

# A Grammar of Agolle Kusaal

Revised Version

David Eddyshaw



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## Preface

I worked as an eye surgeon in the Bawku Presbyterian Hospital in Ghana for some years in the 1990s. I had previously not so much as heard the name of the major language of the district, Kusaal. Although I had the benefit of some coaching in the language by SB (see Sources), there were no written instructional materials of any kind available to me at the time I first arrived. (I would have been saved a good deal of trouble, though denied some pleasure of discovery, if I had then seen David Spratt's very handy introductory sketch and vocabulary.) Accordingly I embarked on the wholly new adventure of trying to work out the structure of an entirely unfamiliar language essentially by myself from scratch, armed with a longstanding interest in language but very little in the way of prior helpful skills and experience.

Through enthusiasm, perseverance and the help of some very tolerant and patient informants, along with a good deal of exposure to the language in the course of my work, I did eventually acquire enough competence to be able to function in the highly stylised context of medical interaction with patients. I also became fascinated by the language and delighted by the order and beauty which underlies a surface which initially seemed chaotic. I hope that this work will convey a little of that beauty.

No linguist will fail to recognise that the account below is the work of an amateur. Whatever it has produced which is of value is a testimony to the intelligence of my informants, who also had perfectly good day jobs in which they proved themselves some of the best colleagues I have ever worked with.

This grammar began as an attempt to understand Kusaal morphophonemics. It grew into areas where I was even less sure-footed, and I am very conscious of its deficiencies. In the course of working up my old notes after many years many questions have occurred to me which I lacked the experience to ask when I had daily contact with Kusaal speakers. If my description provokes others to ask some of those questions I will be very happy, especially if they share the answers with me.

A particular challenge to description is posed by **apocope**, the deletion of underlying word-final vowels in most but not all contexts. Apocope removes phonological conditioning factors, creating new contrasts. Where it could render word forms ambiguous, morphophonemic rules may instead be disrupted, sometimes so systematically that new regular subpatterns have arisen. Apocope greatly complicates external sandhi, even causing some clitics to lose segmental representation altogether, so that their presence is recognisable only from segmental and/or tonal effects on preceding words. Non-Africanists may find Kusaal interesting particularly because of these wide-ranging effects.

When I lived in Ghana, there were very few linguistic works available on Kusaal. Happily, the situation has changed; in the References and Bibliography I list numerous works by Urs Niggli on the Toende Kusaal of Burkina Faso, and more

encouragingly still, accounts of aspects of Toende Kusaal by Hasiyatu Abubakari, herself a speaker; see further "Other studies of Kusaal" below.

Particularly useful accounts of other Western Oti-Volta languages have been Knut Olawsky's careful study of Dagbani, and Adams Bodomo's grammar of his mother tongue, Dagaare. I have also gleaned many helpful ideas from the Cambridge Grammar of the English Language (Huddleston and Pullum 2002), a valuable guide to the kinds of question it is helpful to ask about the syntax even of languages very different from English.

My very brief account of the Kusaasi people themselves in my Introduction is merely a short list of points I found especially interesting, and is in no way even the beginning of an adequate account of a deep and intricate culture. I am even less of an anthropologist than a professional linguist; it is much to be hoped that Kusaasi culture finds worthy students and investigators, ideally Kusaasi themselves, who can portray it as it deserves. Until then I would recommend Ernst Haaf's work "Die Kusase" (see Bibliography.) Haaf was a doctor in Bawku Presbyterian Hospital from 1959 to 1962; he was still remembered with affection thirty years later. The work concentrates especially on Kusaasi traditional medicine, but contains a great deal of other interesting material.

I am grateful to Dr Tony Naden, who sportingly put up with being visited out of the blue in his home in northern Ghana and showed me hospitality worthy of Africa, while giving me a number of helpful pointers; I was also helped by several individuals working for the Ghana Institute of Linguistics in Tamale, who among other kindnesses provided me with photocopies of David Spratt's unpublished introductory materials on Kusaal. It goes without saying that none of these people is responsible for the errors in my work.

I am particularly grateful to Brian McLemore, Executive Director of Global Translation Services at Bible League International, for consulting the original translators of the Kusaal New Testament versions and granting permission for me to cite verses from those versions, which are copyright to Bible League International along with the Ghana Institute of Linguistics, Literacy and Bible Translation. My debt to these works and their creators is discussed further in the following pages.

More generally, I am grateful to the Presbyterian Church of Ghana, an organisation working in often difficult circumstances with tenacity and wisdom; and to the excellent Christoffelblindenmission, by whom I was seconded to Ghana; they did not mean to sponsor the writing of a grammar, but I am sure they will not mind that they did so as a happy side-effect.

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Swansea, December 2016  
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## **Preface to the Revised Version**

*Citius emergit veritas ex errore quam ex confusione.*

Truth will sooner come out from error than from confusion.

Francis Bacon, *Novum Organum*, Book II, Aphorism XX

I have updated a few details in my original Preface; here I mention some of the many changes in the grammar itself since December 2016.

I am very grateful to the Ghana Institute of Linguistics, Literacy and Bible Translation for permission to cite verses from the 2016 Kusaal Bible.

My orthography is now closer to that of Kusaal written materials, especially the 2016 Bible. I have adopted most of the recent orthographic changes, which are almost all improvements, except for the marking of nasalisation.

A fair amount of new material on syntax has been added, derived from further study of the readily available digitised Bible versions.

Many errors have been corrected. A number of idiosyncratic technical terms have been replaced by more mainstream equivalents. The presentation has been reorganised in many respects, and I have abandoned the unhelpful separation of description from the internal reconstruction and comparative material which was intended to shed light on it.

Interlinear glosses now appear throughout.

The tonal description previously reflected the close structural parallels with other Western Oti-Volta languages, but from a language-internal standpoint it is more natural to describe the system with high, mid and low tonemes. Altering the tone marking to reflect this, I have also made it much less abstract: the domain of marking is now always the individual word, and low tonemes are marked explicitly.

David Eddyshaw  
Swansea, July 2018

## Abbreviations

(See also Interlinear Glossing Conventions below.)

AdvP	adverbial phrase
BNY	<i>Bunkonbid ne Niis ne ba yɛla</i> (see Sources)
C	consonant
cb	combining form (of noun or adjective)
CGEL	Cambridge Grammar of the English Language (see Bibliography)
DK	informant (see Sources)
dp	discontinuous past
ger	gerund
H	High toneme
ILK	"An Introduction to Learning Kusaal" (David Spratt)
ipfv	imperfective
irreg	irregular
KB	Kusaal Bible of 2016 (see Sources)
KED	"A Short Kusaal-English Dictionary" (David Spratt)
KKY	<i>Kusaas Kuob ne Yir yela Gbauŋ</i> (see Sources)
KSS	<i>Kusaal Solima ne Siilima</i> (see Sources)
KT	informant (see Sources)
L	Low toneme
LF	Long Form (of word capable of standing clause-finally)
M	Mid toneme
NP	noun phrase
NT	Kusaal New Testament Versions of 1976 and 1996 (see Sources)
pfv	perfective
pl	plural
SB	informant (see Sources)
SF	Short Form (of word capable of standing clause-finally)
sg	singular
V	vowel
VP	verb phrase; to be distinguished from
VPred	verbal predicator <a href="#">19</a>
WK	informant (see Sources)
1sg 2pl ...	first person singular, second person plural etc

Abbreviations of the names of books of the Bible are fairly standard and should occasion no difficulty. Citations are from the 2016 version unless stated otherwise.

## Interlinear glossing

### Abbreviations:

<b>ABSTR</b>	abstract	<a href="#">9.1.1</a>
<b>ADV</b>	adverbial	<a href="#">12.3</a>
<b>AN</b>	animate gender	<a href="#">16.2.2</a>
<b>CAT</b>	VP catenator (underlyingly <i>n</i> )	<a href="#">23.1</a>
<b>CNTR</b>	contrastive (personal pronouns)	<a href="#">30.5</a>
<b>COP</b>	copula <i>àɛñ<sup>a</sup></i>	<a href="#">21.2</a>
<b>CQ</b>	content question prosodic clitic	<a href="#">8.1</a>
<b>DEM</b>	(short) demonstrative pronoun	<a href="#">16.3.2</a>
<b>DEM.DEI</b>	deictic (long) demonstrative pronoun	<a href="#">16.3.2</a>
<b>DP</b>	discontinuous-past marker <i>n<sup>ɛ</sup></i>	<a href="#">27.1.1</a>
<b>EXIST</b>	existence/location verb <i>bè<sup>+</sup></i>	<a href="#">21.1</a>
<b>FOC</b>	focus particle <i>nē<sup>+/</sup></i>	<a href="#">30.1.2</a> <a href="#">19.2</a>
<b>GER</b>	gerund	<a href="#">12.1.1</a>
<b>IMP</b>	independent imperative verb form	<a href="#">11.1</a>
<b>INAN</b>	inanimate gender	<a href="#">16.2.2</a>
<b>INDF</b>	indefinite pronoun	<a href="#">16.3.3</a>
<b>IPFV</b>	imperfective verb form	<a href="#">11.1</a>
<b>IRR</b>	positive irrealis mood marker	<a href="#">19.4</a>
<b>LOC</b>	locative postposition ( <i>nī<sup>+/</sup></i> ~ <i>n<sup>ɛ</sup></i> )	<a href="#">17.3</a>
<b>NEG</b>	negative prosodic clitic	<a href="#">8.1</a>
<b>NEG.BE</b>	negative verb to and <b>COP</b> and <b>EXIST</b>	<a href="#">29.1.1</a>
<b>NEG.HAVE</b>	(another use of the same verb)	<a href="#">29.1.1</a>
<b>NEG.IMP</b>	negative imperative marker	<a href="#">19.4</a>
<b>NEG.IND</b>	negative indicative marker	<a href="#">19.4</a>
<b>NEG.IRR</b>	negative irrealis marker	<a href="#">19.4</a>
<b>NEG.KNOW</b>	negative verb <i>zī<sup>+</sup></i>	<a href="#">29.1.1</a>
<b>NEG.LET</b>	negative verb <i>mīt</i>	<a href="#">29.1.1</a>
<b>NUM</b>	number prefix <i>à- b-à- ñ- b-ù-</i>	<a href="#">14.3</a>
<b>NZ</b>	nominaliser (underlyingly <i>ñ</i> )	<a href="#">28</a>
<b>OB</b>	object (liaison-enclitic pronouns)	<a href="#">8.2.1</a>
<b>PERS</b>	personifier clitic <i>à-</i>	<a href="#">16.6</a>
<b>PFV</b>	independent perfective marker <i>yā<sup>+</sup></i>	<a href="#">19.6.2.1</a>
<b>PL</b>	plural	<a href="#">16.2.1</a>
<b>PQ</b>	polar question prosodic clitic	<a href="#">8.1</a>
<b>REL</b>	relative pronoun	<a href="#">28.2.3</a>
<b>SG</b>	singular	<a href="#">16.2.1</a>
<b>TNS</b>	tense marker	<a href="#">19.3.1</a>
<b>VOC</b>	vocative prosodic clitic	<a href="#">8.1</a>

<u>Personal pronouns:</u>		<a href="#">16.3.1</a>
<b>1SG 1PL</b>	1st sg/pl	
<b>2SG 2PL</b>	2nd sg/pl	
<b>3AN 3INAN</b>	3rd sg animate/inanimate	<a href="#">16.2.2</a>
<b>3PL</b>	3rd pl	
<b>2PL.SUB</b>	postposed 2nd pl Subject	<a href="#">25.2.3</a>

The linker particles *kà* and *yē* are conventionally glossed "and" and "that" respectively throughout, though this very often does not reflect the true meaning in context [24.1.2.](#); similarly *yà'* [27.1](#) is glossed "if" in all cases. The empty particle *nē* which follows objects of comparison which lack the article [18.1](#) is glossed "like."

Mass nouns [16.2.1](#) are not specified as **SG** or **PL** in the glossing; similarly, invariable verbs [11.2](#) are not labelled for aspect. The perfective of variable verbs is also unlabelled.

The symbol  $\emptyset$  in the glossing represents words with no surface segmental representation at all, which are detectable only from tonal and segmental effects on preceding words. Prosodic clitics [8.1](#) are represented by  $^+\emptyset$ , and liaison [8.2](#) is marked by  $\_$ .

For the purposes of interlinear glossing, I have adopted the concept of wordhood reflected in the traditional orthography. This entails a deviation from the Leipzig Glossing Rules for clitics. Clitics which the traditional orthography writes solid with their hosts, as if they were word fragments, are in both the working orthography of this grammar and in glossing joined to their hosts by *hyphens* (not =): these comprise the combining forms of nouns and adjectives, the personifier particle *À-*, and the liaison enclitics *n<sup>ε</sup> LOC n<sup>ε</sup> DP <sup>ya</sup> 2PL.SUB* along with the LF of <sup>o</sup> *3AN.OB* [1.3.1](#). All other clitics are written as separate words throughout. Polysyllabic words ending in a vowel symbol before a hyphen are always followed by liaison, and as this is predictable, the  $\_$  symbol is then omitted: *pūvgv-n* "inside", not *pūvgv\_* $\_$ *n*.

## Transcription conventions

For the working orthography used for Agolle Kusaal in this grammar see [1.3](#).

Phonetic transcriptions are written in square brackets; they are quite broad, and ignore a good deal of allophony, as explained in [3.1 4.1](#).

Starred forms representing the input of morphophonemic rules do not represent a single underlying form of the language but are given *ad hoc* to illustrate the particular rule in question.

Hausa words are cited in the orthography of Jaggar 2001, except that long vowels are written with double letters rather than macrons, as in Caron 1991. High tone is unmarked, low tone is marked with a grave, and a circumflex represents falling tone. Standard Kano forms are given, although the actual source of the loanwords in Kusaal is the *Gaanancii* lingua franca. Dialect variation in Hausa is surprisingly small, however, considering the wide area over which the language is spoken and its extensive use as a second language.

Mooré words are cited as in Niggli 2016, along with his tone marking. Acute accents represent high tone, grave low; tone marks seem to apply to all following unmarked morae, and a second acute after a first within a single word seems usually to represent a downstepped H tone. The Mooré sources reflect Ouagadougou Mooré, which differs somewhat from the dialect with which Kusaal has been in contact.

Arabic transcriptions use IPA symbols, except that *y* is used for /j/; classical forms are given, with brackets around the segments omitted in pause.

All my Francophone sources use the symbols *ɪ* *ʊ* for IPA *ɪ* *ʊ*, as do Urs Niggli's works in English and the working orthography of this grammar.

Words from other languages are cited as given in the sources from which they are drawn, except for tones, which are transcribed using acute for H, grave for L, macron for mid tone and ↓ for emic downstep. Except with Hausa, absent tone marks signify a lack of tonal information.

*This* colour is used for words cited in foreign languages, including Agolle Kusaal in the original orthography of written sources; *this* colour is reserved for words and word fragments written in the working orthography of this grammar.

Internal and external hyperlinks appear like [this](#).



## Sources

The analyses adopted in this grammar are entirely original, except for the most basic aspects of the tonal system, where I was much helped initially by David Spratt's brief "Introduction to Learning Kusaal." The phonology and morphology are based on elicitation work with four informants. With great reluctance I have omitted their names, as I am not currently able to confirm that they would be happy to be identified. I am very grateful to all of them. If any would like to see his name included in its rightful place of honour, I would be delighted to comply. I identify them in the grammar by these abbreviations (which are not the initials of the informants' names):

WK	(from Koka)	KT	(from Tempane)
DK	(from Kukpariga)	SB	(from Bawku)

The treatment of phrase-level syntax is largely based on work with these informants both in elicitation and in exploring puzzling constructions I had encountered while attempting to communicate at work. All four are first-language speakers of Agolle Kusaal, and have essentially first-language level competence in English. All are male, and were then around forty years old. I noted examples of conversation from many speakers, but recorded few examples of the usage of younger speakers specifically; I did notice a few comments about the incorrect grammar of the young from my informants (surely a cultural universal.) I found no evidence of significant differences between the speech of men and women but made no systematic enquiries on this point. My informants showed a number of minor speech differences from one another, which were probably dialectal, but I have not explored the question of subdialects within Agolle Kusaal.

My materials drawn from conversation were limited as to genre. More informal settings would have rounded out the picture in many respects. For example, features like ideophones [16.11.1.3](#) are sparsely represented my data, and this has probably led to underestimation of their importance in the language as a whole.

At that time, I had little understanding of syntactic issues at clausal or higher level. I compensated as far as I could by private study of written materials, above all the 1976 New Testament version, storing up problems to discuss later with my teachers. In revising the work twenty years later I have had the advantage of access to digitised versions of the 1996 New Testament and the complete Bible version of 2016, which has enabled me to improve my analyses of Kusaal syntax substantially in several areas. I have also drawn on the collection of stories and proverbs *Kusaal Solima ne Siilima*, and to a small extent on other literacy materials. I owe a great debt to the many dedicated individuals involved in Bible translation and literacy work

under the auspices of the Ghana Institute of Linguistics, Literacy and Bible Translation (GILLBT), without whom these materials would not exist.

The Bible versions are regarded by Kusaal speakers as good and idiomatic Kusaal; nevertheless, as translations, they naturally cannot be fully representative of the language. The 1996 revision adapted most foreign names to accord more closely with ordinary Kusaal spelling. Many changes were made to improve accuracy and clarity; strikingly, all instances of the previously very common indirect speech construction [26.3.2](#) were replaced by direct speech. The 2016 Kusaal Bible makes significant orthographic changes. There is some evidence of actual language change over this forty-year period [8.2.2](#), but most divergences between the spelling of older sources and the speech of my informants in the 1990's seem simply to be matters of orthographic convention [8.5.3](#); the audio version of the 1996 NT consistently agrees with my informants in such cases.

There is no standard or prestige form of Agolle Kusaal [1.2.2](#), and as a natural consequence the language is not entirely uniform in any of the Bible versions.

Written sources are cited in their original orthography, with a transliteration into the working orthography of this grammar. The tone marking of examples drawn from written materials is supplied by me; it should be regarded as illustrating the tonal principles described elsewhere, not as evidence for their validity.

The following texts are cited; apart from the Bible versions, they were published by the Tamale offices of GILLBT (the Ghana Institute of Linguistics, Literacy and Bible Translation):

*Wina'am Gbaun*  
*Wínà'am Gbáun*

Kusaal Bible  
1976 NT © World Home Bible League  
1996 NT © The Bible League/GILLBT  
available as [Audio and searchable text](#)  
2016 Complete Bible © GILLBT  
available as an [Android application](#)

*Bunkonbid ne Niis ne ba yela*  
*Bŭn-kóñbìd nē Níís né bà yēlá*

"Animals and birds and their affairs"  
Matthew M. Abokiba

*Kusaal Solima ne Siilima*  
*Kūsáàl Sólímà nē Síílímà*

"Kusaal Stories and Proverbs"  
Samuel Akon, Joe Anabah

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"A book on Kusaasi farming and housing"  
William A. Sandow, Joseph A.H.Anaba

## Other studies of Kusaal

The pioneers of Kusaal grammatical study were **David and Nancy Spratt**. David Spratt's forty-two page "Introduction to Learning Kusaal" contains a useful sketch of the tone system, which was invaluable in starting me in the right direction. His work has also been helpful in lexical matters.

More recently, numerous grammatical and lexical studies of the Toende Kusaal of Burkina Faso have been produced by **Urs Niggli**, who has also done considerable work with Kassem and Farefare, and edited a very useful dictionary of Mooré. I have found his Kusaal materials of great comparative interest, but the language itself differs significantly from the Agolle dialect described here, and I have not borrowed from his grammatical analyses. Niggli's account also suggests that the tonal system of Toende Kusaal is surprisingly dissimilar to that of Agolle, especially in matters of tone sandhi. Niggli's Toende dictionary has been an excellent resource for comparative material; it marks all vowel contrasts, and the most recent update also marks tone in many headwords. The tones as marked suggest that the effects of external tone sandhi have not always been taken into account.

**Tony Naden** is working on a dictionary of Agolle Kusaal, which is much the most extensive lexicographic work on the language so far. It is based on written sources and does not mark distinctions (such as tone) which are not reflected in the standard orthography.

There have been several publications on aspects of Kusaal grammar by **Hasiyatu Abubakari**, a Toende Kusaal speaker currently conducting postgraduate studies in linguistics at the University of Vienna. She has plans to publish more, including further studies of the phonological structure of the language, including the tonal system, and the difficult area of focus particles. Her work seems likely to advance the understanding of the structure of the language significantly: Kusaal may well come to take a place as one of the best described of all Gur languages.

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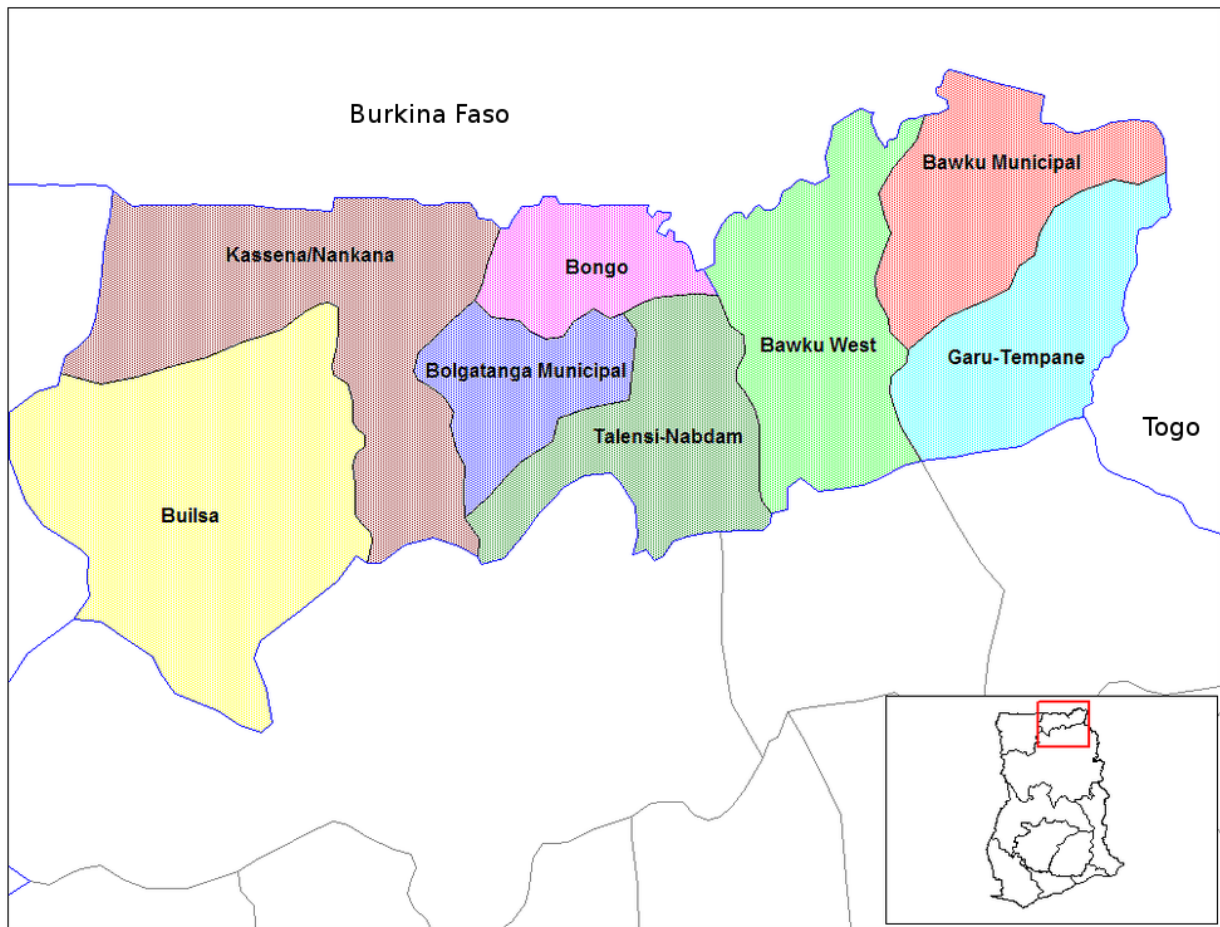
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## 1 Introduction to Kusaal and the Kusaasi

Upper East Region of Ghana (Public Domain, created by [Rarelibra](#))



Kusaal is the language of the Kusaasi, the majority ethnic group of the Bawku Municipal, Bawku West and Garu-Tempene Districts of the Upper East Region in the far northeast of Ghana, extending from the Red Volta river and the Gambaga Escarpment to the national borders with Burkina Faso and Togo. The smaller area west of the White Volta river, coinciding largely with Bawku West District, is called **Toende** in Ghanaian English (less often spelt "Tonde", and in French contexts "Tondé"), Toende Kusaal *Tóŋn* "in front, West", Agolle Kusaal<sup>1</sup> *Tùen*<sup>NE</sup>. The larger eastern part is **Agolle** (less accurately spelt "Agole"), Kusaal *Agò*<sup>LE</sup> "Upper." The Ghanaian districts comprise most of *Kūsáùg*<sup>3</sup> "Kusaasiland", but there are also a good number of Kusaasi settlements in the neighbouring part of Burkina Faso, west of the White Volta and south of Zabré, and a few over the border in Togo.

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1) Superscript letters represent the parts of Kusaal words deleted in most contexts by apocope [2.3](#). They play no part in the pronunciation of citation forms, and may be ignored in this section, along with the / tone mark which follows some superscripts.

## 1.1 The Kusaasi people

The name *Kūsáàl*<sup>ε</sup> "Kusaal" and the name of the people *Kūsáàs*<sup>ε</sup> "Kusaasi" are not transparent within the language itself. Some Kusaasi speculate about a derivation from Hausa *kusa* "near" but there seems to be no evidence for this beyond a chance similarity of sound. It is in fact the norm for local ethnic groups to have endonyms which have no known etymology; often, as in this case, these names have complex stems unlike most of the common vocabulary in structure.

The land is mostly open savanna with scattered trees. The population density is fairly high for northern Ghana, and much former woodland has been turned over to cultivation; tracts survive especially along the White Volta where settlements are few because of the river blindness (onchocerciasis) endemic there until recent times.

Most Kusaasi are cultivators, living in widely scattered compounds, each one the domain of a single family head with his wives, sons, daughters-in-law and grandchildren. Cattle-raising is common but is mostly the preserve of Fulbe and Mossi. There is one rainy season, lasting unpredictably from May to October. The main crop is millet of various kinds, along with rice to a lesser extent. Millet is used to make the Kusaasi staple millet porridge *sā'ab*<sup>ɔ</sup>, called "TZ" /ti:'zɛd/ in local English (from Hausa *tuwon zaafii*, literally "hot porridge"), and the traditional millet beer, *dāam*<sup>m/</sup>, called "pito" (Hausa *fitoo*) in English.

The Kusaasi are divided into numerous patrilineal exogamous clans (*dòɔg*<sup>ɔ</sup>, "house") which tend to be associated with particular areas. (The clans being both exogamous and area-based, I was once told: "The first thing a young man looking for a wife needs to do is to get a bicycle.") A Kusaasi person knows his or her clan, and often its *pɔɔr*<sup>ε/</sup> "slogan", part of its traditional lineage, but unlike the Mossi, the Kusaasi do not use clan names as surnames. Clans have taboos associated with them (for example, against eating particular animals) and have their own cults, but no administrative function; the Kusaasi originally had no chiefs. In religious matters the leading man of the area is the *tɛŋ-dāan*<sup>a</sup> or earth-priest, who is supposed to be the descendant and heir of the original oikist or first settler. In precolonial times the dominant political structures in this region were the so-called Mossi-Dagomba states, the remarkably durable continuations and offshoots of polities founded, probably around the fourteenth century, by incoming conquerors traditionally held to be from the region of Lake Chad. The invaders created hereditary chiefdoms among previously acephalous peoples, who continued to provide the *tɛŋ-dāan-nām*<sup>a</sup>. The founder of these kingdoms was *Naa Gbewaa*, whose seat was at Pusiga (Kusaal *Pūsɪg*<sup>a/</sup>) in what is now Kusaasi territory; he is said to have been swallowed by the earth at that place. In his sons' time the capital was relocated south to the Mamprussi lands. The Dagomba and Mossi kingdoms are cadet branches of this centuries-old military-aristocratic Mamprussi state (Iliasu 1971.) Unlike their Mamprussi neighbours, the Kusaasi were not absorbed into the system, and

intermittent conflict has continued to this day, particularly over the chieftaincy of Bawku. Both in colonial times and since independence, wider political issues have complicated the situation (Lund 2003.)

Ethnic group membership is patrilineal, and many Mamprussi in the Bawku area are in fact Kusaal-speaking. (It was one of my Mamprussi colleagues who first gave me a Kusaal New Testament; he himself could not speak Mampruli.)

The Kusaasi are part of a widespread culture which also encompasses neighbouring peoples like the Mossi, Farefare, Mamprussi, Dagomba and Balsa. Traditional Kusaasi dress resembles that of the Mamprussi, Dagomba and Mossi, including the long-sleeved baggy *bānāa*<sup>∞</sup> smock, called a "fugu shirt" in English (*fūug*<sup>∞</sup> "clothing"), popularised in southern Ghana by President Rawlings.

Most Kusaasi retain their traditional animist outlook. As of 1995, perhaps 5% of local people professed Christianity, a figure which includes many non-Kusaasi from the south; likewise, of some 5% Muslims, many belonged to other ethnic groups.

Traditional belief includes a creator God, *Wīn*<sup>NE/</sup>, invoked in proverbs and greetings but remote from everyday life and not to be approached in prayer or worship. Characteristic proverbs say

*Dīm nē Wīn, dā tú'às nē Wīnné* <sup>+∅</sup>.

Eat:IMP with God:SG, NEG.IMP talk with God:SG NEG.

"Eat with God, don't talk with God."

*Wīn ñyé kà sīn.*

God:SG see and be.silent.

"God sees and is silent."

Everyday religious practice is concerned with local non-anthropomorphic spirits, also called *wīn*<sup>NE/</sup>. A *wīn*<sup>NE/</sup> resides in a *bōgur*<sup>ε</sup>, an object such as a stone or horn, but it is the *wīn*<sup>NE/</sup> that is spiritually significant, not its place of attachment.

A central figure is the *bā'a*<sup>∞</sup> "diviner", who seeks guidance for a client (*bōgud*<sup>a</sup>) on all matters by casting lots. Traditional healers, a separate group, show considerable variation in approach from herbalist to occult.

A human being is understood as having four components: *nin-gbīŋ*<sup>∞</sup> "body"; *ñyò-vōr*<sup>ε/</sup> "life" as opposed to death, possessed by all living animals; *wīn*<sup>NE/</sup> (in this sense) "genius, spirit, a person's own spiritual self"; and *kīkīrs*<sup>ε/</sup>, protective spirits (called "fairies" in local English.) Men have three *kīkīrs*<sup>ε/</sup>, women a fourth, because of the dangers of childbirth. (Throughout the cultural zone, three is a man's number, and four is a woman's.) There are wild *kīkīrs*<sup>ε/</sup> in the bush which are hostile and try to lead travellers astray. *Sīg*<sup>a</sup> "life force", used for "spirit" in Christian materials, is in traditional belief intimately associated with a person's tutelary *kīkīrs*<sup>ε/</sup>.

The key term *wīn*<sup>NE/</sup> has yet further senses, overlapping with the European concepts of fate or destiny: *wīn-tʃòg*<sup>ɔ̄</sup>, literally "bitterness of *wīn*<sup>NE/</sup>" is "misfortune." Most people have a particular *sīgír*<sup>E/</sup> "guardian spirit" which is often the *wīn*<sup>NE/</sup> of an ancestor; the word *būgúr*<sup>E</sup> may also mean "a *wīn*<sup>NE/</sup> inherited from one's mother's family." Many Kusaasi personal names refer to an individual's *sīgír*<sup>E/</sup> [32.2](#).

*Sɔ̄ɔñb*<sup>a</sup> "witches" exist in the traditional world view; though they cause harm, their condition can be involuntary. As in European tradition, those accused are often marginalised or older women. The Mamprussi king, whose rôle imbues him with great spiritual power, is safe from witches and takes them in formal marriage so that they may avoid persecution. My Ghanaian colleagues once organised a visit to an entire village of such witches in order to operate on their cataracts.

## 1.2 The Kusaal language

### 1.2.1 Language status

As of 1995 there were probably some 250,000 speakers of Kusaal, a number which has since increased very substantially.

Written materials are few and not widely available, apart from the Bible translation, which is far and away the most extensive written work in Kusaal. Few people were proficient in reading or writing the language in the 1990's. When I was learning to communicate in Kusaal at work, colleagues sometimes interrupted me to say that patients were "literate", meaning that they knew English.

Though Kusaal is thus currently excluded from domains involving Western-style education and technical activity, it shows no sign of ceding ground as the language not only of the home but of all everyday interaction. It is the normal medium of communication among Kusaasi of all ages, most of whom are monolingual, and is also an areal lingua franca. It is not currently endangered.

### 1.2.2 Dialects

There is no standard dialect of Kusaal; every district has local peculiarities and my informants show numerous small differences in speech. Bawku does not serve as a centre for the Kusaal language: as is typical for the zone, it is a multiethnic trading centre around a Muslim quarter or "zongo" (Hausa *zangò* "camping ground, lodging place") where the main common language is Hausa. The independent spirit of traditional Kusaasi society also militates against the acceptance of any standard.

The major dialect division is between Agolle and Toende. The differences are striking, considering the size of the Kusaasi area. Agolle Vowel Breaking [4.1.1](#) correlates with numerous other isoglosses, resulting in a sharp discontinuity between Agolle and Toende Kusaal, probably attributable to the depopulation of the border zone along the White Volta caused by the river blindness (onchocerciasis) prevalent in the region until quite recent times.

My informants reported no difficulty communicating with Toende speakers, but they are all sophisticated multilinguals who may not be altogether typical. Berthelette 2001 studied the degree to which Burkina Faso Toende speakers understand Agolle Kusaal: of thirteen respondents, ten self-reported that they understood the Ghanaian Toende of Zebilla "very well", one "somewhat well" and two "a little", whereas with Agolle, eight said that they understood it "a little", two "somewhat well" and only three "well." Recorded text tests administered to Burkina Faso Toende speakers showed scores of 93% for comprehension of Ghanaian Toende versus 80.5% for Agolle, but Ghanaian Toende speakers achieved 94.5% with Agolle, presumably reflecting their greater exposure to the dialect. It is possible that Agolle speakers find Toende Kusaal easier than vice versa, but this was not looked into in detail, as the focus of the paper is on the question of whether Agolle Bible translations and literacy materials would suffice for Toende speakers. The conclusion was that Toende materials would be valuable, perhaps not on strictly linguistic grounds but because of speaker attitudes: Toende speakers feel their own dialect is "purer", which may affect judgments of comprehensibility.

Berthelette reports a rate of apparent lexical cognates between Toende and Agolle of only 84%. Judging by Urs Niggli's dictionary, this figure seems surprisingly low; it may be that the divergence is more marked among the commonest words.

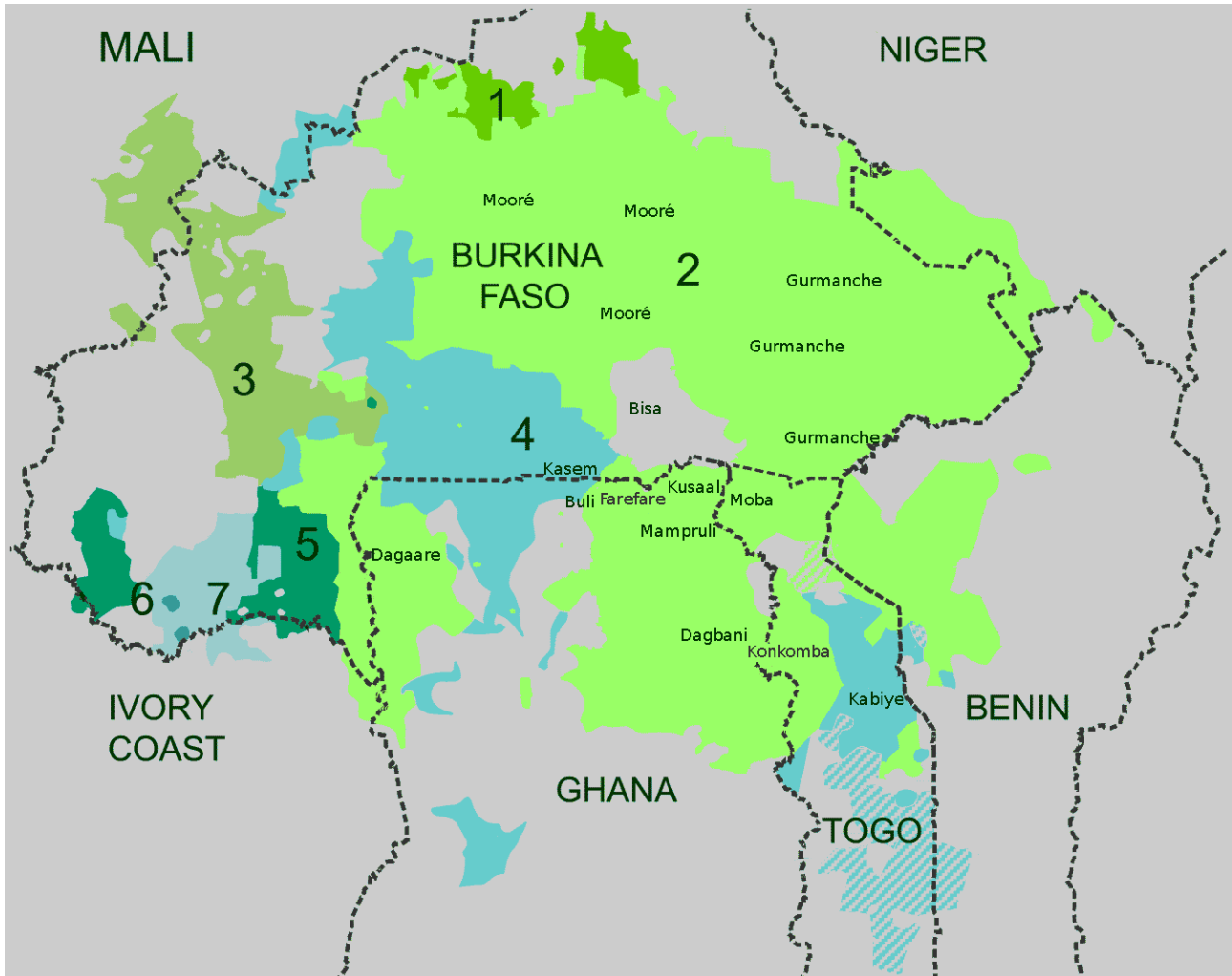
Agolle and Toende Kusaasi themselves agree that they constitute a single ethnic group, and that they speak dialects of a single language; this is perhaps reinforced by a strong local tendency to equate language and ethnicity (note the language names formed from ethnonyms in [32.5](#).) Nevertheless, the differences are great enough to justify separate grammatical treatment for the two major dialects.

This account describes Agolle Kusaal, the language of the majority of Kusaasi, including those of the vicinity of Bawku. This is the basis of most written materials, including the Bible versions. As a matter of convenience, by "Kusaal" I will mean "Agolle Kusaal" by default below; I do not intend by this to imply that Agolle speech is the sole standard form of the language.

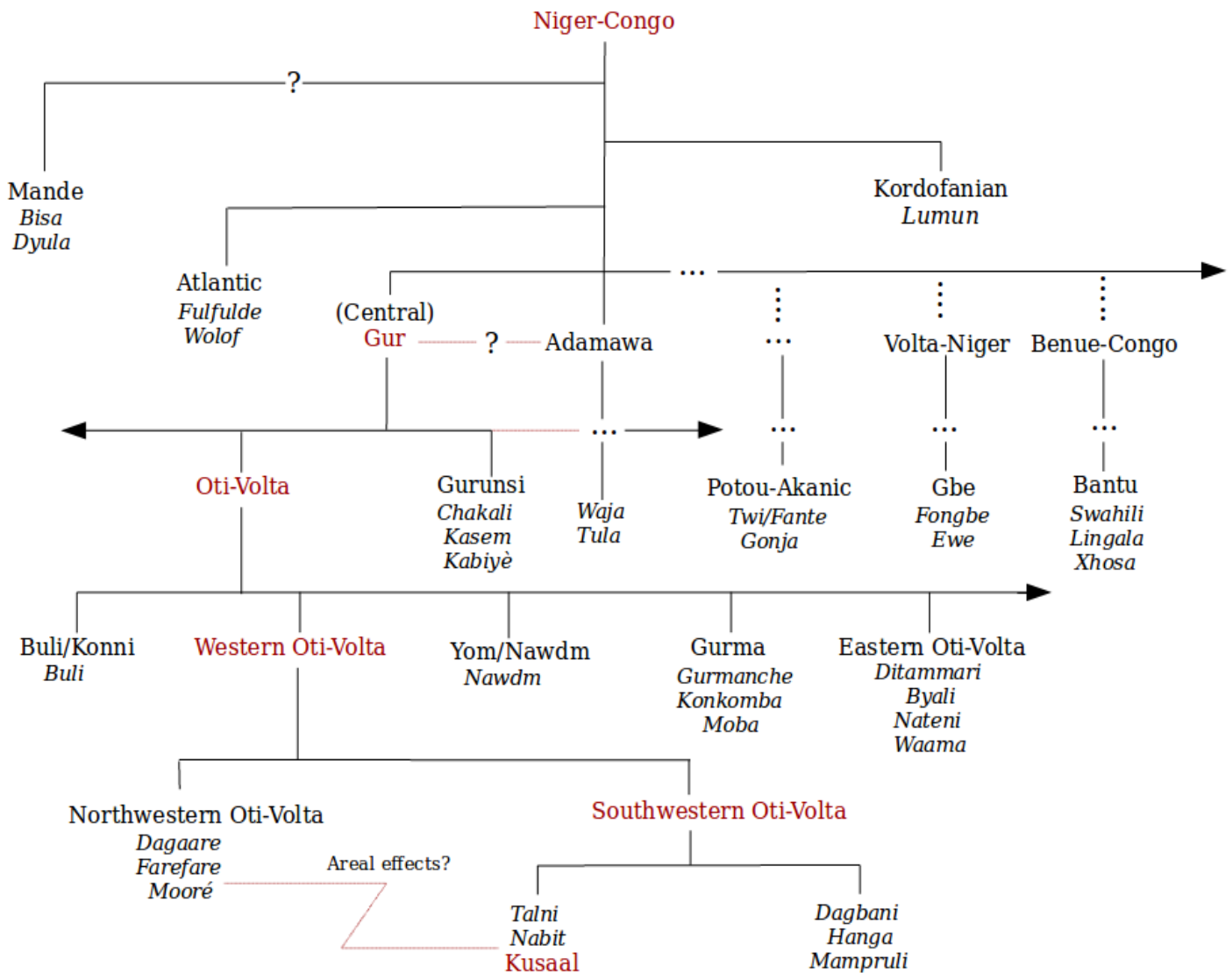
### 1.2.3 Related languages

Kusaal belongs to the **Gur** or **Voltaic** language family within the huge and diverse **Niger-Congo** phylum which comprises most of the languages of Africa south of the Sahara.

The Gur Languages (Public Domain, created by [Davius](#))



- |              |                       |               |           |
|--------------|-----------------------|---------------|-----------|
| 1 Koromfé    | 2 Oti-Volta languages | 3 Bwamu       | 4 Gurunsi |
| 5 Kirma-Lobi | 6 Dogoso-Khe          | 7 Doghose-Gan |           |



This chart outlines the relationships between some of the Niger-Congo languages mentioned in this account, omitting all but a few branches and languages. Subclassifications are often uncertain. Mande is the most divergent group, and may not truly belong to Niger-Congo at all; neither "Atlantic" nor "Kordofanian" seems to be a real unity; Twi has been said to belong to a "Kwa" branch, but the evidence that this is a valid node is weak; the relationship between Gur and Adamawa is unclear; Eastern Oti-Volta shows much more internal diversity than Western Oti-Volta, and its validity is less certain. At present, the inclusion of Mande and Kordofanian in Niger-Congo is a long-range hypothesis, rather than a well-established linguistic grouping like Indo-European; to some extent, this is true even of Atlantic. Moreover, West Africa has probably always been characterised by widespread multilingualism and borrowing not only of lexicon but also of morphology and syntax: for West Africa (and beyond) as a *Sprachbund* see especially Güldemann 2007.



There is unequivocal evidence for Volta-Congo (the branches after "Atlantic" in the chart) as a true genetic grouping. Basic lexical items recur frequently; compare Kusaal *bīg*<sup>a</sup> "child", *dī*<sup>+</sup> "eat", *nū*<sup>+</sup> "drink", *kpi*<sup>+</sup> "die", *tūg*<sup>a</sup> "tree", *àtáñ*<sup>+</sup> "three", *tùbur*<sup>ε</sup> "ear" to their respective Fongbe equivalents *ví*, *dù*, *nù*, *kú*, *átín*, *àtòn*, *tó* (Lefebvre 2002.) Guthrie's Proto-Bantu reconstructions parallel all except "child": *dí*- "eat", *-nú*- "drink", *kú*- "die", *-tí* "tree", *-tátò* "three", *-tó* "ear", and his Proto-Bantu *-tóm*- "send" corresponds to Kusaal *tòm*<sup>m</sup>. The Potou-Akanic language group, which includes Twi/Fante and Gonja, here shows a regular sound correspondence *t* ~ *s*: Twi *esã* "three", *asõ* "ear", *soma* "send", Gonja *à-sá* "three", *kò-sówé* "ear."

The most salient morphological feature of Niger-Congo is the presence of noun class systems, with frequent congruences in both form and meaning among the Volta-Congo branches. Thus the Kusaal human-plural noun suffix *-b*<sup>a</sup> seen in *nīdib*<sup>a/</sup> "people", plural of *nīd*<sup>a/</sup>, matches the Gonja human-plural prefix in *bá-sà* "people", plural of *é-sà* (Painter 1970), and the *ba* of Lingala *bato* "people", plural of *moto*, and of Xhosa *abantu* "people", plural of *umntu*. Particular singular/plural pairings of noun class affixes recur throughout Volta-Congo; for example, the suffixes *r<sup>ε</sup>|a*<sup>+</sup> seen in Kusaal *tùbur*<sup>ε</sup> "ear", *tùba*<sup>+</sup> "ears" are cognate to the Bantu prefix pair labelled 5/6 in the Bleek-Meinhof system (Nurse and Phillipson 2003.) Lingala has the cognate of Kusaal *tùbur*<sup>ε</sup> in this very class: *litóí* "ear", plural *matóí*. In general, it is the Bantu pronominal and verbal concord prefixes which correspond to the affixes of other Volta-Congo languages, rather than the noun class prefixes themselves, which often show an additional initial nasal, as with *matóí*. The Swahili verbal subject prefixes for the 5/6 class are singular *li*, plural *ya*; as in Kusaal, names of fruits (for example) usually belong to this class.

Similarities also appear in verbal derivation by suffixes, here usually called "verbal extensions", after the term used for Bantu languages, in which such processes are typically highly productive. However, at the level of Niger-Congo, form and function can be difficult to correlate, and some processes may even be areal phenomena, found also in Afro-Asiatic and Nilo-Saharan (see Hyman 2007.<sup>2</sup>)

Mande shows no trace of noun class affixes or Niger-Congo-type verbal extensions, and offers little lexical evidence for a genetic link to Volta-Congo. Some Kordofanian languages (e.g. Lumun, thoroughly described in Smits 2017) bear a striking typological similarity to Volta-Congo, with robust noun class systems marked by often-paired prefixes and extensive agreement, and with a similar system of verbal extensions, but there is very little formal or lexical correspondence. Even with the Atlantic languages, typological resemblances are much more apparent than lexical, and affixes of similar meaning to those of Volta-Congo often show dissimilar forms.

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2) For Gur, Hyman cites only Canu 1976. Some of Canu's proposals segment CVC roots as CV+C, where CV- is not attested as a root; however, Canu's *second*-position suffixes have numerous cognates throughout Western Oti-Volta; for Kusaal see [13.2](#).

Many Niger-Congo subclassifications rely heavily on lexicostatistics, particularly problematic when so many of the relevant languages are poorly documented; detailed comparative work is necessary for reliable results. With some lower-level groupings much has been achieved already, very notably with Bantu; among languages closer to Kusaal, see Sambieni 2005 on Eastern Oti-Volta. At a higher level, comparative work is generally at an early stage; see, however, numerous publications by Gabriel Manessy on Gur, and especially the publications of John Stewart on Potou-Akanic and its relationships with Bantu and Atlantic.

At the lowest level Kusaal belongs to a clear-cut language family called **Western Oti-Volta** by Manessy, for which Adams Bodomo has suggested "Mabia" (cf Kusaal *mà-bīig*<sup>a</sup> "sibling") as an alternative name. This term, though attractive, is not a "shibboleth" word demarcating Western Oti-Volta: cf Buli *mà-bīik id*. There is, however, a good deal of distinctively Western Oti-Volta vocabulary, e.g. Kusaal *kù'əm*<sup>m</sup> "water", Mooré *kòóm*, versus Gurmanche *ñíma* Buli *nyám* (cf Kusaal *nì*<sup>+</sup> "rain.") The Western Oti-Volta languages all share a strikingly simple and regular system of verbal inflection, with almost all inflecting verbs using the bare stem for the perfective aspect and adding a suffix *\*-da* for the imperfective. The Western Oti-Volta languages are closely related to one another: the group is roughly as diverse as Romance. However, claims of mutual intelligibility are often much overstated; they reflect underappreciation of the fact that many local people are competent users of more than one distinct language. Kusaal and Mampruli, for example, are not mutually intelligible (as I had abundant opportunity to observe in our outpatient clinics.)

Western Oti-Volta is subdivided into Northwestern and Southwestern branches. Northwestern Oti-Volta includes Mooré (much the largest Gur language, with millions of speakers), Safaliba, the dialect continuum Dagaare/Waale/Birifor, and Farefare/Gurenne/Ninkare. I will gloss over some complex issues regarding the naming of the latter two languages and their speakers, referring to them simply as Dagaare and Farefare below. The Southwestern division includes Kusaal, Nabit and Talni along with Mampruli, Dagbani, Hanga, Kamara and some similar smaller languages. A distinctive feature of the Southwestern languages is the inflection *\*-ma* used for positive imperatives.

There is evidence of extensive language contact across this division, notably with Farefare and Nabit and with Mooré and Kusaal, and in a milieu where many people are multilingual in closely related languages, it can be difficult to distinguish historical shared innovations from the effects of diffusion. Numerous isoglosses cut across the division, but most involve shared retentions, such as noun-class based grammatical gender in Talni, Mampruli and Farefare [10](#), vowel glottalisation in Kusaal, Nabit, Talni and Farefare [4.2.2](#), and the contrast between non-initial /r/ and /d/ in Mooré, Agolle (not Toende) Kusaal, Talni and Nabit. The preverbal negation particles are recognisably similar across Southwestern Oti-Volta and also in Dagaare: Kusaal *pō/bō*, Dagbani *bi*, Dagaare *ba* for indicative, Kusaal *dā*, Dagbani *di*, Dagaare

*ta* for imperative, Kusaal *kù*, Dagbani *ku*, Dagaare *kong* replacing the positive markers (*nà ni na* respectively) in the irrealis. Mooré and Farefare share the innovation of negative *ká* for both indicative and irrealis; they also share the introduction of rounded vowels in the plural suffix *-do/-ro* 4.4.

The Kusaal 2sg pronoun *fù* "you" goes with the Northwestern languages (Mooré *fò*, Farefare *fv*, Dagaare *fv*) rather than the Southwestern (Nabit, Talni and Mampruli *i*, Dagbani *a*); Buli *fi* and Nawdm *bé* suggest that the Kusaal and Northwestern forms are simply conservative, but Gurmanche has *à*, Konkomba *i*, and Moba has *ā* for the non-contrastive pronoun but *fī* for contrastive: Moba probably preserves a distinction independently levelled in the other languages.

Mampruli, Dagbani, Hanga and some similar smaller languages form a clear subgroup; there is said to be considerable mutual intelligibility. These languages show great simplification of the inherited vowel system, with loss of contrasts in glottalisation, nasalisation and tenseness, along with lowering of original short *e* to *a*, and the secondary development of a series of contrastively palatalised velars. There are other shared innovations: for example, for the basic kinship term "sibling of opposite sex (regardless of seniority)", Mooré, Farefare, and Talni all have cognates of Kusaal *tāyñ<sup>+/</sup>*, but Mampruli and Dagbani use the stem "younger sibling of the same sex" compounded with "man" for "woman's brother (regardless of seniority)" and "woman" for "man's sister (regardless of seniority)": Mampruli *tinzo* = Kusaal *pītú<sup>+</sup>*, *tinzdoo/tinzɔpɔ'a* = *tāyñ<sup>+/</sup>*.

Nabit, Talni and Kusaal may also constitute a subgroup. Tony Naden's Nabit materials closely resemble Toende Kusaal. Giffen 2015 in her interesting discussion of the social and cultural setting implies that that Nabit has been swept up into the cultural and political orbit of the more distantly related Farefare. She also notes that Talni speakers understand Nabit to some extent.

Nabit and Talni, like Kusaal, have lost inherited final short vowels in citation forms. This is of course very common cross-linguistically (and seen also in Moba), but some sentences in Naden's dictionaries suggest that Nabit and Talni retain the final vowel at the end of negated clauses and of questions, as with Kusaal apocope 2.3:

Nabit	<i>La bi'imε.</i>	"It is ripe"
Toende	<i>La bi'ɪ me.</i>	
Agolle	<i>Lì b'ig nē.</i>	
	<b>3INAN ripen FOC</b>	

Nabit	<i>La na bu biigε.</i>	"It is not yet ripe."
Toende	<i>La nan bu bi'ɪge.</i>	
Agolle	<i>Lì nàm pō b'igē<sup>+</sup>∅.</i>	
	<b>3INAN still NEG.IND ripen NEG.</b>	

Talni	<i>Bunpɔk dɔɣam pu bɔkɛra, buraɔ dɔɣam m bɔkɛt.</i> "A woman's kindred is not divided, a man's kindred is divided."
Toende	<i>Bupɔk dɔɣim bu bɔkɪra, buraɔ dɔɣim bɔkɪt.</i>
Agolle	[Pɥ'ā] dú'àm pō byákìdā +∅, [dāy] dú'amì_∅ byákìd. Woman:SG kindred NEG.IND split:IPFV NEG, man:SG kindred CAT split:IPFV.

The Toende forms are from Niggli's dictionary, with the inflected forms *bɔkɪra* and *bi'ige* constructed on the basis of his grammatical works.

There are few examples, and the Talni data in particular seem equivocal, but if this unusual behaviour is indeed common to all three languages it would be compelling evidence for a Kusaal-Nabit-Talni subgroup. There are lexical isoglosses: for example, Kusaal *nɔ̃k*<sup>ε/</sup> "pick up" (Toende *nɔ̃k*) has a cognate in Nabit *nok* but not, as far as I have been able to discover, in any other Western Oti-Volta language.

Other groups within the broader Oti-Volta family can be seen to be related to Western Oti-Volta even on fairly superficial examination. Buli, in particular, though placed quite far from Western Oti-Volta in some classifications, is shown by the detailed materials in Kröger 1992 to be much closer to Western Oti-Volta than are the Gurma languages Gurmanche, Konkonba and Moba; there are numerous obvious cognates in vocabulary and many parallels in morphology.

Both Buli and Gurmanche have three-tone systems, and the three basically distinct Western Oti-Volta Tone Patterns can be systematically matched with these [7.1](#). However, although Western Oti-Volta Tone Pattern H corresponds to *high* tone in Buli, it corresponds to *low* in the Gurma languages:

<u>Kusaal</u>		<u>Gurmanche</u>	<u>Buli</u>
<i>sāan</i> <sup>a/</sup>	"stranger"	<i>càanō</i>	<i>nícháanoā</i> (ní- "person")
<i>wáaf</i> <sup>p</sup>	"snake"	<i>wà</i>	<i>wáab</i>
<i>nīf</i> <sup>/</sup>	"eye"	<i>nùnbū</i>	<i>núm</i>

Western Oti-Volta Pattern O matches Gurmanche high and Buli mid, while Pattern L corresponds to Gurmanche mid and Buli low:

<i>mɔ̃ɔg</i> <sup>ɔ̃</sup>	"grass"	<i>múagū</i>	<i>mūub</i> ("blade of grass")
<i>tìig</i> <sup>a</sup>	"tree"	<i>tībū</i>	<i>tìib</i>

It is the languages with H for Kusaal Pattern H (Western Oti-Volta, Buli/Konni, Yom/Nawdm, and Waama) which have innovated: cf Chakali *tʃùòmó* "hare" = Kusaal *sú'ej*<sup>a</sup>, Buli *súom*; Proto-Bantu *-nùà* "mouth" = Kusaal *nɔ̃ɔr*<sup>ε/</sup>; contrast Proto-Bantu *-tɔ̃* "ear" = Kusaal *tùbɔr*<sup>ε</sup>; Prot-Bantu *-tí* "tree" = Kusaal *tìig*<sup>a</sup>.

The Eastern Oti-Volta languages are distinctly different from Western Oti-Volta in both morphology and lexicon. Sambieni 2005 provides considerable detail on the

language group, which shows much greater internal diversity than Western Oti-Volta. His comparative work assumes the validity of Manessy's Eastern Oti-Volta, which is based on the initial changes  $*g \rightarrow k$ ,  $*gb \rightarrow kp$  along with  $*j \rightarrow y$ ,  $*v \rightarrow f$  (also seen in Gurma.) In fact, the Eastern Oti-Volta languages lack  $v gb j$  altogether, while  $g$  occurs only as a word-internal allophone of  $/k/$ , suggesting that these changes may be an areal development. Manessy has  $*gb \rightarrow kw$  for the neighbouring Bulba/Nõõtre, which he classifies with Western Oti-Volta.

Of the four languages Ditammari, Nateni, Byali and Waama, Ditammari resembles Gurmanche and Konkomba in that nouns usually appear with noun class prefixes and suffixes together. The noun class systems do not show any innovations common to the entire group.

Ditammari and Nateni probably form a subgroup. Both show L tone corresponding to Kusaal Pattern H. They have similar systems of verb flexion, with some verbs opposing a perfective ending  $-a$  to an imperfective ending which is  $-i$  after alveolar consonants but  $-u$  otherwise, other verbs changing the stem tones, or dropping a derivational suffix from the perfective to make the imperfective. Individual verbs often behave alike in both languages.

Byali shows mid tones for the most part where Western Oti-Volta has Pattern H; in verbs it opposes perfective  $-sə$  to imperfective  $-u$  (including after alveolars.)

Waama has H tone corresponding to Western Oti-Volta Pattern H. A small group of verbs oppose final  $-i$  for perfective to  $-u$  for imperfective, but most verbs form the imperfective by adding a suffix  $-ri$   $-di$  or  $-ti$  to the perfective form. There are lexical isoglosses uniting Waama with Western Oti-Volta and Buli over against the other Eastern languages, e.g. Waama *wōmmā* "entendre" = Kusaal *wùm<sup>m</sup>*, Buli *wom*, versus Byali *yō*, Ditammari *yō*, Nateni *yēkà*; Waama *cáárō* "forgeron" = Kusaal *sāḡñ<sup>+</sup>*, versus Byali *má-máárāū*, Ditammari *ōmáátà*, Nateni *málō* (and Gurmanche *mááno*); Waama *yété* pl *yéyā* "maison" = Kusaal *yīr<sup>el</sup>*, Buli *yéρί*, versus Byali *tápúú*, Ditammari *tācīētà*, Nateni *hǒǒtā*.

There is much less similarity between Oti-Volta as a whole and the other main branch of Central Gur, the Gurunsi languages. It has been suggested that Oti-Volta and Gurunsi may be coordinate members of a continuum including at least some Adamawa groups: Kleinwillinghöfer 1996 references studies suggesting that the Adamawa languages Waja and Tula are closer to the Gurunsi languages than to the rest of "Central Gur." Further progress on this issue will probably only come about after more descriptive work on Adamawa languages.

A few languages are classified as Central Gur, but neither Oti-Volta nor Gurunsi. Most are poorly documented; an exception is Koromfe (Rennison 1997.)

Various languages have been previously taken as Gur on the basis of nonspecific typological criteria, especially the use of noun class suffixes rather than prefixes. This is notably the case with the Senoufo group, now usually held to constitute a distinct branch of Niger-Congo.

### 1.2.4 External influences

Most identifiable loanwords [15.1](#) in Kusaal come from **Hausa**, the largest African language after Arabic by number of first-language speakers, used by millions more as a lingua franca in the savanna zone of West Africa; Kusaal has far fewer Hausa loans than Dagbani or Mampruli, however. In Ghana, Hausa has strong associations with Islam and with trade. There are many ethnic *Hàusàawaa* in the Kusaasi area, especially in Bawku, but the language which has influenced Kusaal is the *Gaanancii* lingua franca. Though mutually intelligible with Kano Hausa, *Gaanancii* among other differences lacks not only grammatical but even natural gender, uses [z] for [d̪̥], monophthongises diphthongs, and drops the distinction between glottalic consonants and their plain counterparts.

The other major lingua francas of Ghana, Twi/Fante ("Akan") and English, have contributed little to Kusaal to date. In the mid 1990's few people outside Bawku were very proficient in either language unless they had been to school or lived in the south of the country. Perhaps 5-10% of patients attending our clinics in Bawku at that time could communicate in English well enough for the purposes of medical consultation; the majority were most comfortable with Kusaal, with Hausa and Mooré about equal in second place, in both cases often as vehicular languages rather than mother tongues.

Among neighbouring languages, **Farefare** has certainly influenced Nabit and perhaps also Toende Kusaal. With **Mampruli**, matters are complicated by the political history of the area, and by the fact that many local Mamprussi speak Kusaal rather than Mampruli, but some loanwords are identifiable.

Many Mossi people are found in the Kusaasi area, and many Kusaasi themselves speak **Mooré** well; they often attribute local or individual peculiarities of Kusaal speech to Mooré influence. Early Christian missionary work among the Kusaasi used Mooré materials, leading to some borrowing and calquing.

There is little evidence of influence on Kusaal from Moba, the neighbouring language to the east, or even from Bisa to the north, despite the fact that many Bisa people have settled in the villages among the Kusaasi, and in Bawku. Bisa people in Ghana use Kusaal as the areal lingua franca, and few others can communicate in their Mande language. Nor is there evidence of borrowing from the language of the nomadic cattle-raising Fulbe, found locally as throughout the savanna of West Africa. Fulfulde *nagge*, plural *na'i* "cow" strikingly resembles Kusaal *náaf*<sup>p</sup> (← \**nāáǵfū*) plural *nīǵí*<sup>+</sup>, but this cannot be a loanword into Kusaal itself, because both the word and its distinctive flexion can be reconstructed to a stage prior to the Western Oti-Volta protolanguage (cf Buli *nááb* pl *nīǵā*.)

### 1.3 Orthography

Except as specified otherwise below, symbols represent sounds similar to their IPA values; for more specific details see [3.1](#) [4.1](#). Acute, grave and macron signs mark tone [5.1](#); for word division conventions see [1.3.1](#).

*y* represents [j]; *kp gb* represent [k̟p] [g̟b].

Between vowels within a word *k t p ŋ* are realised as [k:] [t:] [p:] [ŋ:] in very deliberate speech.

The vowel symbols *a e o i u* have IPA values, while *ɪ ʊ* represent [ɪ] [ʊ] respectively. The allophony [ɪ]~[i] and [ʊ]~[u] epenthetic and prefix vowels [4.3](#) [4.4](#) is ignored, only *ɪ ʊ* being used. Written *e o* always represent [ɪ] [ʊ], used instead of *ɪ ʊ* only as non-initial elements of diphthongs [4.2.3](#) and for the 3sg animate pronoun *o* [ʊ] along with the [ʊ] mora which precedes it in liaison, which is written *·o* [1.3.1](#).

	<i>dī̄e</i>	"receive"	[d̟īɪ]
	<i>pā̄e</i>	"reach"	[pʰaɪ]
	<i>bē̄og</i>	"tomorrow"	[bɛʊg]
	<i>kpī̄'oŋ</i>	"strong"	[k̟pī'ŋ]
but	<i>dāv̄g</i>	"male"	[daʊg]
	<i>ò bī̄g</i>	"her child"	[ʊbi:g]
	<i>zú'·o</i>	"steal him"	[zuʊ]
	<i>dà'·o</i>	"bought for him"	[d̟əʊ]

*ɛ̣ ị* both represent [ɪ̣]; *ị* is used before vowel symbols and after *u*. The symbol *ɥ* is used for [ʊ̣].

	<i>gbàɥŋ</i>	"book"	[g̟baʊŋ]
	<i>sọ̄ɛ̣ñ</i>	"witch"	[sɔ̣ɪ̣]
	<i>mụ̀j</i>	"rice"	[mụ̃j]

Long vowels are written by doubling the vowel symbol.

	<i>bā̄a</i>	"dog"	[ba:]
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Glottalisation of vowels and diphthongs is marked by the symbol ' following the first/only vowel symbol (including *ɥ*) other than *ị*:

	<i>dà'</i>	"buy"	[d̟ə']
	<i>dà'a</i>	"market"	[d̟ə:]
	<i>kù'əm</i>	"water"	[kʰụəm]

<i>pɥ'ā</i>	"woman"	[p <sup>h</sup> ɥ̥ā]
<i>dɪ'ā</i>	"get dirty"	[dɪ̥ā]

Nasalisation of vowels and diphthongs is marked by *ñ* following the entire vowel or diphthong unless it is also glottalised, in which case the *ñ* precedes the ' mark; *ñ* also precedes the raised dot of *·o*.

<i>tēɛñs</i>	"lands"	[t <sup>h</sup> ɛ̃:s]
<i>áñsìb</i>	"mother's brother"	[ãsɪb]
<i>gēñ</i>	"get tired"	[gɛ̃]
<i>gēñ'</i>	"get angry"	[gɛ̃']
<i>gēñ'ed</i>	<i>id</i> (ipfv)	[gɛ̃:d]
<i>āñ·o</i>	"be him/her"	[ãõ]

After initial *y* or *w* nasalisation is instead marked with *ñ* before the *y* or *w*:

<i>ñwām</i>	"calabash"	[wãm]
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The sequences [ɪ̥a] [ɥ̥a] [i̥ə] [u̥ə], with their nasalised and glottalised counterparts, arise from **Agolle Vowel Breaking**. *ɪ̥a ɥ̥a i̥ə u̥ə* are digraphs for *phonemic* monophthongs, though realised *phonetically* as diphthongs [4.1.1](#).

<i>pìəliɔ</i>	"white"	[p <sup>h</sup> i̥əliɔ]
<i>bū'əs</i>	"ask"	[bū̥əs]
<i>tjàk</i>	"change"	[t <sup>h</sup> ɪ̥ak]
<i>pɥāk</i>	"female"	[p <sup>h</sup> ɥ̥ak]
<i>kpi'ə</i>	"shape wood"	[k <sup>h</sup> pɪ̥ə]
<i>kɪ'ə</i>	"cut"	[k <sup>h</sup> ɪ̥ə]

Contrast the *phonemic* diphthongs in e.g.

<i>kpi'a</i>	"neighbour"	[k <sup>h</sup> pɪ̥a]
<i>sīa</i>	"waist"	[sia]

### 1.3.1 Word division

Nominal compounds are hyphenated rather than written solid as in traditional orthography. Nominal combining forms [9.1](#) are not word fragments but clitic words, and compounds are not single words but a particular type of noun *phrase*. Compounding occurs constantly where other languages would use uncompounded phrases, and compounds may even incorporate uncompounded elements [16.9](#).



<i>zīm-gbáñ'àd</i>	"fisherman"	<i>wāb-kúùd</i>	"elephant-killer"
<i>bì-fūug</i>	"children's shirt"	<i>ɸɸ'à-sāñ'am</i>	"adulterer"
<i>bù-ɸìəlɪg</i>	"white goat"	<i>bù-kàṅā</i>	"this goat"
<i>bù-ɸìəl-kàṅā</i>	"this white goat"	<i>wāb-ɸìəlìg</i>	"white elephant"

Nominals with prefixes, loanwords, and unanalysable stems are written solid:

<i>kpòkpàrɪg</i>	"palm tree"	<i>tītā'ar</i>	"big"
<i>wāb-tītā'ar</i>	"big elephant"	<i>Ñwāmpūrɪ</i>	"Mampruli"
<i>bùrkìn</i>	"honest person"		

Distinguishing between a combining form and a prefix is not always straightforward, and the decision whether to spell with a hyphen can turn on no more than etymological ingenuity in some cases [14.1.4](#).

Pronouns reduced to single consonants by apocope are still written as independent words:

*Fù bɔ́ɔdī\_m.* "You love me." [fɔbɔ:dɪm]  
**2SG want 1SG.OB.**

*M̄ bɔ́ɔdī\_f.* "I love you." [m̄bɔ:dɪf]  
**1SG want 2SG.OB.**

The 3sg animate object pronoun <sup>o</sup> [ɔ] "him/her" loses its entire segmental form by apocope [2.3](#), after causing the host final vowel mora to become [ɔ]. The LF-final vowel mora has traditionally been mistaken for the pronoun itself and written as a separate word. As a concession to tradition, the final vowel mora is separated from the rest of the host by a raised point ·*o*; the LF is written as ending in ·*o-o*.

*Fù bɔ́ɔd·ō\_∅.* "You love her." [fɔbɔ:dɔ]  
**2SG want 3AN.OB.**

*Fù pū bɔ́ɔd·ó-o +∅.* "You don't love her." [fɔp<sup>h</sup>ɔbɔ:dɔ:]  
**2SG NEG.IND want-3AN.OB NEG.**

*Fù ñyē·o\_∅.* "You've seen her." [fɔjẽõ]  
**2SG see 3AN.OB.**

*Fù pū ñyē·ó-o +∅.* "You've not seen her." [fɔp<sup>h</sup>ɔjẽõ:]  
**2SG NEG.IND see-3AN.OB NEG.**

The locative enclitic *nɛ* and the discontinuous-past marker *nɛ* are reduced to *n* by apocope. Like the enclitic 2pl subject pronoun *ya*, they are traditionally written solid with the preceding word, but they follow allomorphs of complete words, with liaison changes just as before the object pronouns. The enclitic 2pl subject *ya* is in complementary distribution with the proclitic pronoun *yà* and the locative enclitic *nɛ* is in complementary distribution with the ordinary enclitic particle *nĩ<sup>+/</sup>*. Like all liaison enclitics they are clearly words and not flexions morphosyntactically; for phonological evidence cf [4.4](#) [5.4](#). In the orthography of this grammar they are accordingly separated from preceding words by hyphens:.

*põvɔv-n* "inside"  
inside:SG-LOC

*bòɔdĩ-n* "might wish"  
want-DP

The personifier clitic *à*, which is traditionally written solid with the following word, will here be hyphenated, as it is a particle capable of being attached to entire phrases, like English possessive clitic "'s" [16.6](#).

*À-Wĩn* "Awini" (personal name)  
PERS-personal.spirit:SG

### 1.3.2 Written materials

Written materials are cited in their original orthography. Tone is unmarked.

The clusters *ll mm nn* are very often written single prior to 2016.

KSS uses *ng* throughout for *ŋ*.

Older orthography writes *e o* for *ɛ ɔ*, *i* for both *i* and *ɪ*, *u* for both *u* and *ʊ*; *e o* are sometimes also used unsystematically for *ɪ ʊ* as root vowels. The 2016 Bible uses the same basic conventions as this grammar except that it does not distinguish [i]~[ɪ]: *tiig* = *tìɪg* "tree", *biig* = *bīig* "child."

Word-final short *-ɪ* after *m n* is usually written *ɛ* in KB: *pɛbanɛ* for *pɛ̄'-báni* "sheep which ..." Mk 6:34; so in all cases with the relative pronouns *onɛ kanɛ linɛ banɛ* [28.2.3](#) and with *anɔ'ɔnɛ* "who?" before liaison.

The root-vowel is consistently written as *e* in KB in the words *ye* "that" *teŋ* "land" *keŋ* "go" (pfv) *ken* "go" (ipfv) for *yɛ̄ tɛ̄ŋ kɛ̄ŋ kɛ̄n*, where my informants have [ɛ]. The form *ye* is probably due to the unstressed nature of the particle, but the other words may reflect actual variants with *ɪ* [ɪ]: compare Toende *tĩŋ* "land", Mampruli *tiŋŋa* "land" versus Toende *meŋ*, Mampruli *maŋŋa* = *mɛ̄ŋ* "self."

The demonstrative and pronoun forms *ɔ̄n/ɔ̄n/ɔ̄n òŋā* are written *on oŋa*. As in this grammar, *e o* are used non-initially in diphthongs for [ɪ] [ʊ]. The phonemic monophthongs *iə uə* are written respectively as *ie uo*:

<i>pielig</i>	<i>piəlɪg</i>	"white"	[pʰiəlɪg]
<i>bu'os</i>	<i>bū'əs</i>	"ask"	[buʊəs]

*ie uo* are also used to write the phonemic diphthongs *ie uo* [iɪ] [uʊ] but the ambiguity is marginal, because *ie uo* only appear word-finally and in *-iey-*, while *iə uə* only appear word-internally before consonants, and in external sandhi [8.5.3](#):

<i>d'i'e</i>	<i>dī'e</i>	"receive"	[dɪɪ]
<i>zu o</i>	<i>zú·o</i>	"steal him"	[zuʊ]

The 2016 orthography writes *-ue* [ui] as *-uoe* and *-ve* [ʊɪ] as *-voe* (similarly when nasalised and/or glottalised): *duoe* = *dūe* "raise, rise", *sv'oe* = *sū'e* "own."

The diphthong *io* [iʊ] is written *io* in the 1976 NT but *ieu* later: thus *kpī'oiŋ* "strong" [kʰiʊŋ] is *kpī'oiŋ* in the 1976 NT, *kpī'euiŋ* in the 1996 NT and KB.

Traditional orthography uses *e i u* for non-moraic *ẹ ị ụ* and thus does not mark length in diphthongs consistently, but only two length contrasts are actually found in phonemic diphthongs [4.2.3](#). The distinction *ae/aē* is expressed by writing *aae* (or *aaε*) for *ae* versus *aē* for *aē*:

<i>paae</i>	<i>pāe</i>	"reach"	[pʰaɪ]
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The contrast *av/au* is not marked. KB uses both *au* and *av*, spelling each individual word consistently, but not as marking any length distinction: thus *yauv* "grave" for *yàuv*, but *na'arauv* "ox" for *nā'-dávùv*; *dau* for *dāu* "man" but *tavn* for *tāuñ* "sibling of opposite sex." Ambiguity appears word-medially before *ŋ*:

<i>gbauŋ</i>	<i>gbāuŋ</i>	"skin"	[gʰbaʊŋ]
<i>mangauiŋ</i>	<i>màngáuiŋ</i>	"crab"	[maŋgaʊŋ]

The use of *ia ua* for the short monophthongs *ɪa ʊa* creates potential ambiguity with word-final *ia ua*:

<i>kia</i>	<i>kɪà</i>	"cut"	[kʰɪa]
<i>sia</i>	<i>sīa</i>	"waist"	[sia]
<i>kua</i>	<i>kɪā</i>	"hoe"	[kʰɪa]
<i>sabua</i>	<i>sàbùa</i>	"lover"	[sabua]

The convention that ' is not written after *i* when it represents *j* disambiguates

<i>kpi'a</i>	<i>kpi'a</i> <sup>+</sup>	"neighbour"	[kpi̯a]
<i>kpia'</i>	<i>kpià'</i> <sup>+</sup>	"shape wood"	[kpi̯a]

Before 2016, *ɥ'a* [ɥ̥a] was usually written *o'a*, but did not even then contrast consistently with *u'a* representing *u'a* [u̯a]. All *u'a* *ɥ'a* and *o'a* are now written *u'a*.

<i>po'a</i> or <i>pu'a</i>	<i>pu'ā</i>	"woman"	[p <sup>h</sup> ɥ̥a]
<i>po'ab</i> or <i>pu'ab</i>	<i>pū'ab</i>	"women"	[p <sup>h</sup> ɥ̥ab]

NT/KB write *-ey-* in Long Forms [2.3](#) corresponding to Short Forms where final *y* has become *-ɛ*: *vueya* = *vūyá* Long Form of *vūɛ* "be alive." Older NT versions also write *būn-vúyà* "living things" as *bunvoeya*, but KB has the expected *bunvuya*.

After the low root vowels *a* and *ɔ*, epenthetic *ɪ* is often written *e*:

<i>sa(n)rega</i>	<i>sāriɣá</i>	"prison"	[sarɪga]
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The 2016 orthography writes *bieya* for *bjēyá* "elder same-sex siblings" etc, but *suoya* for *sūyēyá* "roads", *zuoya* for *zūyēyá* "hills" etc by analogy with the singulars. *suor sūər* and *zuor zūər*. Older sources write *sueya*, *zueya*.

Traditional orthography omits word-internal *y* after *i*, except with Long Forms [2.3](#) ending in *-ya*; thus *dūniya*<sup>+</sup> "world" and *láafiya*<sup>+</sup> "health" are written *dunia* and *laafia* although they end in [ɪja], not in the diphthong *ia*.

For nasalisation, plain *n* is used for the *ñ* of this grammar:

<i>tɛɛns</i>	<i>tɛɛñs</i>	"lands"	[t <sup>h</sup> ɛ̃:s]
<i>ɣɛn'</i>	<i>ɣɛñ'</i>	"get angry"	[gɛ̃]
<i>ɣɛn'ɛd</i>	<i>ɣɛñ'ɛd</i>	<i>id</i> (ipfv)	[gɛ̃:d]
<i>nwam</i>	<i>ñwām</i>	"calabash"	[w̃ām]

As prefix vowels show no contrastive nasalisation, *n* ending a prefix (not a combining form) in traditional orthography must represent the consonant *n*:

<i>dunduug</i>	<i>dòndùug</i>	"cobra"	[dundu:g]
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Elsewhere, the constraints on word-internal consonant clusters usually prevent ambiguity, except when the *n* would be word-final without even a following glottalisation mark. Here the orthography formerly wrote *nn* to mark nasalisation, but the 2016 system unfortunately uses an ambiguous single *n*:

<i>kɛn</i> (older <i>kenn</i> )	<i>kɛ̃ñ</i>	"come" (pfv)	[kʰɛ̃]
<i>kɛn</i> (older <i>ken</i> )	<i>kɛ̃n</i>	"coming" (gerund)	[kʰɛ̃n]

Some NT/KB spellings represent **variant forms** different from those used by my informants; the words in question are probably loans from Toende Kusaal [15.1](#).

<u>NT/KB</u>	<u>WK's forms</u>	<u>Toende Kusaal</u>	
<i>Wina'am</i>	<i>Wínnà'am</i>	<i>Wínā'am</i>	"God"
<i>faangid</i>	<i>fāañd</i>	<i>fāagıt</i>	"saviour"
<i>faangir</i>	<i>fáañr</i>	<i>fāagıt</i>	"salvation"

*Wínà'am fāañgíd fāañgír* are used when transliterating Bible verses. *Fāañgíd fāañgír* have become independent words, used to avoid the homophony with *fāañd* "robber" and *fáañr* "robbery."

NT versions prior to 2016 write *aarun* for *añrun* "boat" (cf Toende *āarùn*), and *malek* for *màlĭāk* "angel" (Toende *màlék*); KB has the expected *anrun* and *maliak* throughout, matching the usage of all my informants and of the audio 1996 version.

The spelling *nyain* appears for *ñyāe* "brightly" even in texts prior to 2016, where *nyainn* would be expected. The 1992 audio NT renders it [jãĩ].

**Foreign proper names** in the Bible are adapted to ordinary Kusaal spelling conventions to a variable degree, with familiar names being most prone to alteration; such adaptation is much commoner in later versions than in the 1976 New Testament. There is no systematic relationship between the English pronunciation and the Kusaal renderings, and the 1996 audio NT varies in how far the spellings are read with English rather than Kusaal conventions. In transliterating verses I have simply reproduced the orthography of the originals.

Traditional **word division** can generally be obtained from the orthography of this grammar by writing all hyphenated groups solid, and by replacing the raised dot symbol · by word division.

Thus, compounds are written solid, except when a cb happens to have the same segmental form as the sg:

<i>ziŋban'ad</i>	<i>zīm-gbáñ'àd</i>	"fisherman"
<i>bukaŋa</i>	<i>bù-kàŋā</i>	"this goat"
<i>yamug bipun</i>	<i>yàmmug-bī-pún</i>	"slave girl" <a href="#">9.2.2</a>

Pronouns are written as separate words when they have vowels of their own:

<i>Fv bɔɔdi ti.</i>	"You love us."	[fɔbɔ:ditʰɪ]
<i>Fù bɔɔdī tí.</i>		
<b>2SG want 1PL.OB.</b>		



*Fv nyε o.* "You've seen her." [fojẽõ]  
*F̀̀ ñyέ·o\_∅.*  
**2SG see 3AN.OB.**

*Fv pv nyε oo.* "You've not seen her." [fɔpʰɔjẽõ:]  
*F̀̀ p̄ ñyέ·ó-o +∅.*  
**2SG NEG.IND see-3AN.OB NEG.**

In traditional orthography, focus-*nē*<sup>+</sup> is always written solid after *à(ñ)* from *àḡḡ*<sup>a</sup> "be", and temporal *nē*<sup>+</sup> is usually written solid with a preceding verb:

*O anε biig.* "He/she's a child."  
*̀̀ à nē biig.*  
**3AN COP FOC child:SG.**

*Bipuḡ la pv kp̄i, o gb̄isidε.*  
*B̄i-p̄uḡ lā p̄ kp̄i +∅, ̀̀ gb̄isid nē.*  
 Child-girl:SG ART NEG.IND die NEG, 3AN sleep:IPFV FOC.  
 "The girl is not dead, she is sleeping." (Mt 9:24)

*Nē* "with" is written solid after *wēn*<sup>na/</sup> "resemble":

*Ka o nindaa wenne nintāḡ ne.*  
*Kà ̀̀ n̄n-dāa wēn nē n̄ntāḡ nē.*  
 And 3AN eye-face:SG resemble with sun:SG like.  
 "His face is like the sun." (Rev 10:1, 1996)

In KB *wēn nē* appears as *nwεnε*: *Ka o nindaa nwεnε winniḡ nε.*

A stressed final syllable [2.2](#) is sometimes mistaken for a segmentally homophonous particle; this is rare in KB, however.

*O ku nyāḡe liebi m nya'andol la.*  
*̀̀ k̄ ñyāḡi\_∅ líab̄i\_̀̀ m̄ ñyà'an-d̄llā +∅.*  
**3AN NEG.IRR prevail CAT become 1SG after-follower:SG NEG.**  
 "He cannot become my disciple." (Lk 14:26, 1996; 2016 *nya'andolla*.)

*Arezana nε dunia gaadug pv t̄oi yaa*  
*̀̀ Arazánà nē d̄un̄lyā gáadùḡ p̄ t̄yá +∅.*  
 Heaven with world passing NEG.IND be.difficult NEG.  
 "The passing of heaven and earth is not difficult" (Lk 16:17, 2016)

## 1.4 Outline of Kusaal grammar

Kusaal is in most respects a typical Western Oti-Volta language. It is chiefly distinctive within Western Oti-Volta in having lost word-final short vowels even in citation forms (**apocope** 2.3), a feature shared with Nabit and Talni. (Clause-*medial* loss or reduction of word-final vowels is in contrast extremely common throughout the group.) Thus where Mooré has the citation form *bíiga* "child", the cognate Kusaal word *bīig*<sup>a</sup> normally appears in the **Short Form** (SF) *bīig*. However, this change is not a simple historical matter, like the loss of the earlier word-final vowel in French *mer* ← Latin *mare*; the Kusaal final vowel is still present in certain contexts. For example, it reappears clause-finally when the clause contains a negation or ends a question, with the final word appearing as a **Long Form** (LF):

Ò à nē bīig. "He/she's a child."  
**3AN COP FOC child:SG.**

Ò kā' bīiga +∅. "He/she is not a child."  
**3AN NEG.BE child:SG NEG.**

Ò à nē bīigàa +∅? "Is he/she a child?"  
**3AN COP FOC child:SG PQ?**

So too at the end of vocative phrases:

Ì bīiga +∅! "My child!"  
**1SG child:SG VOC!**

Word-final consonant clusters resulting from apocope are reduced to the first consonant:

Lì kā' gbīgumne +∅. "It's not a lion."  
**3INAN NEG.BE lion:SG NEG.**

Lì à nē gbīgum. "It's a lion."  
**3INAN COP FOC lion:SG.**

This appearance of surface untruncated forms rather than truncated is regarded as being triggered by following **prosodic clitics**, which have no segmental form of their own but show their presence by this effect on the preceding word form. There are four prosodic clitics: negative **NEG**, vocative **VOC**, polar-question **PQ** and



content-question **cq**, with different effects on preceding vowel length and tone. In interlinear glossing they are represented by  $+\emptyset$ , as above.

In citing word forms, superscripts [2.3.1](#) will be used to write the parts of words which are dropped everywhere except before prosodic clitics and liaison: *bīig*<sup>a</sup> "child", *gbīgim*<sup>nε</sup> "lion", *kōk*<sup>a</sup> "chair", *dōk*<sup>ɔ/</sup> "pot."

The phonology of Kusaal is significantly complicated by apocope. For example, apocope deletes segments responsible for rounding and fronting effects on preceding vowels, and renders those effects contrastive. This creates two series of diphthongs, along with emic contrasts among epenthetic vowels. Thus

*vīidé* "owls"

usually appears with apocope as the Short Form *vīid* with the same long vowel as *bīs* "children", shortened from *bīise*, while the singular Long Form

*vīugó* "owl"

has *iu* for *ii* because of the rounding effect of the final vowel, to which the velar *-g* is transparent; after apocope this becomes the Short Form

*vīug* "owl"

After the deletion of the final *-ɔ*, the diphthong itself now contrasts with the vowel of *bīig* "child", shortened from *bīiga* as seen above. Similarly

*āāñdiga* "black plum tree"

has the default epenthetic vowel *ɪ* before the flexion, and appears as *āāñdɪg* after apocope, whereas

*gàadugɔ* "passing" (gerund)

has rounding of the vowel to *u* before the flexion *-gɔ*, and after the loss of the final vowel this rounding itself becomes contrastive in the usual Short Form *gàadug*.

Certain **liaison words** cause a preceding word to appear, not as the usual clause-medial Short Form, but as a Long Form modified by the loss of all original vowel quality contrasts in the final mora. All non-contrastive personal pronouns fall into this category, for example:

*M̩ p̄*     *bɔɔdā*  $+\emptyset$ .     "I don't want to."  
**1SG NEG.IND** want    **NEG.**     Long Form *bɔɔdā* preceding negative clitic.

<i>M̄</i> <i>bɔ̀ɔdī</i> <i>́</i> <i>bá</i> .	"I love them."
<b>1SG</b> want <b>3PL.OB</b> .	Modified Long Form <i>bɔ̀ɔdī</i> before liaison.
<i>M̄</i> <i>p̄</i> <i>zábē</i> <sup>+∅</sup> .	"I haven't fought."
<b>1SG NEG.IND</b> fight <b>NEG</b> .	Long Form <i>zábē</i> preceding negative clitic.
<i>M̄</i> <i>zábī</i> <i>́</i> <i>bá</i> .	"I've fought them."
<b>1SG</b> fight <b>3PL.OB</b> .	Modified Long Form <i>zábī</i> before liaison.

With interlinear glossing, liaison is marked by *́*, as above.

Apocope reduces several liaison words of the underlying form CV to a single consonant. Thus with *bɔ̀ɔd*<sup>a</sup> "wants, loves" and *f* "you (sg)":

<i>M̄</i> <i>p̄</i> <i>bɔ̀ɔdī</i> <i>́</i> <i>f</i> <sup>+∅</sup> .	"I don't love you."
<b>1SG NEG.IND</b> want <b>2SG.OB NEG</b> .	Long Form <i>f</i> of the pronoun "you (sg)"
<i>M̄</i> <i>bɔ̀ɔdī</i> <i>́</i> <i>f</i> .	"I love you."
<b>1SG</b> want <b>2SG.OB</b> .	Short Form <i>f</i> of the pronoun "you (sg)"

The locative postposition *n*<sup>ε</sup> is another such word. It is conventionally written solid with the preceding host word, but hyphenated to it in this grammar:

<i>Lì</i> <i>kā'</i> <i>kōka</i> <sup>+∅</sup> .	"It's not a chair."
<b>3INAN NEG.BE</b> chair: <b>SG NEG</b> .	
<i>Lì</i> <i>kā'</i> <i>kōki-né</i> <sup>+∅</sup> .	"It's not in a chair."
<b>3INAN NEG.BE</b> chair: <b>SG-LOC NEG</b> .	
<i>kōki-n</i>	"in a chair"
chair: <b>SG-LOC</b>	
<i>Lì</i> <i>kā'</i> <i>dōkó</i> <sup>+∅</sup> .	"It's not a pot."
<b>3INAN NEG.BE</b> pot: <b>SG NEG</b> .	
<i>Lì</i> <i>kā'</i> <i>dōkí-nē</i> <sup>+∅</sup> .	"It's not in a pot."
<b>3INAN NEG.BE</b> pot: <b>SG-LOC NEG</b> .	
<i>dōkí-n</i>	"in a pot"
pot: <b>SG-LOC</b>	

The 3sg animate object pronoun <sup>o</sup> "him/her" has the Long Form *o* [ʊ] which is deleted entirely by apocope, producing a Short Form which is segmentally *zero*. Its presence is still shown by the rounding of the preceding host-word-final vowel mora from [ɪ] to [ʊ], which is always written with a preceding raised point as *·o*.

Compare the forms with *f* "you (sg)" with the forms with <sup>o</sup> "him/her":

*M̃ p̄ b̄́ɔd̄́ f̄́* +∅. "I don't love you."  
**1SG NEG.IND want 2SG.OB NEG.**

*M̃ b̄́ɔd̄́ f̄.* "I love you"  
**1SG want 2SG.OB.**

*M̃ p̄ b̄́ɔd̄́·ó·o* +∅. "I don't love him/her." [ɱpʰʊbɔ:dɔ:]  
**1SG NEG.IND want-3AN.OB NEG.** Long Form *o* of the pronoun "him/her"

*M̃ b̄́ɔd̄́·ō* ∅. "I love him/her." [ɱbɔ:dɔ]  
**1SG want 3AN.OB.** Short Form ∅ of the pronoun "him/her"

A liaison word form <sup>ya</sup> of the 2pl *subject* pronoun follows imperative verb forms. It similarly loses its entire segmental form in the Short Form, because *y* left word-final after front vowels by apocope is deleted:

*Ḡ̀s̄̀m!* "Look!"  
 Look:IMP!

*Ḡ̀s̄̀m̄* ∅! "Look ye!" by apocope from *ḡ̀s̄̀m̄-yá*  
 Look:IMP 2PL.SUB!

Liaison words are not all enclitic. Personal pronoun subjects and predeterminers also cause inhibition of apocope in the *preceding* word, as does one proclitic particle *à-* and all words beginning with certain derivational prefixes.

Two liaison-word particles which have the underlying form *n* also frequently lose their own segmental form entirely. As with *o* "him/her", their presence is then apparent only from the modified Long Form of the preceding word and from tone.

*ṁ z̄́ḡ́ ∅ z̄́b̄́ɔd̄́ l̄́ z̄́ḡ́*  
**1SG head:SG NZ fight:IPFV ART upon**  
 "because my head hurts" (nominaliser-*ṁ*)

*M̃ z̄́ḡ́ ∅ z̄́b̄́ɔd̄́.* "My head hurts." (catenator-*n*)  
**1SG head:SG CAT fight:IPFV.**

These various "disappearing" liaison words have unsurprisingly resulted in considerable confusion in word division in the traditional orthography, and are largely responsible for the many cases where clause-medial words acquire a mysterious short-vowel "ending."

Apocope has not only complicated Kusaal phonology, but has also affected morphology, as various strategies are adopted to avoid ambiguities that would otherwise result from final vowel loss and consonant cluster reduction. Expected flexions may be replaced by others of the same meaning but originally from different paradigms, or regular consonant assimilation processes may be blocked. In other cases, new untruncated forms have been created as the shortened form of one flexion has been reinterpreted as the homophonous shortened form of a different flexion.

Kusaal differs from most local languages in showing contrastive **glottalisation** of vowels; however, this feature is shared among Western-Oti Volta languages with neighbouring Nabit, Talni and Farefare.

Agolle Kusaal shows a systematic mismatch between phonetics and phonemics in the vowel system, because of **Agolle Vowel Breaking 4.1.1** of earlier short and long  $\epsilon$   $\upsilon$  vowels, still preserved as phonetic monophthongs in the Toende dialect. This has produced four phonemes  $\underset{\cdot}{j}a$   $\underset{\cdot}{y}a$   $i\text{ə}$   $u\text{ə}$  which are realised phonetically as diphthongs; for phonemic purposes these are digraphs representing monophthongs. Kusaal has also developed *phonemic* diphthongs from fusion of vowels following deletion of intervocalic \*g and from the final fronting and rounding effects already mentioned; these processes all remain active.

Kusaal is **tonal**, like the great majority of African languages south of the Sahara. The tone system is structurally very like that of Dagbani (a typical terracing system with H and L tones and emic downsteps) but is rather different in realisation because original H before L or downstep has become a new toneme, higher than original H. Original H has become M (Mid), and the new toneme takes the place of H.

There is a frequent **tone overlay** marking verbal predicators in main clauses, and pervasive external **tone sandhi**.

Acute, macron and grave mark H, M and L respectively. The macron and grave apply not only to the mora on which they are placed, but to all following morae within the same word up to another tone mark. An unmarked mora after an acute mark is, however, toneless, and the preceding H toneme is realised over both morae.

**Full word stems** are built around a root consisting of a short or long vowel, preceded by at most one consonant, and followed by consonants separated by epenthetic high vowels, or forming very limited sets of two-member clusters.

*dī̄əsídìb*

"receivers"

*bā̄ŋídìb*

"wise men"

*gbī̄gimnɛ*

"lion" (longer form, as above)

The only consonant clusters possible within stems following the root are *kk tt pp ŋŋ nn mm ll mn*, of which *kk tt pp ŋŋ* are written and usually realised as single. For *kp gb ñ* ' see Orthography 1.3. Consonant clusters cannot occur word-initially or finally, except for final geminate *-mm* in Long Forms where there has been loss of syllabicity in an originally syllabic final *m*.

Many nouns, and one adjective, have a **noun prefix** before the root, taking the forms *CV-* or *CVn-*, or less often *CVln-* or *CVsln-*. Nouns with prefixes may thus contain *-nC-* clusters at the junction between the prefix and the rest of the stem:

<i>pīpīriŋ</i>	"desert"
<i>dìndēog</i>	"chameleon"

Other word-internal clusters are confined to loanwords.

Flexional **suffixes**, like prefixes, have only a three-way vowel contrast *a/ɪ/ʊ*. Suffix vowels are lost by apocope in the surface Short Forms; when they are retained before prosodic clitics, *ɪ ʊ* appear lowered to *ɛ ɔ*. Clusters of two consonants occur freely across word division (including within compounds) due to apocope of word-final short vowels:

<i>Gbīgum lā dāa kūvd búj lā.</i>
Lion:SG ART TNS kill:IPFV donkey:SG ART.
"The lion ( <i>gbīgum</i> <sup>nɛ</sup> ) was killing ( <i>kūvd</i> <sup>a/</sup> ) the donkey ( <i>búj</i> <sup>a</sup> ) ."

Most common **particles** are short clitics, like the postposed article *lā* and the preverbal tense marker *dāa* in this example.

**Flexion** is entirely by suffixing, as is all productive stem derivation. Noun prefixes do not usually have identifiable meanings, but prefixes derived from older flexions occur in some quantifiers and adverbs.

Kusaal flexional morphology is underlyingly fairly straightforward, but with some morphophonemic complications. These words all belong to the same *g<sup>a</sup>|s<sup>ɛ</sup>* noun class:

<i>bīg</i>	"child"	<i>bīs</i>	"children"
<i>sàbùa</i>	"lover"	<i>sàbùəs</i>	"lovers"
<i>nūa</i>	"hen"	<i>nōs</i>	"hens"
<i>kūk</i>	"chair"	<i>kūgus</i>	"chairs"
<i>zàk</i>	"compound"	<i>zà'as</i>	"compounds"
<i>dà'a</i>	"market"	<i>dà'as</i>	"markets"
<i>bùŋ</i>	"donkey"	<i>bùmɪs</i>	"donkeys"
<i>tēŋ</i>	"land"	<i>tēēñs</i>	"lands"

**Noun flexion** marks singular and plural by suffixes which come in matched pairs, allowing a division of all nouns into seven noun classes with relatively few exceptions, other than those transparently explicable for phonological reasons. As with many such systems, the classes show a partial correlation with meaning. The bare stem is itself an important part of the paradigm, because (as is typical for Oti-Volta languages) it is extensively used as the first element in **compound** formation, which is a highly productive process. Among other things it is the normal way for a head noun to combine with an **adjective** or **postdeterminer pronoun**:

<i>būvg</i> <sup>a</sup> "goat"	+ <i>piəliɡ</i> <sup>a</sup> "white"	→ <i>bù-piəliɡ</i> <sup>a</sup>	"white goat"
<i>būvg</i> <sup>a</sup> "goat"	+ <i>sīa</i> <sup>+</sup> "another"	→ <i>bù-sīa</i> <sup>+</sup>	"another goat"
<i>kūk</i> <sup>a</sup> "chair"	+ <i>piəliɡ</i> <sup>a</sup> "white"	→ <i>kùg-piəliɡ</i> <sup>a</sup>	"white chair"
<i>kūk</i> <sup>a</sup> "chair"	+ <i>kàŋā</i> <sup>+/</sup> "this"	→ <i>kùg-kàŋā</i> <sup>+/</sup>	"this chair"

In most Gur languages the noun classes form a grammatical gender system, with pronoun and adjective agreement. Kusaal, like most other Western Oti-Volta languages, has abandoned grammatical gender in favour of a natural animate/inanimate gender opposition. Noun classes remain central to noun morphology, with a few fossilised traces of agreement.

Like virtually all the local languages (including *Gaanancii* Hausa, and, disconcertingly for a British native speaker, even some local English) Kusaal makes no grammatical distinction between male and female. In the English translations I have used "he" or "she" randomly where the antecedent is unspecified.

A characteristic feature of Western Oti-Volta is a striking simplification of **verb flexion**, with just one "conjugation" of prototypical "variable verbs", using the bare stem for **perfective** aspect and marking the **imperfective** aspect with a single suffix *-d*<sup>a</sup>. There are few real irregularities, though unobvious consonant changes and vowel deletions again complicate the surface picture:

<i>kū</i> <sup>+</sup>	perfective	"kill" (+ means that the vowel is long in the LF)
<i>kūvd</i> <sup>a/</sup>	imperfective	
<i>ñyē</i> <sup>+</sup>	perfective	"see"
<i>ñyēt</i> <sup>a/</sup>	imperfective	
<i>vū</i> <sup>ε</sup>	perfective	"swallow"
<i>vūn</i> <sup>na/</sup>	imperfective	

Variable verbs also have an imperative flexion *-m*<sup>a</sup>, appearing only in positive polarity when the verb carries the tone overlay of independency marking (see below.)

"Invariable verbs" typically express body positions, relationships, or predicative adjectival senses. They have only a single finite form, which has either **stative** or **dynamic imperfective** aspect depending on the verb:

Ò *dìgi* *nē*. "She's lying down."  
**3AN** be.lying.down **FOC**.

Ò *mòr* *búŋ*. "She has a donkey."  
**3AN** have donkey:**SG**.

Ò *gim*. "She's short."  
**3AN** be.short.

There are two **verbs "to be"**: *bè* "exist, be in a place" and *àeñ* "be something/somehow." The latter verb is usually followed by the focus particle *nē* (in this case focussing the complement) whenever this is syntactically permitted, and then loses both the final *e* and the nasalisation:

Ò *à* *nē* *bīig*. "He's a child."  
**3AN COP FOC** child:**SG**.

The two "be" verbs share a common negative-verb counterpart *kā'e* "not be", which usually appears as *kā'* clause-medially:

Ò *kā'* *bīiga* <sup>+∅</sup>. "He's not a child."  
**3AN NEG.BE** child:**SG** **NEG**.

Kusaal is well-provided with word-level **derivational** processes. For example, regular deverbal gerunds, agent nouns and instrument nouns can be made freely from most verb types:

*kōvb<sup>ɔ</sup>* "killing"  
*kōvd<sup>a</sup>* "killer"  
*kōvdíŋ<sup>a</sup>* "killing implement"

Compound formation, besides being the regular way of adding adjectives to nouns, is common in noun phrase formation generally; there are many set expressions, but compounds of all kinds can be created freely:

*gbìgim-kōvd<sup>a</sup>* "lion-killer"

Syntactically, Kusaal is strictly **SVO**, with indirect objects preceding direct:

*M̄ tís dɔ'átà búŋ lā.*  
**1SG** give doctor:**SG** donkey:**SG** **ART**.  
 "I've given Doctor the donkey."

As seen above, an adjective follows its noun and forms a compound with it. There are two native **prepositions**, *nē* "with" and *wōv* "like" (*nē* also links NPs and some AdvPs in the sense "and", but *kà* is "and" when linking VPs and clauses.)

In other respects Kusaal prefers head-final structures, with **possessors**, for example, always preceding their heads:

*m̄ bīg* "my child"  
*dāy lā bīg* "the man's child"

Adverbs often appear as **postpositions** preceded by NP determiners:

*téebùl lā zúg* "onto the table" (*zūg* "head")

The liaison word *n<sup>ε</sup>* mentioned above is a very general locative postposition. It is hyphenated to the preceding word, and in its Short Form is reduced to *n*:

*mù'arī-n* "in a lake" (*mù'arē* "lake", Long Form)  
 lake:**SG-LOC**

The verb is preceded by proclitic particles expressing tense, mood and polarity. There is no agreement with any noun phrase, whether for person or number:

*Gbīgum lā dāa kō búŋ lā.*  
 Lion:**SG** **ART** **TNS** kill donkey:**SG** **ART**.  
 "The lion killed the donkey."

*Gbīgum lā dāa pō kō búŋ lāa +∅.*  
 Lion:**SG** **ART** **TNS** **NEG.IND** kill donkey:**SG** **ART** **NEG**.  
 "The lion didn't kill the donkey."

*Gbīgum lā sá kù búŋ lā.*  
 Lion:**SG** **ART** **TNS** kill donkey:**SG** **ART**.  
 "The lion killed the donkey yesterday."



The **focus** particle *nē* appears frequently after a verb in a *temporal* sense; it limits the sense of the predicator, implying "at the time referred to in particular.":

*Nīdɪb kpîd.* "People die."  
 Person:PL die:IPFV.

*Nīdɪb kpîd nē.* "People are dying."  
 Person:PL die:IPFV **FOC**.

The particle generally has this meaning when the verb allows it and no unbound words intervene between verb and particle, but it also focusses VP constituents or entire VPs. With stative verbs like *àeñ* "be something" above, the temporal sense is usually not possible, and the particle must be interpreted as focussing a verb phrase constituent.

As with many West African languages, many clauses join more than one verb phrase by **VP chaining**. Kusaal uses the linker particle *n* **CAT** to introduce an additional verb phrase; in this example *tis* "give" is used, as very often, simply as means of adding an indirect object:

*M̄ dāa kùès bònɔ\_ ø tís dɔ'átà.*  
**1SG TNS** sell donkey:SG **CAT** give doctor:SG.  
 "I sold a donkey to Doctor."

In Kusaal the verbal predicate is specifically marked not for subordination but for its absence. Main and content clauses have **independency marking** of the first verbal predicator, marked by a **tone overlay** affecting the first word of the predicator, the tonal behaviour of subject pronouns, a special imperative flexion and a particle *yā* which follows clause-final perfectives. The tone overlay marker is absent in negative polarity or irrealis mood and with various preverbal particles.

Independency marking itself is completely absent after the clause-linker particle *kà* even in *coordinating* function, as in narrative:

*Ò zàb dɔ'átà.* "He's fought the doctor."  
**3AN** fight doctor:SG.

*Ò gòs dɔ'átà.* "He's looked at the doctor."  
**3AN** look.at doctor:SG.

with the verbs *zàb gòs* showing identical tones because of the overlay; contrast

*Kà ò záb dɥ'átà.* "And he's fought the doctor."  
 And **3AN** fight doctor:**SG**.

*Kà ò gōs dɥ'átà.* "And he's looked at the doctor."  
 And **3AN** look.at doctor:**SG**.

If tone overlay is present, it may be accompanied by segmental effects; for example, imperatives of inflecting verbs then take a special flexional ending *-m<sup>a</sup>*:

*Dā gōs dɥ'átāa +∅!* "Don't look at the doctor!"  
**NEG.IMP** look.at doctor:**SG NEG!**

but *Gòsim dɥ'átà!* "Look at the doctor!"  
 Look.at:**IMP** doctor:**SG!**

Main clauses frequently have adjuncts preceding the subject which express time or circumstance; conditional subordinate clauses, which contain *yà'* "if" after their own subject, appear before the main clause subject:

*Fù yá' bòɔd, ò ná tīsɪ\_f búŋ.*  
**2SG** if want, **1SG IRR** give **2SG.OB** donkey:**SG**.  
 "If you want, I'll give you a donkey."

Clauses are often downranked by insertion of the nominaliser particle *ñ* (very frequently realised as segmental  $\emptyset$ ) after the subject:

*gbīgim lá\_∅ kō búŋ* "the lion having killed the donkey"  
 lion:**SG ART NZ** kill donkey:**SG ART**

One type of relative clause is internally-headed:

*[Paul ñ sōb gbàŋ-sī'a n tīs Efesus dím lā]\_∅ ñwá.*  
 Paul **NZ** write letter-**INDF.INAN CAT** give Ephesus one.**PL ART CAT** this.  
 "This is [the letter Paul wrote to the Ephesians]." (NT heading)

Here *gbàŋ-sī'a* is *gbàŋ* "book" compounded with the postdeterminer pronoun *sī'a* which marks it as antecedent, and the entire sequence *Paul ... lā* is the relative clause. The subordinator is not the pronoun but the nominaliser particle *ñ*.

Kusaal has also developed an antecedent-initial relative clause type where the nominaliser has fused with a preceding demonstrative to form a relative pronoun:

*dà̀y-kà̀nɪ pɹ'ā kɹí lā* "the man whose wife has died"  
 man-REL.SG wife:SG die ART

Subordinate clauses may be introduced by the linker particles *yē* or *kà*, expressing purpose, result etc.

*M̄ ná tī f tīm yé fù nīf dā zábē +∅.*  
 1SG IRR give 2SG.OB medicine that 2SG eye:SG NEG.IMP fight NEG.  
 "I'll give you medicine so your eye won't hurt."

*Kà* can introduce adnominal clauses, with a meaning like a non-restrictive relative clause:

*Lì à nē gbīgum lá kà m̄ n̄yēt.*  
 3INAN COP FOC lion:SG ART and 1SG see:IPFV.  
 "It's the lion I see."

Kusaal **narrative** links clause after clause with *kà*, regularly omitting tense marking so long as the action is preceding in sequence, but including it when there are descriptive passages or "flashbacks." In this passage the past-tense marker *dà* occurs only in the first clause. The second *kà* is preposing the time expression *dāar yīnní*, part of an elliptical clefting construction (see below), while the first and third are carrying on the narrative:

*Apuzotyel da ane o saam biig ma'aa. Ka daar yinni ka biig la ne o saam zin'i sonsid. Ka biig la ti yel o saam ye ...*

*À-Pō-zót-yēl dá à né ò sàam bīg mà'aa.*

PERS-NEG.IND-fear:IPFV-thing:SG TNS COP FOC 3AN father:SG child:SG only.

*Kà dāar yīnní kà bīg lā né ò sàam zín'i ∅ sōñsid.*

And day:SG one and child:SG ART with 3AN father:SG sit CAT converse:IPFV.

*Kà bīg lā tí yèl ò sàam yē ...*

And child:SG ART afterwards say 3AN father:SG that...

"Fears-nothing was his father's only son. [And] one day the son and father were sitting talking. [And] then the son said to his father ..." KSS p35

**Content clauses** are formally identical to main clauses, and likewise display independency marking, but have personal pronouns altered as in indirect speech. Content clauses are used for reporting speech and also very generally after verbs expressing communication or thought. Most often they are introduced by *yē* "that." There are **logophoric** uses of contrastive personal pronouns within content clauses.

*Dau da be mori o po'a yimmir, ka po'a la ye on pu lem bood ye o sid la di po'a ya'ase.*

*Dāy dá bē\_∅ mōrí\_ò pɔ̀'à-yīmmír, kà pɔ̀'ā lā yé*

Man:SG TNS EXIST CAT have 3AN wife-single:SG and wife:SG ART say

*ɔ̃n pō lém bɔ̀ɔd yé ò sīd lā dí pɔ̀'ā yá'asē +∅.*

3AN.CNTR NEG.IND again want that 3AN husband:SG ART take wife:SG again NEG.

"There was a man who had only one wife. [And] the wife said that **she** did not want her husband to take another wife." KSS p26

**Clefting** constructions are common; they have given rise to ellipted structures using *n* for focussing subjects and *kà* for foregrounding other elements:

*M̄ zūgv\_∅ zábìd.*

1SG head CAT fight:IPFV.

"My head is hurting."

(Reply to "Where is the pain?")

*Gbīgím kà m̄ dāa ñyē.*

Lion:SG and 1SG TNS see.

"It was a lion that I saw."

Although there is no syntactic movement rule for **interrogative** words, they are frequently preposed in this way, and focussing with *n* is compulsory for *àń'òń* "who?" as subject even though it remains *in situ* before the verb.

*Fù bɔ̀ɔd bɔ́ +∅?*

2SG want what CQ?

"What do you want?"

*Bɔ́ kà fù ñyētá +∅?*

What and 2SG see:IPFV CQ?

"What can you see?"

*Àń'òńì\_∅ kō búŋ lā +∅?*

Who CAT kill donkey:SG ART CQ?

"Who has killed the donkey?"

Place and manner adjuncts may only precede the subject by preposing with *kà*:

*Mām bé nē mɔ̀ɔgv-n.*

1SG.CNTR EXIST FOC grass:SG-LOC.

"I'm in the bush." BNY p8

*Mɔ̀ɔgú-n kà mām bé.*

Grass:SG-LOC and 1SG.CNTR EXIST.

"I'm in the bush." BNY p10 (*kà* required)

## Morphophonemics

### 2 Words, morae and syllables

#### 2.1 Word classes

**Free words** fulfil the concept of "word" expressed in Bloomfield 1926: "A minimum free form is a word. A word is thus a form which may be uttered alone (with meaning) but cannot be analyzed into parts that may (all of them) be uttered alone (with meaning.)" This definition excludes words like the English "the" and the Kusaal article *lā*<sup>+/</sup>. In this grammar the term **clitic word** includes every minimal bound form other than a flexion that is *meaningful at a level higher than the derivational*; the distinction between clitics and flexions is made along the lines suggested in Zwicky and Pullum 1983. This grants clitic status to the article, to the bound pronouns and particles seen in the VP, NP, AdvP and clause, and also to the *open* class of noun and adjective combining forms, but denies it to prefixes.

The open word classes comprise **verbs** and **nominals**, the latter subdivided into **nouns** and **adjectives** along with closed subclasses of **quantifiers**, **adverbs**, and **pronominals**. **Ideophones** are treated in [16.11.1.3](#).

All other words are **particles**. Most particles are bound words; exceptions include *ēñ* "yes" and *áyì* "no." Particles include the article *lā*<sup>+/</sup> and the deictic *ñwà*<sup>+</sup> "this", the locative marker *nī*<sup>+/</sup>~*n<sup>ε</sup>*, the prepositions *nē* "with" and *wōv* "like", preverbs and markers of tense, aspect and mood in verbal predicators, the focus particle *nē*<sup>+/</sup>, the clause linkers *kà* and *yē*, nominaliser-*ñ*, catenator-*n*, VP-final *nā*<sup>+/</sup> "hither" and *sà*<sup>+</sup> "hence", and a number of clause-level words such as conjunctions and emphatics.

#### 2.2 Morae, syllables and stress

All segments constitute **morae**, except for consonants immediately followed by vowels within the same word; other consonants represent **non-vocalic** morae. Written *k p t ŋ* between vowels represent *kk pp tt ŋŋ*, so that e.g. *sú'əŋ* SF "rabbit" has three morae, while the LF *sú'əŋā* has four. Vocalic morae are the domain of **tone**, but not all vocalic morae bear a toneme [5.2](#) [5.4](#).

**Stress** operates with **syllables**; all vocalic morae form syllables, except for the final morae of 2- and 3-mora vowels/diphthongs.

Three-mora vowel sequences are disyllabic, with syllable division following the first mora: LF *nū-áa* "hen."

Word stress falls on the root, except before a prosodic clitic [8.1](#), where it falls on the last syllable. Prefixes and combining forms are not stressed.

Monosyllabic words with a short vowel do not have intrinsic stress. This applies not only to clitics, but even to monosyllabic verbal and nominal forms with a short

vowel, like *mè* "build (pfv)" *bòŋ* "donkey" *ŋn* "he/she." Monosyllables with a long vowel, like *mèɛd* "build (ipfv)" do have intrinsic stress.

Before pause, all intrinsically unstressed words acquire stress, including clitics like the article *lā*<sup>+/</sup>. Even a liaison enclitic [8.2.1](#) acquires stress if it has a vowel of its own, while its host retains its own stress.

Stress is important in allotony; downstepping before H tonemes is dependent on syllable structure and stress. See [5.3](#) for examples.

In a few cases stress has shifted from a root to an original epenthetic vowel, with the root being reinterpreted as a prefix:

	<i>dítún</i> <sup>ɔ</sup>	[ˈdɪtːʊŋ]	"right hand", probably a derivative of <i>dì</i> <sup>+</sup> "eat"
	<i>dàtìŋ</i> <sup>ɔ</sup>	[daˈtʰɪŋ]	"right hand"
	<i>bōtɪŋ</i> <sup>a</sup>	[ˈbɔtːɪŋ]	"cup" (Instrument noun <a href="#">13.1.1.3</a> from <i>bùd</i> <sup>ɛ</sup> "plant seeds", but now "cup" in general)
pl	<i>bōtus</i> <sup>ɛ</sup>	[bɔˈtʰɪːs]	wholly exceptional apparent lengthening of an epenthetic vowel <a href="#">6.2.1</a> via reanalysis of the sg as prefix <i>bō</i> + stem <i>tīŋ</i> <sup>a</sup>

### 2.3 Apocope

Every Kusaal word which can potentially stand clause finally has two surface forms, which differ in nearly all cases, the **Long Form** (LF) and the **Short Form** (SF.)

For example, "child" appears as the Short Form *bīg* in isolation and in most contexts, including clause finally for the most part, and clause medially everywhere except when followed by a particular set of "liaison words" [8.2](#):

Ò *dāa ñyē bīg*. "She saw a child."  
**3AN TNS** see child:**SG**.

*bīg lā nú'ùg* "the child's hand"  
 child:**SG** ART hand:**SG**

The Long Form (here, *bīga*) is found in the final word of

Clauses with a **negation** (negative particle or negative verb)  
**Questions**, both content and polar  
 Phrases used as **vocatives**

Ò *kā' bīga* +∅. "He/she is not a child."  
**3AN NEG.BE child:SG NEG.**

Ò *dāa pō ñyē bīga* +∅.  
**3AN TNS NEG.IND see child:SG NEG.**  
 "He/she did not see a child."

Ànó'ɔ̀nì\_∅ *dāa ñyē bīgà* +∅?  
 Who **CAT TNS see child:SG CQ?**  
 "Who saw a child?"

Ì *bīga* +∅! "My child!"  
**1SG child:SG VOC!**

The Long Form also appears as a **derivational** feature in the *citation* form of some words [6.4](#). Direct commands sometimes end in a LF [25.2.3](#).

The LF appears in a modified form before **liaison**, with LF final short vowels losing all contrasts of quality [8.2](#).

The LF is not predictable in general from the shape of the SF alone (but see [2.3.2](#)); however, the SF is always derivable from the LF by **apocope**:

A final long vowel is shortened and a final short vowel is deleted.  
 Final diphthongs shorten by one mora.

Subsequently

Word-final consonant clusters drop the second consonant  
 (*kk tt pp ηη* become *k t p η* but are *written* single in any case [1.3](#))  
 Word-final *y* becomes *ɛ* after back vowels and zero elsewhere

Shortening of final diphthongs by apocope (changes apply identically to nasalised and/or glottalised diphthongs):

*ia* → *ja*    *ua* → *ɥa*    *ja'a* → *ja'*    *ɥ'aa* → *ɥ'a*  
*ae* → *aɛ*    *av* → *aɥ*    *ui* → *uj*  
*Vaa* → *Va*    *Vee* → *Ve*    *Vuv* → *Vv*

The term "apocope" will be used exclusively for this phenomenon. Apocope is described as a single process, but historically the matter was more complex: comparative and internal evidence suggests that loss of quality contrasts preceded the complete deletion of word-final vowels clause-medially, which was itself probably a stress-related process distinct from the clause-final apocope characteristic of Kusaal, Nabit and Talni. (Cf also on Toende word-final stop devoicing [3.1](#) fn.)

Examples:

<i>Lì à nē kōk.</i>	"It's a chair."
<b>3INAN COP FOC chair:SG.</b>	
<i>Kōk lā bódìg yā.</i>	"The chair has got lost."
Chair:SG ART get.lost PFV.	
<i>Lì kā' kōka. +∅.</i>	"It's not a chair."
<b>3INAN NEG.BE chair:SG NEG.</b>	
<i>Lì à nē kúkàa +∅?</i>	"Is it a chair?"
<b>3INAN COP FOC chair:SG PQ?</b>	
<i>Ànó'ɔ̀nì_∅ ñyē kúkà +∅?</i>	"Who saw a chair?"
Who <b>CAT</b> see chair:SG CQ?	

Similarly, with the same frames (also using *ò* 3AN "he/she", *bà* 3PL "they"):

<i>Lì à nē dōk.</i>	"It's a cooking pot."
<i>Dōk lā bódìg yā.</i>	"The pot's got lost."
<i>Lì kā' dōkó.</i>	"It's not a pot." /kk/
<i>Lì à nē dōkóɔ?</i>	"Is it a pot?"
<i>Ànó'ɔ̀nì ñyē dōkó?</i>	"Who saw a pot?"
<i>Lì à nē gbīgim.</i>	"It's a lion."
<i>Lì kā' gbīgimne.</i>	"It's not a lion."
<i>Lì à nē gbīgimne?</i>	"Is it a lion?"
<i>Ànó'ɔ̀nì ñyē gbīgimne?</i>	"Who saw a lion?"
<i>Lì à nē yáarim.</i>	"It's salt."
<i>Lì kā' yáarimm.</i>	"It's not salt."
<i>Lì à nē yáarimm?</i>	"Is it salt?"
<i>Ànó'ɔ̀nì ñyē yáarimm?</i>	"Who saw salt?"



<i>Bà à nē gbīguma.</i>	"They're lions."
<i>Bà kā' gbīgumaa.</i>	"They're not lions."
<i>Bà à nē gbígumàa?</i>	"Are they lions?"
<i>Àń'òńì ñyē gbígumà?</i>	"Who saw lions?"
<i>Ò à nē dāy.</i>	"He's a man."
<i>Ò kā' dāv.</i>	"He's not a man."
<i>Ò à nē dáùv?</i>	"Is he a man?"
<i>Àń'òńì ñyē dāv?</i>	"Who saw a man?"
<i>Ò à nē sāeñ.</i>	"He's a blacksmith."
<i>Ò kā' sāeñ.</i>	"He's not a blacksmith."
<i>Ò à nē sáèeñ?</i>	"Is he a blacksmith?"
<i>Àń'òńì ñyē sáeñ?</i>	"Who saw a blacksmith?"
<i>Lì à nē múj.</i>	"It's rice."
<i>Lì kā' múi.</i>	"It's not rice."
<i>Lì à nē múii?</i>	"Is it rice?"
<i>Àń'òńì ñyē múi?</i>	"Who saw rice?"
<i>Kà ò sjàk.</i>	"And he agreed."
And <b>3AN</b> agree.	
<i>Ò pū sjàkē +∅.</i>	"He didn't agree."
<b>3AN NEG.IND</b> agree <b>NEG.</b>	
<i>Kà ò dīgi.</i>	"And she's lying down."
And <b>3AN</b> be.lying.	
<i>Ò pū dīgiyá +∅.</i>	"She isn't lying down."
<b>3AN NEG.IND</b> be.lying <b>NEG.</b>	
<i>Kà ò vūe.</i>	"And she's alive."
<i>Ò pū vūyá.</i>	"She's not alive."
<i>Kà ò kuyā.</i>	"And he farmed."
<i>Ò pū kūa.</i>	"He hasn't farmed."
<i>Kà ò kjà.</i>	"And she cut (it)."
<i>Ò pū kía.</i>	"She hasn't cut (it)."

<i>Kà ò pāe.</i>	"And he reached (it)."
<i>Ò pō pāée.</i>	"He hasn't reached (it)."

The derivational type of Long Form appears in many adverbs and quantifiers. Thus with the adjective *bédug* "big" and the adverb *bédugū* "a lot":

<i>Lì à nē bōn-bédùg.</i>	"It's a big thing."
<b>3INAN COP FOC</b> thing-big: <b>SG</b> .	
<i>Lì kā' bōn-bédugō +∅.</i>	"It's not a big thing."
<b>3INAN NEG.BE</b> thing-big: <b>SG</b> <b>NEG.</b>	
<i>M̄ pú'ùs yā bédugū.</i>	"Thank you very much."
<b>1SG</b> greet <b>PFV</b> much.	

### 2.3.1 Superscript notation

The exact shape of a Long Form differs in different contexts. Final vowel length may be neutralised, final short vowel qualities may be altered or completely neutralised, and final tonemes may be altered. Changes to LFs occur clause-medially before **liaison** 8.2, and clause-finally before **prosodic clitics** 8.1, which have no segmental form of their own but cause the preceding word to appear as a LF rather than the default SF. Derivational LF types are taken as showing **apocope-blocking** 6.4. The Long Form as such is an abstraction, representing the underlying word-form which produces the surface SF through apocope, and the various surface LFs through application of the rules for each environment. For convenience, the LF form preceding the *negative* prosodic clitic will be taken as basic. It shows underlying LF-final short *-ɪ -ʊ* as *-ɛ -ɔ*, *\*-mʊ \*-mɪ* as *-mm -mm* and *-iə -uə* as *-ia -ua* 4.1.1, and its final toneme is always either M or H.

Words in isolation will be cited in **superscript notation**, writing forms with the portion of the LF which does not appear in the SF as a following superscript.

<i>bīg<sup>a</sup></i>	"child"	<i>kōk<sup>a</sup></i>	"chair"
<i>dōk<sup>ɔ</sup></i>	"pot"	<i>sjàk<sup>ɛ</sup></i>	"agree"
<i>gbīgim<sup>nɛ</sup></i>	"lion"	<i>yàarim<sup>m</sup></i>	"salt"
<i>dīg<sup>ya</sup></i>	"be lying down"	<i>zì'e<sup>ya</sup></i>	"be standing"

When the LF ends in a long vowel or diphthong, superscript notation writes the SF followed by the mark <sup>+</sup>:

<i>gbīguma</i> <sup>+</sup>	"lions"	SF <i>gbīguma</i>	LF <i>gbīgumaa</i>
<i>mòli</i> <sup>+</sup>	"gazelles"	SF <i>mòli</i>	LF <i>mòlī</i>
<i>gòñ</i> <sup>+</sup>	"hunt"	SF <i>gòñ</i>	LF <i>gōɔñ</i>
<i>tìeñ</i> <sup>+</sup>	"inform"	SF <i>tìeñ</i>	LF <i>tìēeñ</i>
<i>kjà</i> <sup>+</sup>	"cut"	SF <i>kjà</i>	LF <i>kīa</i>
<i>kɥā</i> <sup>+</sup>	"hoe"	SF <i>kɥā</i>	LF <i>kūa</i>
<i>dāɥ</i> <sup>+</sup>	"man"	SF <i>dāɥ</i>	LF <i>dāv</i>
<i>sāeñ</i> <sup>+</sup>	"blacksmith"	SF <i>sāeñ</i>	LF <i>sāeñ</i>

(This use of <sup>+</sup> exploits the extent to which LFs can be predicted synchronically from SFs [2.3.2](#). More radical simplifications could be made: <sup>+</sup> <sup>ε</sup> <sup>m</sup> = are in complementary distribution, as are <sup>a</sup> <sup>y</sup><sup>a</sup>. Separate symbols are used for clarity.)

Superscript <sup>a</sup> is written after a vowel symbol in two cases.

Words ending in LF *ja'a ɥ'aa* are written with superscript <sup>a</sup> rather than <sup>+</sup> to distinguish them from words ending in LF *i'a u'a*:

	<i>kpjà</i> <sup>+</sup>	"shape wood"	SF <i>kpjà</i> '	LF <i>kpī'a</i>
but	<i>djā</i> <sup>a</sup>	"get dirty"	SF <i>djā</i> '	LF <i>djā'a</i>
	<i>kɥā</i> <sup>+</sup>	"hoe"	SF <i>kɥā</i>	LF <i>kūa</i>
but	<i>ɥ'ā</i> <sup>a</sup>	"woman"	SF <i>ɥ'ā</i>	LF <i>ɥ'āa</i>

Words with LFs in *-ya* where the SFs changes the word-final *-y* to *-ɛ* are also written with superscript <sup>a</sup>:

<i>vōɛ</i> <sup>a/</sup>	"be alive"	SF <i>vōɛ</i>	LF <i>vōyá</i>
<i>tōɛ</i> <sup>a/</sup>	"be bitter"	SF <i>tōɛ</i>	LF <i>tōyá</i>

Words with segmentally identical SF and LF and are written with =:

<i>dà'a</i> <sup>=</sup>	"market"
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In a few cases where superscript notation is impractical, the forms will be written out separately, e.g. *pāmm* SF *pāmné* LF "a lot."

In accordance with the LF tonemes seen before the negative prosodic clitic, **the LF is to be understood as ending with M toneme, unless the superscript is followed by an acute mark /** (for H.)

This final M or H tone is by default realised on the rightmost vocalic mora of the LF, but **tautosyllabic delinking** [5.2](#) may apply. If a pitch rise would otherwise result within a single syllable, the first mora is delinked and the second toneme links to both morae; this process is not marked in superscript notation itself:

<i>fūug</i> <sup>ɔ/</sup>	"shirt, clothes"	SF <i>fūug</i>	LF <i>fūug</i> <sup>ɔ</sup>
<i>pāe</i> <sup>+/</sup>	"reach"	SF <i>pāe</i>	LF <i>pāée</i>
<i>nūa</i> <sup>+/</sup>	"hen"	SF <i>nūa</i>	LF <i>nūáa</i>
<i>yā</i> <sup>+/</sup>	"houses"	SF <i>yā</i>	LF <i>yáa</i>
<i>lā</i> <sup>+/</sup>	(article)	SF <i>lā</i>	LF <i>láa</i>
<i>bèdvgū</i> <sup>+/</sup>	"a lot"	SF <i>bèdvgū</i>	LF <i>bèdvgúu</i>
<i>gāañ</i> <sup>=/</sup>	"Nigerian ebony"	SF <i>gāañ</i>	LF <i>gáañ</i>
<i>dāam</i> <sup>m/</sup>	"millet beer"	SF <i>dāam</i>	LF <i>dáamm</i>
<i>tāuñ</i> <sup>+/</sup>	"opposite-sex sib"	SF <i>tāuñ</i>	LF <i>táuñ</i>
<i>m̀li</i> <sup>+</sup>	"gazelles"	SF <i>m̀li</i>	LF <i>m̀lí</i>

Similarly, when the liaison enclitic <sup>o</sup> "him/her" is attached to a perfective form ending in a root vowel, the first mora in the SF is delinked when a pitch rise would otherwise occur within the syllable: such forms are written with *LF* tones:

<i>ňyē·ó</i> <sup>o</sup>	"see him/her"	SF <i>ňyé·o</i>	LF <i>ňyē·ó·o</i>
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Note that *kū·ó*<sup>=</sup> "kill him/her" represents the identical SF and LF *kú·o*.

Tautosyllabic delinking also applies if the sequence HM would result on a single syllable. In this case it is the M on the *second* mora which is delinked:

<i>Lì k̄a' yáar̄imm.</i>	"It's not salt ( <i>yàarim</i> <sup>m</sup> )."
but <i>Lì k̄a' ò t̄imm.</i>	"It's not her medicine (← <i>t̄imm</i> ← <i>t̄im</i> <sup>m</sup> )."
<i>Lì k̄a' t̄imm.</i>	"It's not medicine (← <i>t̄imm</i> )."
<i>Lì k̄a' bà d̄a'a.</i>	"It's not their market (← <i>dà'ā</i> ← <i>dà'a</i> <sup>=</sup> )."
<i>Lì k̄a' dá'a.</i>	"It's not a market (← <i>dá'ā</i> )."

Tautosyllabic delinking causes words like *náaf*<sup>p</sup> and *nú'ùg*<sup>ɔ</sup> to coincide tonally in the LF only: such words are written in superscript notation with the SF tonemes.

<i>Lì k̄a' nú'uḡ +∅.</i>	"It's not a hand."
<b>3INAN NEG.BE hand:SG NEG.</b>	

<i>Lì k̄a' náaf̄ +∅.</i>	"It's not a cow."
<b>3INAN NEG.BE COW:SG NEG.</b>	

### 2.3.2 Predictability of Long Forms

The LF can usually be predicted from the SF given the aspect of a verb, or whether a noun has human reference [9.1](#). Historically expected forms may be replaced by such predicted forms, either as variants or throughout. Apocope frequently does *not* lead to loss of segmental contrasts despite deleting segments which condition preceding sound changes, and working in reverse, such features can often accurately predict LFs from SFs; even words completely deleted by apocope remain recognisable from their effects on preceding words.

This raises questions about the psychological reality of LFs as underlying word forms. The LF will be treated as synchronically primary, as it certainly is historically, but the matter merits discussion.

Apocope abolishes the contrast between Tone Patterns H and O in nominals with 2-mora stems, and where LFs lack contrasts present in SFs this is due to a late tone realisation rule [5.2](#). However, Tone Patterns are best described synchronically as suprasegmental stem features [7.1](#), so this does not establish the primacy of the LF.

With **SFs ending in consonants**, it is not possible in principle to predict the LF from the SF alone. The LF may end in *a* *ε* or *ɔ*; preceding SF-final *m* *n* or *l* may or may not be geminated; *-m* may become *-mn-* instead of *-mm-*. However, given whether a noun has human reference, it is usually possible to identify its noun class and thus the correct LF [9.1](#). Variable-verb perfectives end in *-mm* if the SF ends in *-m* and in *-ε* otherwise; imperfectives end in *-a* with gemination of preceding *n* / *m*. Variable-verb imperfectives with SFs ending in *-m* formerly had LFs in *-mna*, though not for my informants nor in KB:

*...kà pū túmnā.*                      "...and does not work." (2 Thess 3:11, 1996,  
written *ka pu tum na* [1.3.2](#); KB *ka pu tumma*.)

The default LF ending corresponding to SFs ending in a consonant is *-ε*. Thus with loans like *tílás<sup>ε</sup>* "necessity", cf Hausa *tíilàs id*, and in e.g.

*Li pu nar ye fu di fu ba'abiig po'a Herodiase.*  
*Lì pū nār yé fù dí fù bā'-bîg                      pū'á Herodiase<sup>+∅</sup>.*  
**3INAN NEG.IND** must that **2SG** take **2SG** father-child:**SG** wife:**SG** Herodias **NEG**.  
"It's not right for you to marry your brother's wife Herodias." (Mt 14:4, 1996)

*Pu'abi du'a sieba la wusa, sɔ' kae gat Joon nε* [sic [1.3.2](#)].  
*Pū'abí\_ ∅ dɔ' à sīāba lā wūsa, sɔ'                      kā'e\_∅ gát                      Joone<sup>+∅</sup>.*  
Woman:**PL** **NZ** bear **INDF.PL** **ART** all,                      **INDF.AN** **NEG.BE** **CAT** pass:**IPFV** John **NEG**.  
"Of all those born of women, none surpasses John." (Lk 7: 28)

Before liaison [8.2](#) final affix-vowel quality is neutralised, but the same issues arise with gemination of *l m n*, and *mn ~ mm*:

*nwɛɛ tinamɛ kɛt banɛ tummi ti taali [sic] basid si'em la.*

*wēn nē tīnámì\_∅ két bání tùm̄mī\_ tí tàallì\_ ∅*

resemble with 1PL NZ let:IPFV REL.PL work:IPFV 1PL fault:SG CAT

*básìd sī'am lā.*

throw.out:IPFV INDF.ADV ART.

"like we forgive the sin of those who do it to us." (Lk 11:4)

*ka ban ka kikirbe'ednam daamne ba daa nye laafiya*

*kà bàn kà kìkīr-bé'éd-nàm dáàm̄nī\_ bá dāa ñyē láafīya*

and REL.PL and fairy-bad-PL trouble:IPFV 3PL.OB TNS see health

"And people who were afflicted by evil spirits became well."

(Lk 6:18, 1976; KB: *ka banɛ ka kikiris daamidi ba daa nye laafi*)

Almost all **SFs ending in vowels** have LFs which can be obtained simply by lengthening the final vowel/diphthong, including all that do not end in *ja ja'*, short *ɪ*, or a fronting diphthong, and many that do:

<i>sīa</i> <sup>+</sup>	"waist"	<i>sàbùa</i> <sup>+</sup>	"girlfriend"
<i>bāa</i> <sup>=</sup>	"dog" <a href="#">8.1</a>	<i>pāe</i> <sup>+/</sup>	"reach"
<i>niè</i> <sup>+</sup>	"appear"	<i>dūe</i> <sup>+/</sup>	"raise/rise"
<i>kūgá</i> <sup>+</sup>	"stones"	<i>wìdɪ</i> <sup>+</sup>	"horses"
<i>kū</i> <sup>+</sup>	"kill"	<i>mà</i> <sup>+</sup>	"mother"
<i>bèdvgū</i> <sup>+/</sup>	"a lot" <a href="#">6.4</a>		

This applies also in cases where a LF long vowel is historically unexpected:

<i>djā</i> <sup>'a</sup>	"get dirty"	← * <i>djagɪ</i> <a href="#">6.3.1</a>	Farefare	<i>dēgè</i>
<i>dy'à</i> <sup>a</sup>	"bear, beget"	← * <i>dyagɪ</i>	Farefare	<i>dògè</i>
<i>zò</i> <sup>+</sup>	"run"		Farefare	<i>zòè</i>
<i>dāu</i> <sup>+</sup> LF <i>dāv</i>	"man"	← * <i>dawa</i>	Mooré	<i>ráoa</i>
<i>tāuñ</i> <sup>+/</sup> LF <i>távñ</i>	"opposite-sex sib"	← * <i>tāwa</i>	Mooré	<i>tāoa</i>

A marginal exception to predictability is the fact that words ending in *ja'* may have LFs in *ja'a* like *djā*<sup>'a</sup> "get dirty" or in *i'a* like *kpjà*<sup>'+</sup> "shape wood with an axe."

The major exception is SFs ending in a fronting diphthong or short *ɪ*, where the LF may either prolong the diphthong or add *-ya*. Two nouns have variant sg LFs:

<i>sāeñ</i>	"blacksmith"	LF <i>sāeñ</i> or <i>sāñya</i>
<i>sōeñ</i>	"witch"	LF <i>sōeñ</i> or <i>sōñya</i>

All other cases involve **invariable verbs** [11.2](#), where LF *-ya* is regular except for a handful of bare root forms:

<i>dīg<sup>ya</sup></i>	"be lying down"	<i>wà'e<sup>ya</sup></i>	"be en route for"
<i>vōe<sup>a</sup></i>	"be alive"	<i>sū'e<sup>ya</sup></i>	"own"

Before liaison, invariable verbs follow the *general* rule, prolonging any final short diphthong and then applying phrase-medial loss of fronting [8.2.1](#).

## 2.4 Ordering of morphophonemic rules

Agolle Vowel Breaking [4.1.1](#) is part of the underlying word form prior to the application of any rules.

Consonant assimilation/epenthetic vowel insertion [6.2.1](#), vowel fusion [6.3.1](#), and fronting/rounding of vowel morae [6.3.2](#) all precede apocope. Fronting/rounding can be taken as following epenthetic vowel insertion for simplicity.

Consonant assimilation precedes deletion of \**g* and vowel fusion, although synchronically only deletion after short vowels needs to follow assimilation, as with e.g. sg *zàk<sup>a</sup>* ← \**zagga* "compound" pl *zà'as<sup>ε</sup>* ← \**zagsl*. After \**CVVg-* roots, flexions beginning with \**g* are systematically avoided [12.1.1.1](#), and before other suffixes former \**g* is reflected only in toneme allocation [7.2.1.1](#).

Tone Patterns [7.1](#) can be described without reference to segmental changes other than a few which delete underlying morae [7.2.1.1](#). They allocate tonemes prior to apocope. The tonal overlay of independency marking [19.6.1.1](#) creates a new set of intrinsic tones.

External sandhi of all types [8](#) naturally follows apocope.

L spreading [8.4](#) and the tonal effects of prosodic clitics [8.1](#) and liaison enclitics [8.2.3](#) occur *prior* to M spreading [8.3](#) and the effects of fixed-L words: L tonemes resulting from the interrogative clitics following a Pattern O word, and the L tonemes produced by L spreading are subject to M spreading. Tautosyllabic delinking [5.2](#) precedes downstep insertion before H tonemes [5.3](#); heterosyllabic H spreading [5.4](#) does not need to be ordered with respect to either of these rules.

### 3 Consonants

#### 3.1 Inventory and symbols

The following consonant symbols are used:

<i>k</i>	<i>t</i>	<i>p</i>	<i>kp</i>		
<i>g</i>	<i>d</i>	<i>b</i>	<i>gb</i>		
<i>ŋ</i>	<i>n</i>	<i>m</i>			
	<i>s</i>			<i>f</i>	<i>h</i>
	<i>z</i>			<i>v</i>	
	<i>l</i>				
	<i>r</i>				
		<i>w</i>		<i>y</i>	

These symbols correspond to the consonant phonemes of the language, except that *kp gb* are digraphs for the labiovelar double-closure stops [k̠p̠] [g̠b̠]. The symbols stand for values like the corresponding IPA symbols, except as discussed below.

*t d n s z l r* represent alveolars in general, but *s z* are often dental, and even interdental for some speakers. Before *u*, *s* and *z* are sometimes heard as [ʃ] [ʒ]. The consonant *l* is never velarised. For other variants of *s r* see below.

*k t p* represent [kʰ] [tʰ] [pʰ] word-initially and after prefixes and [k] [t] [p] elsewhere. Between vowels word-internally the symbols represent geminate /kk/ /tt/ /pp/. They are only *realised* double in very slow speech. The aspiration is comparable to that of English initial voiceless stops. Word-final *g d b* are often partly devoiced, but still contrast with the unaspirated word-final *k t p*.<sup>3</sup>

*k g ŋ* The symbol *ŋ* is realised [ŋ] word-finally and [ŋ:] elsewhere. Original \**ŋ*, preserved in related languages, has disappeared in all positions, and existing Kusaal *ŋ* is always the result of the cluster assimilations \**mg \*ng* → *ŋŋ* with simplification to *ŋ* word-finally.

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3) In Toende Kusaal word-final *g d b* normally become *k t p*, but *g b* (though not *d*) remain at the end of verb perfectives and cbs; there are even minimal pairs like *ya'ab* "mould pots" versus *ya'ap* "potter." This suggests that in Toende, after proclitics and perfectives *only*, apocope applies later than word-final stop devoicing.





*h* as a phoneme *h* itself is marginal, occurring only syllable-initially in loanwords; however these include the very common word *hālí*<sup>+</sup> "as far as." In the personal name *Dàhamáani*<sup>+</sup> عبد الرحمن *ʿAbdu-r-Raḥma:n(i)* there is alternation with *-s-* but particular individuals with the name seem to choose one alternant only.

*d* as a word-initial is frequently realised as a flapped [ɾ] when the preceding word in a phrase ends in a vowel (including glottalised vowels); within compounds this is invariable:

	<i>nō-dáùg</i> <sup>ɔ</sup>	"cock"	[nɔɾaʊg]
	<i>nā'-dáàd</i> <sup>ɛ</sup>	"oxen"	[nɑɾa:d]
but	<i>wìd-dāvg</i> <sup>ɔ</sup>	"stallion"	[wɪd:aʊg]

In rapid speech non-initial *d* may also resemble [ɾ], but there are minimal and near-minimal pairs following root and epenthetic vowels:

<i>èñdɪg</i> <sup>ɛ</sup>	"unplug"
<i>èñrɪg</i> <sup>ɛ</sup>	"shift along"
<i>mōd</i> <sup>ɛ</sup>	"swell"
<i>mōr</i> <sup>a/</sup>	"have"
<i>yàad</i> <sup>ɛ</sup>	"graves"
<i>yāar</i> <sup>ɛ/</sup>	"scatter"

*r* itself is the alveolar flap [ɾ], except after an epenthetic vowel (e.g. in the *r*<sup>ɛ</sup> noun class singular suffix) where it is realised as a retroflex lateral [ɭ]. It does not contrast with *d* as a root-initial consonant or in prefixes, and only [d] occurs after a consonant or pause. I write *d* always except in a few words following a prefix vowel where *r* is traditional:

<i>tīrààn</i> <sup>a</sup>	"neighbour"
<i>àrazàk</i> <sup>a</sup>	"riches"
<i>àrazánà</i> <sup>+</sup>	"heaven"

The allophony of both *d* and *r* will be ignored even in narrow transcription elsewhere, where they will be written [d] [ɾ].

*m* is syllabic when standing alone as the proclitic 1st sg pronoun "I, my." It shows no tendency to assimilate its position of articulation to following consonants when it is syllabic. Following unstressed *ɪ*-vowels can be absorbed because of the potentially syllabic character of *m*:

<i>Gòsimī m!</i>	"Look at me!"
<i>Gòsīm.</i>	"Look at me!" contrasting with
<i>Gòsim!</i>	"Look!"
<i>Gòsimí fù nú'ùg!</i>	"Look at your hand!"
<i>Gòsīm fù nú'ùg!</i>	<i>id</i>

*m* is unique in that it can form the word-final cluster *mm* [m:], which appears chiefly in LFs but also in some forms with derivational apocope-blocking 6.4. like the SF *pāmm* "a lot." The cluster patterns in many ways as if the second *m* were syllabic, but it is currently consonantal, and in particular cannot bear a toneme 8.1.

*n* is syllabic when representing various proclitic particles, and as the number prefix. It *does* assimilate, even when syllabic, to the position of a following consonant. The VP catenator particle *n* and the clause nominaliser *ñ* are syllabic [ŋ] for some speakers but my informants have consonantal, denasalised or zero reflexes instead.

*kp gb* are digraphs for the labiovelar double closures [k̠p̠] [g̠b̠]. Unlike word- and root-initial *k t p*, the voiceless *kp* is not aspirated. *kp gb* occur only word-initially and after prefixes, and then only before unrounded vowels, except for some speakers who preserve them in reduplication-prefixes like *kp̀̀kp̀̀arig*<sup>a</sup> "palm tree" where other speakers have *k̀̀kp̀̀arig*<sup>a</sup> etc. Otherwise *kp gb* are replaced by velars before rounded vowels; they are thus in complementary distribution with labialised velars, which could be ascribed to these phonemes rather than to the velars.

<i>kūm</i> <sup>m</sup>	"death"	cf <i>kp̀̀</i> <sup>+</sup>	"die"	
<i>kōba</i> <sup>+</sup>	"bones"	cf Gurmanche	<i>kp̀̀ábá</i>	<i>id</i>
<i>kp̀̀akūr</i> <sup>ε/</sup>	"tortoise"	cf Dagbani	<i>kp̀̀akp̀̀lí</i>	<i>id</i>

In loanwords *kp gb* are used for the Hausa labialised velars *kw gw*:

<i>bákp̀̀e</i> <sup>+</sup>	"week" ← Hausa <i>bakwà</i> "seven" (also "week" in <i>Gaanancii</i> Hausa)
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*y w*

are respectively voiced palatal and labiovelar approximants. They are strongly nasalised before nasalised vowels, and are then written *ñy ñw* with no further nasalisation marking on the vowel:

<i>ñyē</i> <sup>+</sup>	"see"	[j̃ɛ]
<i>ñwādiŋ</i> <sup>a/</sup>	"moon"	[w̃ãdiŋ]
<i>ñwè</i> <sup>+</sup>	"beat"	[w̃ɛ̃]

Word-initial *y w* followed by contrastive nasalisation reflect earlier initial *ɲ ñm* respectively, and similarly word-initial contrastively nasalised vowels are historically derived from initial *ɲ*:

<u>Dagbani</u>	<u>Kusaal</u>	
<i>ɲariŋ</i>	<i>àñruŋ</i> <sup>ɔ</sup>	"boat"
<i>nyá</i> [ɲa]	<i>ñyē</i> <sup>+</sup>	"see"
<i>ɲme</i> [ɲme]	<i>ñwè</i> <sup>+</sup>	"beat"

Mooré shows the same developments as Kusaal. Niggli 2012 reports that some Toende speakers still have consonantal [ɲ] [ɲm] phonetically in these cases, although he regards these as allophones of *y w* before nasalised vowels. Before */i/* original *ɲ* has often become *n* [8.2.1.2](#).

*y w* occur only syllable-initially. They are in complementary distribution with the glides *i/ɛ* and *ɥ* respectively, which do not form syllable boundaries [4.2.3](#). When apocope leaves *-y-* as word-final after a short back vowel, it is replaced by *ɛ*, producing a short fronting diphthong [6.3.2](#).

Consonantal *w* occurs only root-initially, i.e. word-initially and after prefixes: *wìəf*<sup>ɔ</sup> "horse", *dàwān*<sup>nɛ/</sup> "pigeon", but consonantal *y* occurs root-initially (*yáaŋ*<sup>a</sup> "grandchild", *dàyūug*<sup>ɔ/</sup> "rat"), and also word-medially before the vowel *a*: *nōyá*<sup>+</sup> "mouths."

### 3.2 Consonant clusters

Consonant clusters consist of at most two consonants (except in the very marginal case of *-mm* followed by a consonant across word division.) No word may begin or end with a consonant cluster, except for Long Forms and forms with apocope-blocking which show final *-mm*:

<i>pāmm</i>	"a lot"
<i>dāamm</i>	"millet beer", Long Form

Across word division, including within compounds, any combination of consonants may occur where the first is a possible word-final consonant.

<i>ñwād-bí<sup>a</sup></i>	"star"
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Within phrases, there may be partial assimilation of the word-final consonant to the following word-initial consonant [8.5.1](#).

Within words, the range of permitted clusters is very limited.

At the junction between a noun prefix and the following stem, combinations of nasal and any possible word-initial consonant may occur, with assimilation of the position of articulation of the nasal to a following consonant other than *s* or *z*, before which the nasal is realised as [ŋ].

<i>kùndùŋ<sup>a</sup></i>	"jackal"	
<i>gūmpōzēr<sup>ε/</sup></i>	"duck"	
<i>dànkòŋ<sup>ɔ</sup></i>	"measles"	[daŋkʰɔŋ]
<i>zùnzòŋ<sup>a</sup></i>	"blind"	[zʊŋzɔŋ]

Loanwords may include clusters not found elsewhere.

<i>bòrkìn<sup>a</sup></i>	"honourable/free/honest person"
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Apart from this, the only word-internal clusters permitted are *kk tt pp ŋŋ nn mm ll mn*. Of these *kk tt pp ŋŋ* are only realised as geminates in very slow speech, and are written as single *k t p ŋ*; nevertheless intervocalic *k t p ŋ* always pattern as clusters not only structurally but in toneme allocation and realisation [5.4](#) [7.2.1](#) [7.3.1](#).

Gemination of *mm nn ll* before LF affix vowels is clearly audible, even where the LF-final vowel has been downranked before liaison [8.2.1](#); the audio version of the 1996 NT for example provides numerous examples of *dōll-ó* "follow him" (written

*dol o*) clearly read as [dɔl:ɔ]. It is harder to hear length contrasts with *mm nn ll* preceding an epenthetic vowel. Written materials prior to 2016 rarely mark gemination in such cases, but KB is generally reliable. The tones of Pattern H stems can also confirm the presence of clusters. Urs Niggli's Toende materials never show geminate consonants except before LF flexions preceding prosodic clitics; this may be a genuine difference from Agolle Kusaal.

The only cluster which is not simply a geminate, *mn*, is unstable. Some speakers replace it entirely with *mm*. All my informants show *mm* in place of *mn* in Variable-verb imperfectives:

*kàrum*<sup>m</sup> "read" → *kàrum*<sup>ma</sup> cf Dagbani *karimda*

There are a few examples of *mn* in the NT prior to 2016:

*ka ba li' ba toba ka pu wum na* [sic 1.3.2]  
*kà bà lí bà tùba kà pū wúmnā* +∅.

And **3PL** block **3PL** ear:**PL** and **NEG.IND** hear:**IMPF NEG**.

"they have blocked their ears and do not hear" (Mt 13:15, 1996)

*ka ban ka kikirbe'ednam daamne* [sic 1.3.2] *ba daa nye laafiya*  
*kà bàn kà kīkīr-bé'èd-nàm dáàmñī* *bá dāa ñyē láafiya*  
 and **REL.PL** and fairy-bad-**PL** trouble:**IPFV 3PL.OB TNS** see health

"And people who were afflicted by evil spirits became well." (Lk 6:18, 1976)

Informants differ with regard to the singular forms of *r<sup>ε</sup>|a<sup>+</sup>* class *m*-stems:

<i>gbīgim</i> <sup>nε</sup>	SB	<i>gbīgim</i> <sup>mε</sup>	WK	"lion"
<i>dūm</i> <sup>nε</sup>	SB	<i>dūm</i> <sup>mε</sup>	WK	"knee"

Exceptionally with *-nn-* for *-mn-* and a plural remodelled on the singular:

<i>ñwān</i> <sup>nε</sup>	SB	pl <i>ñwāna</i> <sup>+</sup>	(Lk 11:39, 1976) "calabash"
<i>ñwām</i> <sup>mε</sup>	WK	pl <i>ñwāma</i> <sup>+</sup>	SB WK

Cf 1976 NT *kobkennib* = *kòñb-kīmmɪb*<sup>a</sup> ← \**kǒb-kɪmdɪba* "herdsmen."

There is variation also with the agent nouns of *m*-stem verbs:

*pe'es bane ka' konbkemma*  
*pē'εs bání ká' kóñb-kīmma* +∅  
 sheep:**PL REL.PL NEG.BE** animal-tender:**SG NEG**  
 "sheep without a shepherd" (Mt 9:36, 1996)

*m naan ku aan Kiristo tumtum na* [sic [1.3.2](#)].

*m̄ nāan kú āa-n Kiristo túm-tūmna* <sup>+∅</sup>.

**1SG** then **NEG.IRR COP-DP** Christ work-worker:**SG** **NEG**.

"I would not have been Christ's servant." (Gal 1:10, 1996; KB *tumtumma*)

The plurals usually show *-mn-*:

*O tumtumnib pii ne ayi' la yuda nwa.*

*Ò tùm-tūmnib pīi né àyí lā yúdà\_ ∅ ñwà.*

**3AN** work-worker:**PL** ten with **NUM:two** **ART** name:**PL** **CAT** this.

"These are the names of his twelve servants." (Mt 10:2)

All examples of dynamic adjectives derived from *m*-stem verbs in my data show *-mm-* before epenthetic vowels:

*bōn-túmmir<sup>ε</sup>* "useful thing"; plural *tūmna<sup>+</sup>* is cited by some informants.

*bò-sāñ'ammir<sup>ε</sup>* "goat for destruction, scapegoat" WK

The great majority of cases *-mn-* within words precede front vowels; compare focus-*nē<sup>+l</sup>*, corresponding to *me* in Toende Kusaal, Mooré etc [30.1.2](#).

KB has no word-internal or word-final *-mna-* or *-mne-* at all; all examples so written involve separate words by the criteria of this grammar. Word-internal *-mni-* is common, however, in plurals like *tumtumnib* = *tùm-tūmnib* "servants."

The consonants *r f s* are sometimes shown by Tone Pattern allocation rules or by morphophonemics [6.2.1](#) to reflect underlying clusters [7.2.1.1](#), but unlike *k t p ŋ* they are never actually realised as geminates.

*tītōñríg<sup>a</sup>* "mole" (animal) ← \**tītōñrrígā*

*pííñ<sup>p</sup>* "genet" ← \**pííñfō*

*níís<sup>ε</sup>* "birds" ← \**níínsī*

## 4 Vowels

### 4.1 Inventory and symbols

There are great differences in the range of vowel contrasts possible in different positions within a full word. Correlation with stress [2.2](#) is only partial, so the system is best regarded as involving **positional prominence**.

The main distinction is between **Root Vowels**, appearing in the roots of non-clitic words, and all others. Root vowels show the full range of vowel contrasts, with contrastive length, nasalisation, glottalisation and a wide range of diphthongs.

**Epthetic Vowels** show a contrast only of unrounded versus rounded high vowels, written *ɪ* and *ʊ* respectively; considering LFs alone even this distinction would be predictable.

**Affix Vowels** have a three-way contrast in quality *a ɪ ʊ* and also distinguish short and long vowels. Prosodic clitics lower short *ɪ ʊ* to *ɛ ɔ*, which are here realised slightly closer than as root vowels [4.4](#).

*a ɛ ɔ i u* represent [a] [ɛ] [ɔ] [i] [u].

*ɪ ʊ* represent [ɪ] [ʊ]. The symbols *ɪ ʊ* sometimes represent [i] [u] as epenthetic and prefix vowels [4.3](#) [4.4](#), but never in contrast with [ɪ] [ʊ].

*e o* always represent [ɪ] [ʊ]. They replace *ɪ ʊ* as non-initial components of diphthongs [4.2.3](#), except that [ʊ] is written *ʊ* after *a*. In addition, the 3sg animate pronoun [ʊ] is always written *o* [16.3.1](#). The sequence *·o* represents [ʊ] when it is a vowel mora rounded before the enclitic pronoun <sup>o</sup> [8.2.1.1](#).

Long vowels are written with double symbols.

The symbol *ñ* represents emic nasalisation [4.2.1](#), while ' represents glottalisation [4.2.2](#).

*ɛ̣ j̣ ʊ̣* represent non-moraic glides; *ɛ̣* and *j̣* are equivalent symbols for [ɪ̣], and *ʊ̣* represents [ʊ̣].

The vowel system shows a **systematic mismatch between phonetics and phonemics**.

*iə uə* are *phonemic monophthongs* but are realised phonetically as [iə] [uə]. Similarly, *ja ʊa* represent short *monophthongs*, realised [ɪa] [ʊa], which appear as *je ye* [jɪ] [ɥɪ] before *y* word-internally. The orthography of this grammar follows the traditional system in representing these segments according to their *phonetic* realisation, but the symbols *iə uə ja ʊa je ye* are regarded throughout as **digraphs representing monophthongs** [4.1.1](#). The letters *ə e* are used only in these digraphs.



### 4.1.1 Agolle Vowel Breaking

The sequences *iə uə*, realised with the corresponding IPA values, pattern throughout as long *monophthongs*, with *ja ua* as the corresponding short vowels. They may be nasalised or glottalised, and are subject to the fronting and rounding processes described below [6.3.2](#) just like other monophthongs. They will be described as monophthongs throughout this grammar. All other sequences beginning with written *i u* are *diphthongs* both phonetically and phonemically.

Toende Kusaal preserves these vowels as *phonetic* monophthongs, more open than the Toende *close* vowels corresponding to Agolle vowels which have expanded into the phonetic space vacated by Breaking to become *open*  $\varepsilon \text{ } \text{ɔ} \text{ } \varepsilon\varepsilon \text{ } \text{ɔ}\text{ɔ}$ :

<u>Toende</u>	<u>Agolle</u>	
<i>sɛ̄ɛ̄s</i>	<i>sīās<sup>ɛ</sup></i>	"waists"
<i>pē'ēs</i>	<i>pē'ɛs<sup>ɛ/</sup></i>	"sheep" pl
<i>bó'ɔs</i>	<i>bū'əs<sup>ɛ/</sup></i>	"ask"
<i>tōom</i>	<i>tōɔm<sup>m/</sup></i>	"depart, disappear"

Common Kusaal probably preserved older diphthongs, like Mooré; Kusaal  $\text{ɔ}\text{ɔ}/\text{ua}$  pairings correspond to Mooré *oo*, but Mooré *ao* corresponds to  $\text{ɔ}\text{ɔ}/\text{ɔ}\text{ɔ}$ :

<i>bòòt</i>	<i>bòòd<sup>a</sup></i>	"want, wish" (Mooré <i>bàoda</i> )
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There are gaps in the distribution of Agolle  $\varepsilon\varepsilon \text{ } \text{ɔ}\text{ɔ}$  probably connected with their diphthongal origins; some occurrences seem to be due to levelling within  $g^{\text{ɔ}}|d^{\text{ɛ}}$  class paradigms [9.2.1](#). Short  $\varepsilon \text{ } \text{ɔ}$  do not contrast underlyingly with *ja ua* (see below.)

*iə uə* may only occur word-finally through loss of fronting in word-final *ie ue* by phrase-internal sandhi [8.5.3](#):

<i>pīé tī<sup>+/</sup></i>	"wash us"	( <i>pīe<sup>+/</sup></i> "wash")
<i>dūé tī<sup>+/</sup></i>	"raise us"	( <i>dūe<sup>+/</sup></i> "raise")

Word-final *iə uə* diphthongise to *ia ua* before prosodic clitics, but not liaison:

LF	<i>kīa</i>	"cut" pfv	[k <sup>h</sup> ia]	cf <i>kīəd<sup>a</sup></i>	ipfv
LF	<i>kūa</i>	"hoe" pfv	[k <sup>h</sup> ua]	cf <i>kūəd<sup>a/</sup></i>	ipfv

Nasalised *iəñ uəñ*, including after *m n* [4.2.1](#), occur only in the inflexion and gerund formation of fusion verbs [6.3.1](#). In all other contexts *iəñ uəñ* and  $\varepsilon\varepsilonñ \text{ } \text{ɔ}\text{ɔñ}$  have fallen together. The vowels were distinct historically: compare *nōɔr* "times" (Mooré *náooré*) with *nōɔr* "mouth" (Mooré *nóorè*) [16.4.2.4](#).

The short vowels corresponding to *iə uə* are *ja ɥa* [ɪa] [ʊa].

These, too, pattern as simple vowels throughout: *sjàk<sup>ɛ</sup>* "agree" and *byàk<sup>ɛ</sup>* "split" do not violate the constraint that full words begin with at most one consonant. Apocope shortens final *iə uə* to *ja ɥa*:

<i>kjà</i>	"cut"	SF of <i>kīa</i>
<i>kuā</i>	"hoe"	SF of <i>kūa</i>

Short *ɛ ɔ* appear instead of *ja ɥa* everywhere except before *k* and underlying \**g*, which is deleted, with vowel glottalisation and fusion [6.3.1](#). Almost all short *ɛ ɔ* are either of this origin, or derive from apocope of *ɛɛ ɔɔ*. *B̀̀k<sup>ɔ</sup>* "pit" contrasting with *byàk<sup>ɛ</sup>* "split" is due to the rounding change \**ɥakkv* → *ɔkkv* [6.3.2](#), while *tēk<sup>ɛ</sup>* "pull", contrasting with *tjàk<sup>ɛ</sup>* "change" is due to shortening of a long vowel before an original plosive cluster \**tɛɛkkɪ* [6.3.3](#). Presumably *n̄k<sup>ɛ</sup>* "pick up" is similarly derived by shortening of \**nɔɔkkɪ*; Toende Kusaal has *ǹ̀k*, with a variant form *nɔ'ɔ* (for \**nɔ'ɔg*.)

*je ɥe* [ɪ] [ʊ] appear in place of *ja ɥa* before *-y-*, which can occur only in the context of *r<sup>ɛ</sup>|a<sup>+</sup>* class plurals of nouns and adjectives with stems in *iə* and *uə* [6.1.1.1](#):

<i>bīər<sup>ɛ</sup></i>	"elder same-sex sib"	pl <i>bjēyá<sup>+</sup></i>
<i>sūər<sup>ɛ</sup></i>	"road"	pl <i>suēyá<sup>+</sup></i> KB <i>suoya</i> <a href="#">1.3.2</a>

## 4.2 Root vowels

In root syllables *a ɛ ɔ ɪ ʊ i u* represent [a] [ɛ] [ɔ] [ɪ] [ʊ] [i] [u] respectively.

The vowel *ɪ* is more central after velars and labials, and *ʊ* is slightly more fronted after alveolars and *y*; *u* is noticeably fronted after alveolar consonants, which may then even be realised as palato-alveolars. This is particularly common with *z*: [ʒyɡ] for *zūg* "head" [3.1](#).

**Long vowels** contrast with short in length alone, with no difference in vowel quality. They are written by doubling the vowel symbol.

There are few minimal pairs for the contrast *u/v* in short root vowels and very few indeed for *i/t*; there is no contrast in the corresponding nasal short vowels. There is a robust contrast between long *uu/vv* and long *ii/tt*, and thus between the corresponding vowels shortened by apocope, but even here it is difficult to find true minimal pairs; *li* "fall", for example, certainly contrasts phonetically with *li* "it", but the words contain a root vowel and an affix vowel respectively.

Minimal and near-minimal pairs include

<i>lìdɪg</i>	"astonish, be amazed"	<i>lìdɪg</i>	"turn a shirt" WK
<i>sīd</i>	"husband"	<i>sīn</i>	"be silent"
<i>sībɪg</i>	antelope species KED	<i>sībɪg</i>	"termite"
<i>bùl</i>	"astonish"	<i>bùl</i>	"germinate"
<i>ùk</i>	"vomit"	<i>ūk</i>	"bloat"
<i>bōn</i>	"thing"	<i>bùn</i>	"germinate" ipfv
<i>kūdɔg</i>	"old"	<i>kūdɔg</i>	"piece of iron"
<i>kūg-kájā</i>	"this mahogany tree"	<i>kūg-kájā</i>	"this stone"
<i>tōlɪg</i>	"heat up"	<i>tùlɪg</i>	"invert"
<i>yūgúm</i>	"camel"	<i>yūgɔdɪr</i>	"hedgehog"

### 4.2.1 Nasalisation

Contrastive nasalisation is confined to root vowels. It is marked with *ñ* in the orthography of this grammar [1.3](#). It often represents originally automatic nasalisation after *\*ŋ \*ɲ \*ŋm̄*, or arises before underlying *\*ns \*nf* [6.2.1](#). High nasalised vowels left word-initial by the loss of historical initial *\*ŋ* have been lowered to *ɛñ ɔñ*: cf *ɔñb<sup>ɛ</sup>* "chew", Dagbani *ɲubi*.

Short *iñ uñ* are laxer than oral *i u*, but there are no contrasting short *\*iñ \*uñ*. In all but one case, short *iñ uñ* arise from apocope of *iiñ uuñ*:

<i>sīiñ<sup>ɸ</sup></i>	"bee"	cb	<i>sīñ-</i>
<i>zùuñg<sup>ɔ</sup></i>	"vulture"	cb	<i>zùñ-</i>

The only remaining case is *sūiñ<sup>ɸ</sup>* "heart" pl *sūñyá<sup>+</sup>* cb *sūñ-*; the vowel of this word is consistently written *un* in KB.

Nasalisation is automatic on long vowels preceded by a nasal consonant:

<i>mèɛd<sup>a</sup></i>	"build" ipfv	[mɛ̃:d]
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Long *uñ vuñ* contrasting with *iiñ uuñ* appear exclusively from the change of *\*nf \*ns* to *f s* with nasalisation of the preceding vowel [6.2.1](#):

	<i>níiŋ<sup>a</sup></i>	"bird"		
but	<i>ɸíiñ<sup>ɸ</sup></i>	"genet"	cf plural	<i>ɸīuní<sup>+</sup></i>
	<i>zùuñd<sup>ɛ</sup></i>	"vultures"		
but	<i>zúbvñ<sup>ɸ</sup></i>	"dawadawa seed"	cf plural	<i>zūvuní<sup>+</sup></i>
	<i>tèŋ-zùvñs<sup>ɛ</sup></i>	"foreign lands"	cf singular	<i>tèŋ-zùŋ<sup>ɔ</sup></i>

Nasalised *iəñ uəñ* occur only in fusion verbs [6.3.1](#).

### 4.2.2 Glottalisation

Glottalisation is confined to root vowels and the proclitic tense marker *pà'* "earlier today." It does not affect vowel quality. It is marked by the symbol ' [1.3](#).

Glottalisation may be realised as a creaky-voiced glottal approximant [ʔ] after the first vocalic mora, or the creakiness may be more widely spread within the vowel; but in either case it behaves as a vowel feature, not a consonant. The flap realisation of initial *d* [3.1](#) occurs after *V'* as well as after *V*; and in general glottalised vowels pattern exactly like unglottalised vowels. The glottalisation which has arisen from deletion of \**g* after *a ja ɥa* [6.3.1](#) does not differ phonetically from other types.

Tonal considerations confirm that ' is not a consonant. Thus

	<i>Lì k̄ā' mólɪf̄.</i>	"It's not a gazelle."
but	<i>Lì k̄ā' ↓nú'uḡ.</i>	"It's not a hand."
like	<i>Lì k̄ā' ↓tíḡā.</i>	"It's not a tree."

differ in whether the H toneme is realised with a preceding downstep, because the sequence *-li-* in *mólɪf̄* is a separate unstressed syllable preceding the final stress on *-f̄*, whereas the ' in *nú'uḡ* is not a consonant and does not begin a syllable [5.3](#).

An unwritten [ʔ] follows short vowels and diphthongs ending statements and commands, but not questions. Phrase-final *dāɥ* "man", for example, is realised [dɑʔ]. Before this [ʔ], vowel glottalisation is lost:

	<i>Kà bà gēñ.</i>	"and they got tired"	is homophonous with
	<i>Kà bà gēñ'.</i>	"and they got angry"	
but	<i>Bà gēñ nē.</i>	"they're tired"	differs in realisation from
	<i>Bà gēñ' nē.</i>	"they're angry"	

There is nothing corresponding to Kusaal vowel glottalisation in Mooré, Dagaare, Mampruli, Hanga or Dagbani, but Farefare, Nabit and Talni share it:

Farefare	<i>yú'úré</i>	"name"	Kusaal	<i>yū'vr<sup>ɛ</sup></i>
Talni	<i>kwoʔm</i>	"water"	Kusaal	<i>kù'əm<sup>m</sup></i>
Nabit	<i>kpa'uj</i>	"guinea fowl"	Kusaal	<i>kpá'vɲ<sup>ɔ</sup></i>
Nabit	<i>nɔnya'aŋ</i>	"hen"	Kusaal	<i>nō-ñyá'àŋ<sup>a</sup></i>

Nawdm, too, has ʔ in many words with Kusaal cognates showing glottalised vowels, e.g. *mì-tâʔ* "three" (in counting) = Kusaal *ntáñ'*; *núʔú* "arm, hand" = *nú'ùg<sup>ɔ</sup>*; *ráʔm* "bile" = Kusaal *yā'm<sup>m</sup>* (WK), Farefare *yá'am*. Vowel glottalisation is thus clearly inherited from Oti-Volta.

Glottalised short vowels are almost all the result of apocope. Besides *kā'ɛ*<sup>+</sup> "not be" (← \**kagɪ*) all other cases precede *m* or *ŋ* in closed syllables in some words for some informants.

<i>kpè'ŋ</i> <sup>ɛ</sup>	"strengthen"	<i>lā'ŋ</i> <sup>ɛ/</sup>	"set alight"
<i>nī'm</i> <sup>nɛ/</sup>	"meat"	<i>kō'm</i> <sup>m/</sup>	"hunger"
<i>yā'm</i> <sup>m/</sup>	"gall bladder; sense"	<i>sù'ŋā</i> <sup>+</sup>	"well"
<i>sù'm</i> <sup>m</sup>	"goodness"		

The adjective *sù'ŋ*<sup>ɔ</sup> (pl *sù'ma*<sup>+</sup>) "good" itself never has a glottalisation mark.

The vowels are written as if long in KB: *kpɛ'ɛŋ la'aŋ ni'im kɔ'ɔm ya'am su'vŋa*. Toende Kusaal, Farefare, Nabit and Talni lack this phenomenon in all the cognate words, except Farefare *yá'ám* "bile." It has probably arisen from gemination of *m* *ŋ*; KB has 385 examples of *an sum* to 47 of *an su'um* (*àñ súm* "is good"), but 30 of *ka' sum* to 40 of *ka' su'um*, which would be *kā' súmm* "is not good" when clause-final. *Yā'm*<sup>m/</sup> is perhaps genuinely *yā'am*<sup>m/</sup>; it was the only word of this type where I was able to confirm the glottalisation with my informants.

### 4.2.3 Diphthongs

Kusaal has diphthongs of one or two morae, and also three-mora vowel sequences which, though realised as disyllabic with syllable division after the first mora [2.2](#), are structurally extra-long diphthongs. Length contrasts among phonemic diphthongs in identical contexts can occur only with word-final *ae/aɛ* and with *av/aʊ* before *ŋ*, but the use of *ia ua* for *ja ʊa* as well as *ia ua* in the standard orthography creates potential ambiguity word-finally [1.3.2](#).

[ɪ] is written *e* (not *ɪ*) after *a ɔ ʊ*, and [ʊ] is written *o* (not *ʊ*) after *i ɪ ɛ*.

The symbols *j* and *ɛ* both represent [ɪ] except in *uj* and in the monophthong *je*, where the realisation is [j]; [ʊ] is always written *ʊ*.

The digraphs *ja ʊa* represent *single* segments phonemically, but are *realised* as written. Written *iə* [iə] and *ue* [ue], and their nasalised/glottalised forms, are the corresponding *phonemically monophthongal* long vowels [4.1.1](#), realised as falling diphthongs. All other sequences of dissimilar vowels are both phonetic and phonemic diphthongs; 3-mora sequences are rising, and all others falling.

The word-final diphthongs *av avñ ui* arose historically from \**Vw* \**Vy* [6.1.1.1](#). All other word-internal **primary** diphthongs result from active word-internal morphophonemic processes of fusion, fronting and rounding [6.3.1](#) [6.3.2](#). **Secondary** diphthongs are created by the simple *replacement* of final morae by [ɪ] [ʊ] before the liaison enclitics <sup>ʷa</sup> [8.2.1.2](#) and <sup>o</sup> [8.2.1.1](#) respectively.

Rounding diphthongs occur only word-finally and before velars; fronting diphthongs only word-finally and before *y*.

The primary diphthongs are:

<u>1-Mora</u>		<u>2-Mora</u>		<u>3-Mora</u>	
		<i>ia</i>	[ia]	<i>iaa</i>	[ia:]
		<i>ja'a</i>	[j̥aː]		
		<i>ua</i>	[ua]	<i>uaa</i>	[ua:]
		<i>u'a</i>	[u̥a]		
<i>aɛ̃</i>	[aɪ̃]	<i>ae</i>	[aɪ]	<i>aeē</i>	[aɪ:]
<i>ɔɛ̃</i>	[ɔɪ̃]	<i>ɔ'e</i>	[ɔɪ]		
<i>ʊɛ̃</i>	[ʊɪ̃]	<i>ʊ'e</i>	[ʊɪ]		
<i>uj̃</i>	[uj̃]	<i>ui</i>	[ui]		
		<i>ie</i>	[iɪ]	<i>iee</i>	[iɪ:]
		<i>ue</i>	[uɪ]	<i>uee</i>	[uɪ:]
<i>aʊ̃</i>	[aʊ̃]	<i>av</i>	[aʊ]		
		<i>iu</i>	[iu]		
<i>ɪʊ̃</i>	[ɪʊ̃]				
<i>ɛʊ̃</i>	[ɛʊ̃]	<i>ɛo</i>	[ɛʊ]		
<i>jaʊ̃</i>	[j̥aʊ̃]				
		<i>io</i>	[iʊ]		

These diphthongs also occur nasalised, and if not 1-mora, glottalised; those written glottalised above *only* occur glottalised. A 2-mora diphthong may become 3-mora by prolongation of the second mora before the polar-question prosodic clitic [8.1](#). The diphthongs *u'a uñ'a* appear as *u'aa uñ'aa* respectively when LF-final.

*ɛ̃j̃ ʊ̃* contrast with *y w* in not forming syllable boundaries or consonant clusters, either as components of the digraphs *ja ʊa* representing single short vowel phonemes, or as the final glide components of short diphthongs:

<i>bj̃äʊ̃nkʷ</i>	[b̥j̃äʊ̃k]	"shoulder"	CVC
<i>bʊ̃àk<sup>ɛ</sup></i>	[bʊ̃ak]	"split"	CVC
<i>dāʊ̃<sup>+</sup></i>	[daʊ̃]	"man"	CV
<i>gb̃àʊ̃ŋʷ</i>	[g̃b̃aʊ̃ŋ]	"book"	CVC
<i>sɔ̃ɛ̃ñ</i>	[sɔ̃ɪ̃]	"blacksmith" SF	CV
<i>tɔ̃ɛ̃</i>	[tʰɔ̃ɪ̃]	"be bitter" SF	CV
<i>mù̃j̃<sup>+</sup></i>	[mũ̃j̃]	"rice"	CVCV

Word-final *-V<sub>e</sub> -V<sub>i</sub> -V<sub>u</sub>* behave exactly like word-final short root vowels in being followed by [ʔ] before pause in statements [4.2.2](#):

*Ò à nē dāy.* [ʋanɛdaʔ] "He is a man"

Word-initial *ya* [ja] contrasts with *ja* [ɣa] in the tenseness of the semivowel, and probably in timing features:

<i>jā</i> <sup>+</sup>	[ɣa]	"seek"
<i>yā</i> <sup>+/</sup>	[ja]	"houses"

The contrast is not [ʔja] ~ [ja]: stressed syllables with no initial consonant are sometimes realised with an initial [ʔ], but this is a prosodic feature, not a consonant.

Chitoran 2002 finds that unlike *ia/ea*, a contrast *ua/oa* has no phonetic basis in Romanian, and hypothesises that this is due to the cross-linguistic difficulty of maintaining a contrast between two back rounded glides [w] and [ɔ]. Kusaal, too, has no contrast of initial *wa/ya*.

Secondary diphthongs arise only as the result of the attachment of liaison enclitics after a word ending in a root vowel. The enclitic <sup>o</sup> [ʋ] "him/her" replaces any preceding vowel mora by [ʋ], never [u], and the 2pl subject enclitic <sup>ya</sup> replaces any preceding vowel mora by [ɣ], never [i]. Any of the vowels *a e ɔ ɪ ʊ i u* may precede:

<i>zū-ó-o</i>	[zuʋ:]	"steal him"	LF
<i>zú-o</i>	[zuʋ]	"steal him"	SF
<i>bēɪyá</i>	[bɛɪɣa]	"be ye!"	LF
<i>bēɪ</i>	[bɛɪ]	"be ye!"	SF

### 4.3 Epenthetic vowels

The default epenthetic vowel is *ɪ*.

Before LF *-g<sup>ɔ</sup> -ŋ<sup>ɔ</sup>* the epenthetic vowel becomes *ʊ*, remaining *ʊ* in the SF [6.3.2](#).

	<i>āaŋdɪg<sup>a</sup></i>	← * <i>āādɪga</i>	"black plum tree"
but	<i>gàadug<sup>ɔ</sup></i>	← * <i>gaadɪgʊ</i>	"(sur)passing" (gerund)
pl	<i>māluma<sup>+</sup></i>	← * <i>malɪmaa</i>	"sacrifices"
but	<i>mālʊg<sup>ɔ</sup></i>	← * <i>malɪŋgʊ</i>	"sacrifice"

Epenthetic vowels are also rounded to *ʊ* when *preceded* by a rounded root vowel with intervening *-g-* (but not *-ŋ-* *-k-*):

<i>gbīgim</i> <sup>nε</sup>	[g̃bīgim]	"lion"
<i>yōgúm</i> <sup>nε</sup>	[jɔgɔm]	"camel"
<i>wābɪd</i> <sup>ε/</sup>	[wabɪd]	"elephants"
<i>dōgud</i> <sup>ε/</sup>	[dɔgɔd]	"cooking pots"
<i>dōgudíb</i> <sup>a</sup>	[dɔgɔdɪb]	"people who cook"
<i>pōvgu-n</i> <sup>ε/</sup>	[pʰʊ:gɔn]	"belly" ( <i>pōvg</i> <sup>a</sup> ) + <i>n</i> <sup>ε</sup> locative

Speakers vary with rounding of epenthetic vowels after rounded root vowels, but this can only become contrastive before word-final velars, where it can lead to reanalysis of the *g*<sup>a</sup> sg suffix as *g*<sup>ɔ</sup> 9.3.2.1. NT ILK KED have *poogin* and KB *puugin* for *pōvgu-n*<sup>ε/</sup> "inside." WK has rounding before velars after short root rounded vowels with intervening *b m l*, and after *mm* even when the preceding vowel is not rounded:

<i>nōbvg</i> <sup>ε/</sup>	"grow" (but <i>nóbir</i> <sup>ε</sup> "leg")
<i>kōlv</i> <sup>a</sup>	"river"
<i>yàmmvg</i> <sup>a</sup>	"slave"

After a single consonant preceded by short root *i* or *u*, epenthetic *ɪ* *ʊ* are realised [i] [u] respectively; this is not contrastive and is ignored in the orthography:

	<i>tìsɪd</i> <sup>a</sup>	[tʰɪsɪd]	"gives"
but	<i>sīgɪd</i> <sup>a/</sup>	[sigɪd]	"lowers"
	<i>bōgv</i> <sup>ε</sup>	[bɔgv]	"spirit's dwelling"
but	<i>kūgv</i> <sup>ε/</sup>	[kʰugv]	"stone"

#### 4.4 Affix vowels

Except for combining forms, and some preverbs, post-subject particles, and emphatics, clitics have vowels showing the same set of *affix vowel* contrasts as the flexions and prefixes of full words.

The affix vowels are short *a* *ɪ* *ʊ* and long *aa* *ɪɪ* *ʊʊ*. Glottalisation occurs only in the particle *pà*<sup>l</sup> ← \**pag* "earlier today." Nasalisation is never contrastive, but phonetic nasalisation probably underlies the *ɛ* for expected *ɪ* of various particles realised *nē*, with *nī*<sup>+/</sup> found only as the non-liaison allomorph of the locative marker.

Prosodic clitics cause short LF-final *ɪ* *ʊ* to be lowered to *ɛ* *ɔ*, here realised somewhat closer than as root vowels; the only context in which underlying LF-final short *ɪ* *ʊ* appear as such is with apocope-blocking 6.4.

LF-final long *aa* *ɪɪ* appear in the *r*<sup>ε</sup>|*a*<sup>+</sup> and *f*<sup>ɔ</sup>|*ɪ*<sup>+</sup> class plural flexions. SF-final *-a* *-ɪ* in plurals behave like apocope-blocked forms before liaison, without vowel prolongation, except in *yáan*<sup>ε</sup>, the irregular locative of *yā*<sup>+/</sup> "houses." LF-final *aa* *ɪɪ* *ʊʊ*



also arise from prolongation of forms with apocope-blocking before prosodic clitics, and *uv* arises as the result of liaison with the LF of the enclitic pronoun <sup>o</sup> [8.2.1.1](#).

Prefix *ɪ* *ʊ* are realised [i] [u] when the first mora of the root is *i* or *u*; this is non-contrastive and ignored in the orthography, with *ɪ* *ʊ* used throughout. Thus *tītā'ar*<sup>ε</sup> "big", *kùkōr*<sup>ε/</sup> "voice" have [ɪ] [ʊ] respectively, but

<i>kìkīrɪg</i> <sup>a/</sup>	[kʰikʰirig]	"protective spirit"
<i>sìsì'əm</i> <sup>m</sup>	[sisjəm]	"wind"
<i>dòndùug</i> <sup>ɔ</sup>	[dundu:g]	"cobra"      KB <i>dunduug</i>
<i>sīlɪnsìùṅg</i> <sup>ɔ</sup>	[silɪŋsĩüg]	"spider"
<i>vòlɪnvùuñ</i> <sup>ε</sup>	[vulimvũ:l]	"mason wasp"
but <i>nìn-tāa</i> <sup>=</sup>	[nintʰa:]	"co-wife": there are no short * <i>lñ</i> * <i>uñ</i> <a href="#">4.2.1</a>

Affix-vowel and pre-liaison *ɪ* *ʊ* differ in tone sandhi from epenthetic *ɪ* *ʊ* [5.4](#), and written materials suggest a prominence contrast at least between affix vowels and word-final epenthetic vowels preceded by a single consonant after a short root vowel, as seen in *dīgi* from *dīgi*<sup>və/</sup> "be lying down." In KB, I found no instances of loss of final affix *ɪ* *ʊ*, but *dīgi* appears as *digɪ* 101 times, and *dig* 185. Significantly, there are 33 instances of *dig nε* with only 5 of *digɪ nε*, where there is no clause boundary after the verb, but where the verb is followed by the unstressed clause linker *kà* there are 7 cases of *digɪ ka* to only 2 of *dig ka*, while before a full stop there are 5 instances of *digɪ* to only one of *digɪ* (excepting the collocation *digɪ dig*.)

The affix vowels *ɪ* and *ʊ* contrast only after velars and word-initially: *ɪ* is the default after alveolars, and *ʊ* after labials, labiodentals and labiovelars. Prefixes, however, show *ʊ* rather than *ɪ* before root *u/ʊ/ɔ* (*dòndùug*<sup>ɔ</sup> "cobra") and *ɪ* instead of *ʊ* before root *i/ɪ/ε* (*kpīkpīn*<sup>na/</sup> "merchant.") In flexions *-mm* appears in place of *\*-mʊ*; *ɪ* appears after labial consonants only in the perfectives of variable verbs like *zàb*<sup>ε</sup> "fight" where it is probably analogical. Velars followed by affix-vowel *ʊ* could be internally reconstructed throughout as labiovelars (with 3sg *ò* ← *\*ɲmò* [16.3.1](#) fn.) A system with only two distinct affix vowels except after velars is probably reconstructable for Common Western Oti-Volta: in the equivalent of the *g<sup>ɔ</sup>|d<sup>ε</sup>* class, Mooré and Farefare have the plural suffix *-do/-ro* corresponding to singular *-go*, but Dagaare agrees with the Southwestern languages in showing an unrounded vowel, and this looks like a shared innovation based on the analogy of the singular suffix. Buli, which is close to the Western subgroup within Oti-Volta, also seems to show a three-way contrast in affix vowels only after velars and initially.

## 5 Tones

The tone system of Kusaal is structurally very similar to the two-tone terracing systems with emic downsteps seen very frequently among the neighbouring and related languages. The realisation is complicated by the fact that historical H tone followed by either L or downstep has become a new H toneme, higher than the original H, which is now the M (mid) toneme in a three-toneme system. The sequence ML cannot occur word-internally, but must become either HL or MH.

There are great constraints on tone patterns for single words, with nominals showing only three distinct basic patterns, and verbs only two. Intrinsic tone patterns are frequently changed by tone sandhi [8.3](#) [8.4](#) and tone overlay [19.6.1.1](#).

### 5.1 Tonemes

There are three tonemes:

H	High, marked with an acute:	<i>gél</i> <sup>ε</sup>	"egg"
M	Mid, marked with a macron:	<i>bāŋ</i> <sup>a</sup>	"ring"
L	Low, marked with a grave:	<i>b̀̀k</i> <sup>ɔ</sup>	"pit"

Every vocalic mora carries a toneme, except as a result of tautosyllabic delinking [5.2](#) or heterosyllabic H spreading [5.4](#). When syllabic, *m n* bear the L toneme, except for catenator-*n*, which is toneless.

Toneless morae are realised by extension of the toneme of the preceding mora to cover both morae.

Within a word, macrons (for M) and and graves (for L) apply not only to the mora they are written on, but to all following unmarked morae until the next tone mark or until the end of the word, e.g. *bēogv-n* for *bēōgū-n*, *p̀̀k̀̀ɔ̀̀ŋr* for *p̀̀k̀̀ɔ̀̀ŋr*. After an acute mark, however, an unmarked mora is *toneless*, and the H toneme extends over both morae [5.4](#):

*Lì k̄ā' mól̄t̄f̄* +∅. "It's not a gazelle."  
**3INAN NEG.BE gazelle:SG NEG.**

Nominals with prefixes [14](#) are written with a tone mark on the root even if it is identical to that on the prefix: *zīnzāyŋ* "bat", *k̀̀kp̀̀àr̄ig* "palm tree."

The H toneme is in certain circumstances realised with a preceding *phonetic* downstep, lowering it to M level [5.3](#), but this is entirely a question of surface realisation, and does not affect the relationship of the H to following tonemes.

The mid toneme M is always realised level; L and H are level except before pause, where they are realised as falling tones, beginning at their usual pitch.

H toneme when attached to both morae of a long vowel before pause shows the fall in pitch on the second mora, differing from the sequence HL on a long vowel in a closed syllable, where the fall in pitch occurs from the first mora to the second:

*m̄ sáam* "my guests"  
 but *m̄ gbéěñm* "my sleep"

Tone functions more as a syntactic marker than to distinguish lexemes, but numerous minimal pairs exist, e.g.

<i>bāŋ<sup>a</sup></i>	"ring, chain"	<i>bàŋ<sup>a</sup></i>	"agama lizard"
<i>būk<sup>ε/</sup></i>	"weaken"	<i>bùk<sup>ε</sup></i>	"cast lots"
<i>gāŋ<sup>ε/</sup></i>	"choose"	<i>gàŋ<sup>ε</sup></i>	"step over"
<i>kūk<sup>a/</sup></i>	"mahogany tree"	<i>kùk<sup>a</sup></i>	"ghost"
<i>kūk<sup>a</sup></i>	"chair"		
<i>māk<sup>ε/</sup></i>	"measure"	<i>màk<sup>ε</sup></i>	"crumple up"
<i>mōɔg<sup>ɔ</sup></i>	"bush, wilderness"	<i>Mòɔg<sup>ɔ</sup></i>	"Mossi realm"
<i>pīd<sup>ε</sup></i>	"get bloated"	<i>pìd<sup>ε</sup></i>	"put on hat, shoes etc"
<i>sáam<sup>ma</sup></i>	"guests"	<i>sàam<sup>ma</sup></i>	"father"
<i>sĭāk<sup>ε/</sup></i>	"suffice"	<i>sĭàk<sup>ε</sup></i>	"agree"
<i>yáaŋ<sup>a</sup></i>	"grandchild"	<i>Yàaŋ<sup>a</sup></i>	"Yansi, Yanga person"
<i>yō<sup>+</sup></i>	"pay"	<i>yò<sup>+</sup></i>	"close"

## 5.2 Tautosyllabic delinking

These processes follow all external tone sandhi processes, but precede the insertion of downsteps before H tonemes [5.3](#). Essentially, they are realisation rules, but they are written into the orthography to avoid having to write the same surface tones in several different ways.

A pitch rise is not permitted within a syllable; the first toneme is delinked and the second applies to both morae. This rule applies constantly with words with long root vowels which would be expected to have the tonemes MH in Tone Pattern H [7.2.1](#), and with the allocation of final M and H tones in LFs [2.3.1](#); it applies also when the discontinuous-past liaison enclitic *n<sup>ε</sup>* imposes M toneme on the second mora of a LL root vowel [8.2.3](#).

	<i>sáam<sup>ma</sup></i>	← * <i>sāámmā</i>	"guests"
LF	<i>dáamm</i>	← * <i>dāámm</i>	"beer"
LF	<i>tīumm</i>	← * <i>tīūmm</i>	"medicine"
	<i>mĕĕ-n<sup>ε/</sup></i>	← <i>mĕĕ-n<sup>ε/</sup></i>	"build" <i>mĕ<sup>+</sup></i> + dp <i>n<sup>ε</sup></i>

When HM or HH would occur in one syllable the second toneme is delinked:

*Dāy lā méɛ-n* (← *méɛ-n*) "The man built (earlier today.)"  
 Man:SG ART build-DP

The only remaining sequence of dissimilar tones in one syllable is HL. Even the sequence **HL is only permitted in a closed syllable**; in an open syllable, the L is delinked and H applies to both morae. This means that words like *nú'ùg<sup>3</sup>* "hand" and *náaf<sup>3</sup>* "cow" which have different tonemes in the SF fall together in the LF as the syllable becomes open. Superscript notation writes such words with SF tones.

*Lì k̄ā' nú'uḡ<sup>3</sup>* +∅. "It's not a hand."  
 3INAN NEG.BE hand:SG NEG.

*Lì k̄ā' náaf̄<sup>3</sup>* +∅. "It's not a cow."  
 3INAN NEG.BE COW:SG NEG.

As three-mora diphthongs are disyllabic, with syllable division following the first mora [2.2](#), tautosyllabic delinking applies to the final two morae, e.g. LF *nū-áa* "hen" from *nūa<sup>+/</sup>*; see further examples of LFs at [2.3.1](#).

### 5.3 Downstepping before H

Downstep insertion applies after tautosyllabic delinking.

Downstep is inserted before H after:

H: always

M: if the next syllable is stressed and no other toneme intervenes

**Downstep is not inserted after M before the last H toneme in a question**, due to the interrogative intonation pattern [8.1](#).

Downstep lowers H to the level of the last preceding M: thus, in MHM the final M has the pitch of the first, but M↓HM is realised [MM↓M].

These predictable downsteps are not marked in the normal orthography of this grammar, but in this section will be written as ↓.

Examples for downstep after M before H immediately preceding stress [2.2](#). Where relevant, **bold** type marks stressed and *green* marks unstressed syllables.

*Kà m̀ gōs ↓búŋ lā.*

And 1SG look.at donkey:SG ART.

"And I looked at the donkey."

but *Kà m̀ gōs búŋ lā bēogv-n.*

And 1SG look.at donkey:SG ART morning-LOC.

"And I looked at the donkey in the morning."

*Bīg lā ↓sá m̀ɛɛd yīr lā.*

Child:SG ART TNS build:IPFV house:SG ART.

"The child was building the house yesterday."

but *Bīg lā sá m̀ yīr lā.*

Child:SG ART TNS build house:SG ART.

"The child built the house yesterday."

*Mān ↓bú-pìəl kā'e +∅.*

1SG.CNTR goat-white:SG NEG.BE NEG.

"My white goat isn't there."

but *Mān bú-sùŋ kā'e +∅.*

1SG.CNTR goat-good:SG NEG.BE NEG.

"My good goat isn't there."

*Yū↓gúm kā'e +∅.*

"There's no camel."

Camel:SG NEG.BE NEG.

but *Yūgúm lā kā'e +∅.*

"The camel's not there."

Camel:SG ART NEG.BE NEG.

There is no downstep when L toneme intervenes before the stressed syllable:

*Lì à nē ↓náaf lā.*

"It's the cow."

3INAN COP FOC COW:SG ART.

but *Lì à nē d̀òg lā.*

"It's the hut."

3INAN COP FOC hut:SG ART.

The tonemes of the following syllable itself are not relevant:

*Mān kúkòm kā'e* +∅. "My leper isn't there."  
**1SG.CNTR leper:SG NEG.BE NEG.**

*Mān kúkōr kā'e* +∅. "My voice isn't there." (WK tone)  
**1SG.CNTR voice:SG NEG.BE NEG.**

Before prosodic clitics LFs transfer stress from the root to the affix:

*Lì kā' ñyī↓ríf̄* +∅. "It's not an egusi seed."  
**3INAN NEG.BE egusi:SG NEG.**

*Lì kā' púkòòñrē* +∅. "It's not a widow."  
**3INAN NEG.BE widow:SG NEG.**

*Ànó'ɔ̀nì\_∅ ñyē púkòòñrē* +∅?  
 Who **CAT** see widow:SG **CQ**?  
 "Who saw a widow?"

but *Lì à nē ↓púkòòñr lā.* "It's the widow."  
**3INAN COP FOC widow:SG ART.**

As downstepping between M and H does not occur before an unstressed syllable, *nú'ùg*<sup>ɔ</sup> "hand" matches *nóbìr*<sup>ɛ</sup> "leg" tonally in SF but *náaf*<sup>ɔ</sup> "cow" in LF:

<i>Lì à nē nóbìr.</i>	"It's a leg."
<i>Lì à nē nú'ùg.</i>	"It's a hand."
<i>Lì à nē náaf.</i>	"It's a cow."
<i>Lì kā' nóbìrē.</i>	"It's not a leg." (with H spreading <a href="#">5.4</a> )
<i>Lì kā' ↓nú'ùḡ.</i>	"It's not a hand."
<i>Lì kā' ↓náaf̄.</i>	"It's not a cow."

The **interrogative intonation pattern 8.1** prevents downstep preceding a H syllable even though the next syllable is stressed before a prosodic clitic:

*Ò pū yādi↓gídā* +∅. "He isn't scattering."  
**3AN NEG.IND scatter:IPFV NEG.**

but *Ànó'ɔ̀nì\_∅ yādigídā* +∅? "Who is scattering?"  
 Who **CAT** scatter:IPFV **CQ**?

*Lì k̄ā' bī-↓púŋā* +∅. "It's not a girl."  
**3INAN NEG.BE** child-girl:SG NEG.

but *Lì k̄ā' bī-púŋàa* +∅? "Isn't it a girl?"  
**3INAN NEG.BE** child-girl:SG PQ?

*Ò p̄ō ñyē↓sú'ugā* +∅. "She didn't find a knife."  
**3AN NEG.IND** see knife:SG NEG.

but *Ànó'ɔ̀nì\_∅ ñyē sú'ugà* +∅? "Who found a knife?"  
 Who **CAT** see knife:SG CQ.

and *Ò p̄ō dúgèè* +∅ +∅? "Didn't she cook?"  
**3AN NEG.IND** cook **NEG PQ**.

Downstep is inserted between any two adjacent H tonemes; as downstep insertion applies later than tautosyllabic delinking, words like *náaf* "cow" (← *nāáf*) behave exactly like *gél*<sup>1E</sup> "egg":

*Kà m̄ ḡs gél lā bēogv-n.*  
 And **1SG** look.at egg:SG **ART** morning-LOC.  
 "And I looked at the egg in the morning."

but *M̄ ḡs ↓gél lā bēogv-n.*  
**1SG** look.at egg:SG **ART** morning-LOC.  
 "I looked at the egg in the morning."

*Kà m̄ ḡs náaf lā bēogv-n.*  
 And **1SG** look.at donkey:SG **ART** morning-LOC.  
 "And I looked at the cow in the morning."

but *M̄ ḡs ↓náaf lā bēogv-n.*  
**1SG** look.at cow:SG **ART** morning-LOC.  
 "I looked at the cow in the morning."

### 5.4 Heterosyllabic H spreading

If a short vowel in an open syllable carries H toneme, the toneme on a following *epenthetic* vowel in an open syllable is delinked and the H is realised across both morae. This process does not need to be ordered with respect to either tautosyllabic delinking or downstep insertion.

*Lì k̄ā' mólɪf̄* +∅. "It's not a gazelle."  
**3INAN NEG.BE gazelle:SG NEG.**

*Bà k̄ā' dɪ̄ə́sɪd̄ɪb̄* +∅. "They are not receivers."  
**3PL NEG.BE receiver:PL NEG.**

The rule does not apply if either syllable is closed:

*Lì à nē mólɪf.* "It's a gazelle."  
**3INAN COP FOC gazelle:SG.**

*Bà à nē dɪ̄ə́sɪd̄ɪb.* "They are receivers."  
**3PL COP FOC receiver:PL.**

*Lì k̄ā' bōn-sábìllē* +∅. "It's not a black thing."  
**3INAN NEG.BE thing-black:SG NEG.**

Written intervocalic *k p t ŋ* represent *kk tt pp ŋŋ*, and block H spreading even though generally realised as single except in very slow speech:

*Ka ya pu siakida.* "But you did not agree." (Lk 13:34)  
*Kà yà p̄ s̄jákìdā* +∅.  
**And 2PL NEG.IND agree:IPFV NEG.**

H spreading does not occur if the L mora falls on a root or an affix vowel, or if it precedes liaison, where the short vowel is not epenthetic [8.2.1](#):

*Lì k̄ā' dágòbɪgā* +∅. "It's not a left hand."  
**3INAN NEG.BE left.hand:SG NEG.** (Prefix *dà-*, root *gòb-* [14](#))

*Bà à nē dígà.* "They are dwarfs."  
**3PL COP FOC dwarf:PL.** (Affix vowel *-à*)



*Kà* *ɔ̃n* **zábì** *f*. "And he fought you."  
 And **3AN.CNTR** fight **2SG.OB**.

*Ò* *p̄* **zábì** *f̄* <sup>+∅</sup>. "He didn't fight you."  
**3AN NEG.IND** fight **2SG.OB NEG**.

Contrast the example with the epenthetic vowel in *mòlɪ̄f̄* "gazelle" above:

*Lì* *kā'* **mólɪ̄f̄** <sup>+∅</sup>. "It's not a gazelle."  
**3INAN NEG.BE** gazelle:**SG NEG**.

For possible phonological differences between epenthetic vowels and word-final short vowels before liaison *apart* from tones cf [4.4](#); in any case word-division before liaison enclitics is justifiable morphosyntactically [1.3.1](#). Epenthetic vowels liable to H spreading could instead be regarded as *intrinsically* toneless, becoming L if left in a closed syllable by apocope when preceded by H. However, the distribution of tonemes within words is so constrained that a contrast in *realisation* between such toneless morae and those bearing tonemes would only ever occur after H, the very case addressed by H spreading. H spreading is preferred for descriptive purposes because, as with writing words with tautosyllabic delinking already applied [5.2](#), it avoids the need for multiple notations for identical surface tone patterns.

## 6 Word segmental structure

This section treats the structure of free words, along with various categories of bound words which have the same segmental and tonal form as free words. These comprise combining forms along with some emphatics, conjunctions, preverbs and post-subject particles.

Clause-linker particles, VPred particles, the article, prepositions, the locative marker, and the bound pronouns resemble affixes of full words, with the same much-reduced "affix vowel" contrasts; for their tonal behaviour see [7.4](#). Enclitics of this type are subject to apocope; in some cases this results in a SF consisting of a single consonant, or even a SF with no segmental form at all. Enclitics with SFs of the form CV behave as words with apocope-blocking [6.4](#). Most proclitics other than cbs have not undergone apocope; some end in long vowels impossible for SFs: *lèɛ* "but" [19.7.1](#) *ñyĕɛ* "habitually" [19.7.2](#). However, some do have forms implying apocope, like *pà'* "earlier today": glottalised short vowels occur only in closed syllables before *m* or *ŋ*, or by apocope [4.2.2](#).

### 6.1 Roots, prefixes and suffixes

Word structure is based on **roots**. Roots have the forms (C)V(C) or (C)VV(C). Stressed syllables with no initial consonant may be realised with an initial glottal stop [ʔ] but this is synchronically not a consonant but simply a prosodic feature:

<i>sāan</i> <sup>a/</sup>	"stranger"	[sa:n]
<i>úun</i> <sup>nɛ</sup>	"dry season"	[ʔu:n], [u:n]

For simplicity, possible root shapes will be given as CV(C) CVV(C) elsewhere.

**Root vowels** show the full range of possible Kusaal vowels, including contrastive length, nasalisation and glottalisation. The basic *underlying* vowels are

<i>a</i>	<i>ja/ɛ</i>	<i>ya/ɔ</i>		<i>i</i>	<i>u</i>	<i>ɪ</i>	<i>ʊ</i>
<i>aa</i>	<i>iə</i>	<i>uə</i>	<i>ɛɛ</i>	<i>ɔɔ</i>	<i>ii</i>	<i>uu</i>	<i>ɪɪ</i>

The digraphs represent *monophthongs*, short or long, affected by Agolle Vowel Breaking [4.1.1](#). At this underlying level, short *ja ya* are in complementary distribution with *ɛ ɔ* respectively, all long vowels have glottalised counterparts, and all vowels have contrastively nasalised counterparts except for *iə uə ɪ ʊ ɪɪ ʊʊ*. Short *i u* only occur nasalised after *m n* and *ñy ñw* ← *n ŋm*, however [4.2.1](#).

Postvocalic consonants may be deleted with subsequent vowel fusion [6.3.1](#).

Long vowels frequently undergo fronting or rounding of their second morae before fronted or rounded segments [6.3.2](#); apocope of final vowels may then remove conditioning factors, creating contrastive diphthongs:

*vīid*<sup>ɛ/</sup> "owls" but sg *vīug*<sup>ɔ/</sup> "owl"

Only *b d g l m n s r* occur as second consonants of roots.

**Stems** are derived from roots by adding up to three **derivational suffixes** [13](#) of the form C; nominals may add optional **prefixes** [14](#).

Derivational suffixes again comprise the consonants *b d g l m n s r*, where *b r* are found in very few words. *B g n s r* cannot follow another suffix at all, and *l* only does so in the combination *-lm* which derives abstract nouns from other nouns. The suffix *n* may be historically derived from *\*ld* [6.2.1.1](#); otherwise, the suffix *d* occurs almost exclusively in nouns and adjectives derived from verb stems and frequently either supplants a preceding derivational suffix or is itself omitted. If there are three derivational suffixes the last two can only be *-dm* or *-lm*. CVVC roots assume the allomorph CVC before a suffix of a type which cannot follow another [6.1.1.2](#).

Prefixes are of the forms V CV CV*n* CV*s**l**n* CV*l**n*. They only occur in nominal stems. Their vowels are limited to the short **affix vowels** *a ɪ ʊ* and show no contrastive glottalisation or nasalisation. A few stems have two successive prefixes.

*tītā'ar*<sup>ɛ</sup> "big"      *bùmbàrig*<sup>a</sup> "ant"  
*sīl<sup>h</sup>nsíùŋ*<sup>ɔ</sup> "spider"      *tàsintà*<sup>l</sup><sup>ɛ</sup> "palm of hand"

A stem may constitute a word by itself, or may add a single **flexional suffix**. The flexional suffixes are *a ba ga si fu ɪ rɪ lɪ aa gu dɪ mm bu da ma na la*. These draw their vowels from the set of **affix vowels** *a ɪ ʊ* which here may be short or long:

*a*                      *ɪ*                      *ʊ*  
*aa*                     *ɪɪ*                     *ʊʊ*

Affix vowels show no contrastive nasalisation or glottalisation.

Final *-mm* represents *-mʊ*; it is realised as geminate consonantal [m:] but still patterns in most respects as if the final *m* were syllabic.

LF-final short *ɪ ʊ* appear before prosodic clitics lowered to *ɛ ɔ*.

Stem	<i>bīi-</i>	"child"	sg <i>bīig</i> <sup>a</sup>	pl <i>bīis</i> <sup>ɛ</sup>
	<i>dòɔ-</i>	"hut"	sg <i>dòɔg</i> <sup>ɔ</sup>	pl <i>dòɔd</i> <sup>ɛ</sup>
	<i>kù'ə-</i>	"water"	sg <i>kù'əm</i> <sup>m</sup>	

Before vowel-initial flexions CVV root-stems become CVC; in productive forms always CVy or CVd:

Stem	<i>nɔ̄ɔ-</i>	"mouth"	sg <i>nɔ̄ɔr<sup>ε/</sup></i>	pl <i>nɔ̄yá<sup>+</sup></i>
	<i>yū'v-</i>	"name"	sg <i>yū'vr<sup>ε/</sup></i>	pl <i>yūdá<sup>+</sup></i>

No consonant clusters may occur word-initially, and only *-mm* (derived from *-mu*, as noted above) word-finally.

Clusters of homorganic nasal + C may occur where noun prefixes attach to the root or to another noun prefix.

<i>kòndòŋ<sup>a</sup></i>	"jackal"
<i>gòmpòzēr<sup>ε/</sup></i>	"duck"

Consonant clusters following the root vowel may only be *kk tt pp ŋŋ nn mm ll* or *mn*. Other two-member consonant clusters only occur between words (including between the members of compounds) and word-internally in loanwords:

<i>ñwād-bíl<sup>a</sup></i>	"star"
<i>bòrkìn<sup>a</sup></i>	"honourable/free/honest person" (← Songhay)

All other pairs of consonants within words are separated by **epenthetic vowels**. Adjacent pairs of consonants either assimilate to a permitted cluster or a single consonant, or insert an epenthetic vowel, which is *ɪ* by default but may be rounded to *ʊ* by adjacent consonants or after a short rounded root vowel [4.3](#).

Stem <i>ñwād-</i> "month"	+ sg <i>-ga</i>	→	<i>ñwādɪgá</i>	LF <i>ñwādɪg</i>	SF
	+ pl <i>-sɪ</i>	→	<i>ñwādɪsé</i>	LF <i>ñwādɪs</i>	SF
Stem <i>kūg-</i> "chair"	+ sg <i>-ga</i>	→	<i>kūka</i>	LF <i>kūk</i>	SF
	+ pl <i>-sɪ</i>	→	<i>kūgʊsɛ</i>	LF <i>kūgʊs</i>	SF
Stem <i>nób-</i> "leg"	+ sg <i>-rɪ</i>	→	<i>nóbɪrē</i>	LF <i>nóbɪr</i>	SF
Stem <i>dūm-</i> "knee"	+ pl <i>-aa</i>	→	<i>dūmaa</i>	LF <i>dūma</i>	SF
Stem <i>dūm-</i> "knee"	+ sg <i>-rɪ</i>	→	<i>dūmnɛ</i>	LF <i>dūm</i>	SF

Apocope of word-final *-ɔ̄* after velars may lead to a contrast between round and unrounded epenthetic vowels [6.3.2](#):

	<i>āañdɪg<sup>a</sup></i>	← <i>*āāndɪga</i>	"black plum tree"
but	<i>gàadʊg<sup>ɔ̄</sup></i>	← <i>*gaadɪgʊ</i>	"(sur)passing" (gerund)

### 6.1.1 Root alternations

#### 6.1.1.1 CV~CVV~CVC

Most roots ending in a vowel show a long vowel before all consonant-initial flexional and derivational suffixes: *kō*<sup>+</sup> "kill" ipfv *kōvd*<sup>a/</sup>. However, some show short vowels before at least some suffixes.

Glottalised roots of this kind are underlyingly \*CVg, and their behaviour is explained by \*g deletion and vowel fusion [6.3.1](#).

In *flexion*, non-glottalised roots show a long vowel before the class suffixes -g<sup>a</sup> -g<sup>ɔ</sup> and short elsewhere, with following \*d → tt \*b → pp (but not \*m → mm \*l → ll):

<i>fūug</i> <sup>ɔ/</sup>	"clothing"	pl <i>fūt</i> <sup>ε/</sup>	
<i>pōɔg</i> <sup>ɔ/</sup>	"field"	pl <i>pōt</i> <sup>ε/</sup>	
<i>dòɔg</i> <sup>ɔ</sup>	"hut"	pl <i>dòt</i> <sup>ε</sup>	
<i>dāvug</i> <sup>ɔ</sup>	"male"	cf <i>dāp</i> <sup>a</sup>	"men"
<i>bīig</i> <sup>a</sup>	"child"	cf <i>bīl</i> <sup>a</sup>	"little"
<i>gāañ</i> <sup>=/</sup>	"ebony tree" (*gāãga)	cf <i>gāñr</i> <sup>ε/</sup>	"ebony fruit"
<i>ñyē</i> <sup>+</sup>	"see"	ipfv <i>ñyēt</i> <sup>a/</sup>	imp <i>ñyèm</i> <sup>a</sup>
<i>dō</i> <sup>+</sup>	"rise"	ipfv <i>dōt</i> <sup>a/</sup>	imp <i>dòm</i> <sup>a</sup>
<i>lù</i> <sup>+</sup> or <i>lì</i> <sup>+</sup>	"fall"	ipfv <i>lùt</i> <sup>a</sup> or <i>lìt</i> <sup>a</sup>	imp <i>lùm</i> <sup>a</sup> or <i>lìm</i> <sup>a</sup>
<i>zò</i> <sup>+</sup>	"run"	ipfv <i>zòt</i> <sup>a</sup>	imp <i>zòm</i> <sup>a</sup>
<i>dì</i> <sup>+</sup>	"eat"	ipfv <i>dìt</i> <sup>a</sup>	imp <i>dìm</i> <sup>a</sup>
<i>yī</i> <sup>+</sup>	"emerge"	ipfv <i>yīt</i> <sup>a/</sup>	imp <i>yìm</i> <sup>a</sup>
<i>kē</i> <sup>+</sup>	"allow"	ipfv <i>kēt</i> <sup>a/</sup>	imp <i>kèl</i> <sup>a</sup>

Some words which never appear with -g<sup>a</sup> or -g<sup>ɔ</sup> show short vowels throughout:

<i>yīr</i> <sup>ε/</sup>	"house"	pl <i>yā</i> <sup>+/</sup>
<i>zā</i> <sup>+/</sup>	"millet"	
<i>kī</i> <sup>+/</sup>	"cereal, millet"	
<i>mùj</i> <sup>+/</sup>	"rice"	

*Zūg*<sup>ɔ/</sup> "head" pl *zūt*<sup>ε/</sup> cb *zūg-* or *zū-* is exceptional in showing a short vowel before -g<sup>ɔ</sup>. There may be two originally distinct stems \*zu- and \*zug-: cf Farefare *zúugó* pl *zuto*, Mampruli *zugu* pl *zuguri*.

The long vowel before sg -g<sup>a</sup> or -g<sup>ɔ</sup> is often introduced into the plural, in some cases invariably:

<i>fūug</i> <sup>ɔ/</sup>	"clothing"	pl <i>fūud</i> <sup>ε/</sup>	or <i>fūt</i> <sup>ε/</sup>
<i>pɔɔg</i> <sup>ɔ/</sup>	"field"	pl <i>pɔɔd</i> <sup>ε/</sup>	or <i>pɔt</i> <sup>ε/</sup>
<i>dɔɔg</i> <sup>ɔ</sup>	"hut"	pl <i>dɔɔd</i> <sup>ε</sup>	or <i>dɔt</i> <sup>ε</sup>
<i>dāvg</i> <sup>ɔ</sup>	"male"	pl <i>dāad</i> <sup>ε</sup>	
<i>gāañ</i> <sup>=/</sup>	"ebony tree"	pl <i>gāañs</i> <sup>ε/</sup>	
<i>bīg</i> <sup>a</sup>	"child"	pl <i>bīs</i> <sup>ε</sup>	

Before *derivational* suffixes the vowel is long, with some exceptions before *-s-*:

	<i>dìs</i> <sup>ε</sup>	"feed"	cf	<i>dì</i> <sup>+</sup>	"eat"
	<i>dàalum</i> <sup>m</sup>	"masculinity"	cf	<i>dāp</i> <sup>a</sup>	"men"
but	<i>gɔs</i> <sup>ε</sup>	"look"		ipfv <i>gɔt</i> <sup>a/</sup> or <i>gɔsɪd</i> <sup>a/</sup>	imp <i>gɔm</i> <sup>a</sup> or <i>gɔsɪm</i> <sup>a</sup>
	<i>tìs</i> <sup>ε</sup>	"give"		ipfv <i>tìt</i> <sup>a</sup> or <i>tìsɪd</i> <sup>a</sup>	
	<i>yīs</i> <sup>ε</sup>	"make go/come out"		<i>yī</i> <sup>+</sup>	"emerge"

The causative *yīs*<sup>ε</sup> has a by-form *yīs*<sup>ε/</sup> which is clearly shown to be analogical by its gerund *yīs(b)*<sup>ɔ</sup>, the sole 3-mora stem in the *b*<sup>ɔ</sup> class.

Gerunds in *-b*<sup>ɔ</sup> always show long vowels: *dīib*<sup>ɔ</sup> "food", *ñyēeb*<sup>ɔ/</sup> "seeing", and so, normally, do gerunds in *-r*<sup>ε</sup>: *nɔ-lɔ̀r*<sup>ε</sup> "fasting" ("mouth-tying"), *fū-yéèr*<sup>ε</sup> "shirt-wearing" (WK, nonce-formation), but WK cited two instances of a short vowel before *-r*<sup>ε</sup>: *nā-lɔ̀r*<sup>ε</sup> "place in a compound for tying up cows" and *wìd-lɔ̀r*<sup>ε/</sup> "place in a compound for tying up horses."

There are a few *\*CVy* roots, which preserve the final consonant before a flexion *\*-a* but otherwise show loss of the *\*y* with vowel fusion to *CVV-*; two probable *\*CVw* roots show no current *\*-wa* LF variants [2.3.2](#):

	<i>tɔ̄e</i> <sup>a/</sup>	"be bitter"		<i>tɔɔg</i> <sup>ɔ</sup>	"bitter"
	<i>vūe</i> <sup>a/</sup>	"be alive"		<i>vū'ug</i> <sup>ε/</sup>	"come alive"
	<i>àeñ</i> <sup>a</sup>	"be something"		<i>àañlím</i> <sup>m</sup>	gerund
	<i>sāeñ</i> <sup>a</sup>	"blacksmith"		pl <i>sāañb</i> <sup>a</sup>	
or	<i>sāeñ</i> <sup>+</sup>				
	<i>sɔ̄eñ</i> <sup>a</sup>	"witch"		pl <i>sɔɔñb</i> <sup>a</sup>	
or	<i>sɔ̄eñ</i> <sup>+</sup>				
	<i>dāu</i> <sup>+</sup>	"man", Mooré <i>ráoa</i>		pl <i>dāp</i> <sup>a</sup>	
	<i>tāuñ</i> <sup>+/</sup>	"opposite-sex sib"		pl <i>tāñp</i> <sup>a/</sup>	

This suggests that CV(C)~CVV alternations may historically involve root-final consonants, surfacing as *y/w*, assimilated, or deleted in different environments analogously to \*CVg roots; Mooré cognates lend some support to this. Even so, some roots may be simply \*CV; this may explain the unexpected absence of L spreading after a few cbs 7.2.4. Cf also Dagbani *nya* = Kusaal *ñyē*<sup>+</sup> "see" versus e.g. *me* = *mē*<sup>+</sup> "build"; elsewhere it is only original short *e* which has become *a* in Dagbani.

Before the noun class plural suffix *-a*<sup>+</sup> stems ending in a root vowel insert *-y-*, with shortening of long vowels:

<i>kòkōr</i> <sup>ε/</sup>	"voice"	pl <i>kòkōyá</i> <sup>+</sup>
<i>gāñr</i> <sup>ε/</sup>	"fruit of Nigerian ebony"	pl <i>gāñyá</i> <sup>+</sup>
<i>bàlàar</i> <sup>ε</sup>	"stick, club"	pl <i>bàlàya</i> <sup>+</sup>
<i>nōɔr</i> <sup>ε/</sup>	"mouth"	pl <i>nōyá</i> <sup>+</sup>
<i>zōvr</i> <sup>ε</sup>	"tail"	pl <i>zōya</i> <sup>+</sup>

Shortening of *iə uə* produces *je ue* [jɪ] [ɯɪ], found solely in this context:

<i>bīər</i> <sup>ε/</sup>	"elder same-sex sibling"	pl <i>bjēyá</i> <sup>+</sup>
<i>sūər</i> <sup>ε/</sup>	"road"	pl <i>sūyēyá</i> <sup>+</sup>
<i>zūər</i> <sup>ε</sup>	"hill"	pl <i>zūyēya</i> <sup>+</sup>

A different rule of attachment of *-a*<sup>+</sup> is followed after Root-stems in with glottalised long vowels CV'V, which change to CVd:

<i>yū'vr</i> <sup>ε/</sup>	"name"	pl <i>yūdá</i> <sup>+</sup>
<i>pòñ'ɔr</i> <sup>ε</sup>	"cripple"	pl <i>pòñda</i> <sup>+</sup>
<i>tītā'ar</i> <sup>ε</sup>	"big"	pl <i>tītāda</i> <sup>+</sup>
<i>yū'ər</i> <sup>ε</sup>	"penis"	pl <i>yūāda</i> <sup>+</sup>

Stems in \*-ag- \**ɔ*ag- \*-*ɔ*ag- 6.3.1 may inflect as CVC- stems, or may show analogical forms with *-d*:

<i>sjà'ar</i> <sup>ε</sup>	"forest"	pl <i>sjà'a</i> <sup>+</sup>
<i>bà'ar</i> <sup>ε</sup>	"idol"	pl <i>bà'a</i> <sup>+</sup> or <i>bàda</i> <sup>+</sup> * <i>bagri</i> ; Farefare <i>bàgrè</i>
<i>bjāñ'ar</i> <sup>ε/</sup>	"mud, riverbed"	pl <i>bjāñ'a</i> <sup>+</sup>
<i>mù'ar</i> <sup>ε</sup>	"reservoir, dam"	pl <i>mɔ'aa</i> <sup>+</sup> or <i>mù'ada</i> <sup>+</sup>
<i>zànkù'ar</i> <sup>ε</sup>	"jackal"	pl <i>zànkɔ'aa</i> <sup>+</sup> or <i>zànkù'ada</i> <sup>+</sup>

Roots ending in *ɔ* or *u* become glottalised before derivational \*g and \*s :

	<i>kò</i> <sup>+</sup>	"break" intrans	<i>kò'ɔg</i> <sup>ε</sup>	"break" trans/intrans
	<i>pòɔd</i> <sup>a</sup>	"be few"	<i>pò'ɔg</i> <sup>ε</sup>	"diminish"
	<i>vūɛ</i> <sup>a/</sup>	"be alive"	<i>vū'vɔg</i> <sup>ε/</sup>	"make, come alive"
	<i>nīn-múa</i> <sup>+</sup>	"concentration"	<i>mù'e</i> <sup>+</sup> (* <i>mɔ̃ɔgi</i> )	"intensify" <a href="#">6.3.1</a>
	<i>kòɔlúŋ</i> <sup>ɔ</sup>	"broken"	<i>kò'ɔs</i> <sup>ε</sup>	"break several times"
	<i>tòñ</i> <sup>+</sup>	"shoot"	<i>tòñ'ɔs</i> <sup>ε</sup>	"hunt"
	<i>vūɛ</i> <sup>a/</sup>	"be alive"	<i>vū'vɔs</i> <sup>ε/</sup>	"breathe, rest"
but	<i>yè</i> <sup>+</sup>	"dress oneself"	<i>yèɛg</i> <sup>ε</sup>	"undress oneself"
	<i>dì</i> <sup>+</sup>	"eat"	<i>dìs</i> <sup>ε</sup>	"feed"

Sporadic CVV~CVC root alternations appear elsewhere in

	<i>pē</i> <sup>-</sup> - <i>sá'a</i> <sup>=</sup>	"ewe lamb"	<i>pɔ'á-sādir</i> <sup>ε/</sup>	"young woman"
	<i>pɔ'ɔ-sa'a</i>	"young woman" (Toende)	<i>pògsádà</i>	"young woman" (Mooré)
	<i>lɔ</i> <sup>+</sup>	"tie"	<i>lɔdir</i> <sup>ε/</sup>	"untie"
cf	<i>lɔ</i>	"tie" (Dagbani)	<i>lɔrgi</i>	"untie" (Dagbani)
	<i>lóa</i>	"tie" (Mooré)	<i>lókè</i> or <i>lódgè</i>	"untie" (Mooré)
	<i>pū</i> <sup>+</sup>	"divide"	<i>pūdɔg</i> <sup>ε/</sup>	"divide"
cf	<i>púi</i>	"divide" (Mooré)		
	<i>bò</i>	"perdre, disparaître" (Toende)	<i>bòdir</i> <sup>ε</sup>	"lose, get lost": "fondre, disparaître" (Toende)
cf	<i>bò</i>		<i>bórig</i>	
	<i>dāy</i> <sup>+</sup>	"man"	<i>bī-dí(b)ŋ</i> <sup>a</sup>	"boy"
			<i>bíríblá</i>	"boy" (Mooré)
			cf <i>bìpúglá</i>	"girl" (Mooré)
			<i>pɔ'ā</i>	"woman" (* <i>pɔag-</i> )
	<i>nɔ</i> <sup>+</sup>	"tread"	<i>nɔbá</i> <sup>+</sup>	"feet"; sg <i>nóbir</i> <sup>ε</sup> is modelled on the pl (cf Toende sg <i>nɔ'ɔt</i> )
cf	<i>nao</i>	"tread" (Mooré)		
	<i>wìd</i> <sup>a</sup>	"draw water" ipfv	<i>wik</i> <sup>ε</sup>	pfv (← * <i>wiggɔ</i> )
	<i>vī</i> <sup>+</sup>	"uproot"	<i>vīk</i> <sup>ε/</sup>	"uproot" (← * <i>viggɔ</i> )



### 6.1.1.2 CVVC~CVC

Roots of the form CVVC are confirmed by cases where they alternate with CVC. This happens in flexion with a few very common nouns:

<i>zìíŋ</i> <sup>a</sup> (← *zìímgā)	<i>zīmí</i> <sup>+</sup>	<i>zīm-</i>	"fish"
<i>náaf</i> <sup>o</sup> (← *nāágfū)	<i>nīígí</i> <sup>+</sup>	<i>nā'-</i> (← *nāg-)	"cow"
<i>wáaf</i> <sup>o</sup> (← *wāágfū)	<i>wīígí</i> <sup>+</sup>	<i>wā'-</i> (← *wāg-)	"snake"
<i>pīim</i> <sup>m/</sup>	<i>pīmá</i> <sup>+</sup>		"arrow"
<i>yùum</i> <sup>mε</sup>	<i>yùma</i> <sup>+</sup>		"year"

The alternation also appears in derivation:

<i>tūuma</i> <sup>+</sup>	"work" noun	<i>tùm</i> <sup>m</sup>	"work" verb
<i>yēóŋ</i>	"one"	<i>yīyŋ</i> <sup>o/</sup>	"single"
<i>kāal</i> <sup>ε/</sup>	"count"	<i>kāl</i> <sup>ε/</sup>	"number"
<i>màal</i> <sup>ε</sup>	"sacrifice" verb	<i>māluŋ</i> <sup>o</sup>	"sacrifice" noun
<i>tūulúg</i> <sup>o</sup>	"hot"	<i>tūl</i> <sup>la/</sup>	"be hot"

Before verb-deriving suffixes the short allomorph always appears:

<i>pìəliɡ</i> <sup>a</sup>	"white"	<i>pèliɡ</i> <sup>ε</sup>	"whiten"
<i>kp̄'orŋ</i> <sup>o</sup>	"strong"	<i>kpè'ŋ</i> <sup>ε</sup>	"strengthen"
<i>lìəb</i> <sup>ε</sup>	"become"	<i>lèbiɡ</i> <sup>ε</sup>	"turn over"
<i>tūulúg</i> <sup>o</sup>	"hot"	<i>tūliɡ</i> <sup>ε/</sup>	"heat"
<i>yāar</i> <sup>ε/</sup>	"scatter"	<i>yādliɡ</i> <sup>ε/</sup>	"scatter"
<i>dēəŋ</i> <sup>a</sup>	"first"	<i>dèŋ</i> <sup>ε</sup>	"go first"
<i>pìəb</i> <sup>ε</sup>	"blow" (flute)	<i>pèbis</i> <sup>ε</sup>	"blow" (wind)
<i>yùul</i> <sup>ε</sup>	"swing" intrans	<i>yùliɡ</i> <sup>ε</sup>	"swing" transitive
cf <i>ēəñb</i> <sup>ε/</sup>	"lay a foundation"		cf Mooré <i>yěbgè id</i>

The only derivational suffix found after a CVVC allomorph is *-l-* in *-lum-* "-ness/-hood" [13.1.2](#):

<i>sáannim</i> <sup>m</sup>	"strangerhood"	(*saanlimmu)
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CVVC roots shorten the vowel if *k t* or *p* results from the combination of the final consonant and a following suffix, but this is a phonological constraint rather than a morphological rule [6.3.3](#).

## 6.2 Consonant changes

The deletion of underlying \**g* after short *a ja ɥa aň jaň ɥaň* and long *aa iə uə aañ eɛñ ɔɔñ* [6.3.1](#) follows the changes described in this section.

### 6.2.1 Consonant clusters and epenthetic vowels

Except between a prefix and a root [6.1](#), adjacent consonants within a word must either assimilate to one of the clusters *kk pp tt ŋŋ mm nn ll mn* or insert an **epenthetic vowel** (ɪ by default); *kk pp tt ŋŋ* are written with single symbols: *k p t ŋ*.

Roots can end only in vowels or in *g d b m n r s l*; stems may also end in consonant clusters or *k t p ŋ*; flexional suffixes begin with vowels or *g d b m r s l f*.

Nasals usually take up the position of articulation of a following consonant, and then homorganic consonants mostly form clusters, with exceptions among alveolars, where changes attested in derivation have apparently been levelled in flexion [6.2.1.1](#).

The treatment of the possible pairs is as follows, with ə representing the insertion of an epenthetic vowel. Suffixes beginning with *l f* do not occur in productive paradigms, so there are gaps in the table.

1 <sup>st</sup> ↓ 2 <sup>nd</sup> →	<i>g</i>	<i>d</i>	<i>b</i>	<i>m</i>	<i>r</i>	<i>s</i>	<i>l</i>	<i>f</i>
<i>g</i>	<i>kk</i>	ə	ə	ə	ə	ə		
<i>d</i>	ə	<i>tt</i>	ə	ə	ə	ə		
<i>b</i>	ə	ə	<i>pp</i>	[ <i>mm</i> ]	ə	ə		
<i>m</i>	<i>ŋŋ</i>	<i>mn</i>	<i>mm</i>	<i>mm</i>	<i>mn</i>	[ <i>ʃs</i> ]	<i>nn</i>	
<i>n</i>	<i>ŋŋ</i>	<i>nn</i>	<i>mm</i>	ə	<i>nn</i>	<i>ʃs</i>	<i>nn</i>	<i>~f</i>
<i>r</i>	ə	ə	ə	ə	<i>r</i>	ə	<i>tt</i>	ə
<i>s</i>	ə	ə	ə	ə	ə	ə		
<i>l</i>	ə	<i>nn</i>	ə	ə	<i>ll</i>	ə	<i>ll</i>	ə

Potential pairs with \**y* as second consonant are an issue only with invariable verbs [11.2](#) and are treated as belonging to derivation rather than flexion [6.2.1.1](#).

The unusual change *ld* → *nn* is carried out completely regularly; Dagbani and Mooré have similar rules.

The forms in square brackets occur only under certain phonological conditions:

*bm* → *mm* only occurs after a short root vowel

*ms* → *ʃs* never occurs after a short root vowel; elsewhere it is optional.

Assimilation and epenthesis occur side by side in many words.

**\*ns**, and **\*ms** when it assimilates, become *s* with nasalisation of a preceding root vowel, and lengthening of a preceding short root vowel:

<i>tēŋ<sup>a</sup></i>	"land"	pl	<i>tēēñs<sup>ε</sup></i>	← <i>*tensi</i>
<i>kòlŋ<sup>a</sup></i>	"door"	pl	<i>kòlɪs<sup>ε</sup></i>	← <i>*kɪlɪnsɪ</i>

Exceptionally, an *epenthetic* vowel becomes long before **\*ns** in

<i>bōtŋ<sup>a</sup></i>	"cup"	pl	<i>bōtɪs<sup>ε</sup></i>
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This reflects a reanalysis of the form as noun prefix *bō* + *tŋ<sup>a</sup>* [2.2](#).

**\*nf** becomes *f* with nasalisation of a preceding root vowel, but there is no lengthening of a short preceding root vowel in the only case which occurs:

<i>nīf<sup>l</sup></i>	"eye"	pl	<i>nīnɪ<sup>+</sup></i>
<i>píŋf<sup>a</sup></i>	"genet"	pl	<i>pīnɪ<sup>+</sup></i>

**\*rr** becomes *r* in e.g.

<i>kòkpà<sup>ε</sup></i>	"palm fruit"	pl	<i>kòkpà<sup>+</sup></i>
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The few stems in *-r* in the *r<sup>ε</sup>|a<sup>+</sup>* class may all be derived from **\*rr** [6.2.1.1](#).

**\*rr** → *r* is an active process in phrase-level sandhi [8.5.1](#).

**\*ss** inserts an epenthetic vowel in

<i>pūsɪg<sup>a/</sup></i>	<i>pūsɪs<sup>ε/</sup></i>	<i>pūs-</i>	"tamarind"
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However, all other examples of *g<sup>a</sup>|s<sup>ε</sup>* plurals ending in *-sɪs<sup>ε</sup>* in my materials are for *\*-sɪnsɪ*, from stems in **\*m**. A plural *\*pūs<sup>ε/</sup>* would have appeared to show no ending in SF; nouns usually avoid such ambiguity by selecting a different flexion [9.1](#), but there is a very strong association of tree names with the *g<sup>a</sup>|s<sup>ε</sup>* class and of their fruits with the *r<sup>ε</sup>|a<sup>+</sup>* and *g<sup>ɔ</sup>|d<sup>ε</sup>* [32.6](#); *pūsá<sup>+</sup>* in fact means "tamarind fruits."

Derivation precedes flexion in cluster development.

Stem-final *kk pp tt ŋŋ* and *nn* (regardless of origin) never assimilate further.

<i>sōnnɪ<sup>ε</sup></i>	<i>sōnna<sup>+</sup></i>	<i>sòn-</i>	"inner <i>zàk</i> wall"
<i>sāngúnnɪ<sup>ε</sup></i>	<i>sāngúnnà<sup>+</sup></i>	<i>sāngún-</i>	"millipede"
<i>vènnɪg<sup>a</sup></i>	<i>vènnɪs<sup>ε</sup></i>	<i>vèn-</i>	"beautiful"
<i>vènnɪ<sup>ε</sup></i>	<i>vènnà<sup>+</sup></i>		

With *-nn-* from *\*nd* [13.1.1.2.1](#):

<i>bùn<sup>ε</sup></i>	"reap"	→	<i>būn-búnnìr<sup>ε</sup></i>	"thing for reaping"
<i>gīlɪg<sup>ε/</sup></i>	"go around"	→	<i>pɥ'à-gīnníg<sup>a</sup></i>	"prostitute"
<i>kēŋ<sup>ε/</sup></i>	"go"	→	<i>bùŋ-kēnnír<sup>ε</sup></i>	"moving donkey"
<i>vōl<sup>ε</sup></i>	"swallow"	→	<i>tì-vōnním<sup>m</sup></i>	"oral medication"

The verbs *tàm<sup>m</sup>* "forget", *zàm<sup>m</sup>* "cheat, betray", *dàm<sup>m</sup>* "shake" and *lèm<sup>m</sup>* "sip, taste" are *-mm-* stems: in KB their ipfvs are always written *tammɪd zammɪd dammɪd lèmmɪd*, and they form 3-mora-stem type gerunds: *tàmmug<sup>ɔ</sup> zàmmug<sup>ɔ</sup> dàmmug<sup>ɔ</sup> lèmmug<sup>ɔ</sup>*. The *mm* is probably from *\*mb*: cf Mooré *zāmbe* "tricher", *rāmbe* "remuer", *lèmbe* "goûter". These verbs assimilate *\*mbm* → *mm* in the imperative [11.1](#). Apart from this, stem-final *-mm-* and *-mn-* never assimilate further:

<i>sūmmɪr<sup>ε</sup></i>	<i>sūmma<sup>+</sup></i>	<i>sùm-</i>	"groundnut"
<i>yīmmír<sup>ε</sup></i>	<i>yīmmá<sup>+</sup></i>	<i>yīm-</i>	"solitary"
			Mooré <i>yémbéré</i> "one"

With *-mm-* *-mn-* clusters from *\*md-* [13.1.1.2.1](#):

<i>kìm<sup>m</sup></i>	"tend flock"	→	<i>kǎŋb-kīm<sup>na</sup></i>	"shepherd"
			<i>kǎŋb-kīmmɪb<sup>a</sup></i> or <i>kǎŋb-kīmnɪb<sup>a</sup></i>	
<i>tùm<sup>m</sup></i>	"work"	→	<i>būn-túmmír<sup>ε</sup></i>	"useful thing"
			<i>tūmmɪr<sup>ε</sup></i> DK WK	"useful"
		pl	<i>tūmna<sup>+</sup></i> DK	
			<i>tūmma<sup>+</sup></i> WK	
<i>tùm<sup>m</sup></i>	"work"	→	<i>tūmmím-tāa<sup>=</sup></i>	"co-worker"

Stems in *// r(r)* completely assimilate the following initial of the noun class suffix *-r<sup>ε</sup>*. This has led to the sg SF forms of agent nouns from invariable verbs in *// r(r)* being taken as due to the attachment of *r<sup>ε</sup>* instead of <sup>a</sup>, along with new LFs and analogical plurals in *-a<sup>+</sup>* [9.3.1.1](#). The sg tones of the deverbal adjective in *kùg-dēl<sup>ε/</sup>* "chair for leaning on" (not *\*kùg-dél<sup>lε</sup>*) are probably analogical.

*Single m n* forms may be followed by unexpected epenthesis as a strategy to avoid ambiguous SFs in imperfectives. The suffix suppletion used for this purpose in nominals is not possible because there is only one regular imperfective suffix.

3-mora *n*-stems always show epenthesis, but this may reflect underlying gemination of the suffix [6.2.1.1](#).

<i>dìgin<sup>ε</sup></i>	<i>dìginɪd<sup>a</sup></i>	<i>dìginɪm<sup>a</sup></i>	"lie down"
<i>dìginɪvɔ<sup>ɔ</sup></i>			gerund
<i>gò'ɔn<sup>ε</sup></i>	<i>gò'ɔnɪd<sup>a</sup></i>	<i>gò'ɔnɪm<sup>a</sup></i>	"extend neck"

Regular 2-mora stems in *n* show assimilation in the ipfv only:

<i>bùn<sup>ε</sup></i>	<i>bùn<sup>na</sup></i>	<i>bùnɪm<sup>a</sup></i>	"reap"
<i>būnɪb<sup>ɔ</sup></i>			gerund

3-mora *m*-stems show epenthesis *optionally*:

<i>t̄ɔm<sup>m/</sup></i>	<i>t̄ɔm<sup>ma</sup></i>	<i>t̄ɔm<sup>ma</sup></i>	"depart"
	or <i>t̄ɔmíd<sup>a</sup></i>		
<i>t̄ɔvɔ<sup>ɔ</sup></i>			gerund
or <i>t̄ɔmúvɔ<sup>ɔ</sup></i>			
<i>kàrum<sup>m</sup></i>	<i>kàrum<sup>m</sup></i>	<i>kàrum<sup>ma</sup></i>	"read"
	or <i>kàrumíd<sup>a</sup></i>		
<i>kàrvɔ<sup>ɔ</sup></i>			gerund
or <i>kàrumvɔ<sup>ɔ</sup></i>			

In a clear demonstration of epenthesis motivated by the avoidance of ambiguity, both WK and DK use assimilated forms only for clause-final LFs and before the focus particle *nē<sup>+/</sup>*, and require forms with epenthesis everywhere else:

<i>Ṁ p̄ kárimmā.</i>	"I'm not reading."
<i>Ṁ kárim nē.</i>	"I'm reading."
<i>Kà bà kárumíd.</i>	"And they were reading."
<i>Kà bà kárim.</i>	only "And they read."

2-mora *m*-stems regularly assimilate in the imperfective:

<i>tùm<sup>m</sup></i>	<i>tùm<sup>ma</sup></i>	<i>tùm<sup>ma</sup></i>	"work"
<i>wùm<sup>m</sup></i>	<i>wùm<sup>ma</sup></i>	<i>wùm<sup>ma</sup></i>	"hear"

Even here, NT/KB may have unassimilated forms to avoid ambiguity:

*Lin wusa ka ya tumid, tumi li ...*

*Lìn wōsa kà yà tùmíd, tūmmī\_∅...*

**DEM.INAN** all and **2PL** do:IPFV, do:IMP **2PL.SUB** ...

"Everything you do, do it..." (Col 3:23, 1996)

*ka nan kpɛn wɔmid ye m bɛɛ li pɔugin nannanna la.*

*kà nán kpɛ̀n wòmɪd yé ò bɛ́ɛ̀ lì pɔ̀ugv-n nānná-nā lā.*

and still still hear:IPFV that 1SG EXIST 3INAN inside:SG-LOC now ART.

"and are still hearing that I am in it now." (Phil 1:30)

Examples of assimilation:

*gg → kk	<i>gìgɪs<sup>ɛ</sup></i>	"dumb people"	sg	<i>gìk<sup>a</sup></i>
cf	<i>kɔ̀lɪs<sup>ɛ</sup></i>	"river"	sg	<i>kɔ̀lɪg<sup>a</sup></i>
*dd → tt	<i>bùd<sup>ɛ</sup></i>	"plant"	ipfv	<i>bùt<sup>a</sup></i>
cf	<i>dōg<sup>ɛ</sup></i>	"cook"	ipfv	<i>dōgvd<sup>a/</sup></i>
*bb → pp	<i>sɔ̀b<sup>ɛ</sup></i>	"write"	ger	<i>sɔ̀p<sup>ɔ/</sup></i>
cf	<i>kpàr<sup>ɛ</sup></i>	"lock"	ger	<i>kpārɪb<sup>ɔ/</sup></i>
*ld → nn	<i>kòlvɔ<sup>ɔ/</sup></i>	"bag"	pl	<i>kòn<sup>nɛ</sup></i>
cf	<i>zūəbúg<sup>ɔ/</sup></i>	"hair"	pl	<i>zūəbíd<sup>ɛ</sup></i>
*mg → ŋŋ	<i>bùmɪs<sup>ɛ</sup></i>	"donkeys"	sg	<i>bùŋ<sup>a</sup></i>
cf	<i>ńwādɪs<sup>ɛ/</sup></i>	"months"	sg	<i>ńwādɪg<sup>a/</sup></i>
*ng → ŋŋ	<i>gbàna<sup>+</sup></i>	"books"	sg	<i>gbàŋ<sup>ɔ/</sup></i>
cf	<i>wābɪd<sup>ɛ/</sup></i>	"elephants"	sg	<i>wābvɔ<sup>ɔ/</sup></i>
*nr → nn	<i>tāna<sup>+</sup></i>	"earths"	sg	<i>tān<sup>nɛ</sup></i>
cf	<i>dìga<sup>+</sup></i>	"dwarfs"	sg	<i>dìgɪr<sup>ɛ</sup></i>
*mr → mn	<i>dūma<sup>+</sup></i>	"knees"	sg	<i>dūm<sup>nɛ</sup></i>
cf	<i>nɔ̀bá<sup>+</sup></i>	"legs"	sg	<i>nɔ̀bìr<sup>ɛ</sup></i>
*lr → ll	<i>gēlá<sup>+</sup></i>	"eggs"	sg	<i>gél<sup>ɛ</sup></i>
cf	<i>kūgá<sup>+</sup></i>	"stones"	sg	<i>kūgvɪr<sup>ɛ/</sup></i>
*nb → mm	<i>sāan<sup>a/</sup></i>	"stranger"	pl	<i>sám<sup>ma</sup></i>
cf	<i>nīd<sup>a/</sup></i>	"person"	pl	<i>nīdɪb<sup>a/</sup></i>
*mb → mm	<i>kìm<sup>m</sup></i>	"tend flock"	ger	<i>kīm<sup>mɔ/</sup></i>
cf	<i>kàd<sup>ɛ</sup></i>	"drive away"	ger	<i>kādɪb<sup>ɔ/</sup></i>

Language names [9.3.4.1](#):

*// → //	<i>Bùl</i> <sup>lɛ</sup>	"Buli"	cf	<i>Bùlɪs</i> <sup>ɛ</sup>	"Bulsa"
	<i>Àgòl</i> <sup>lɛ</sup>	"Agolle Kusaal"	cf	<i>Àgòl</i> <sup>lɛ</sup>	"Agolle area"
*r/ → tt	<i>Bāt</i> <sup>ɛ/</sup>	"Bisa language"	cf	<i>Bāɪs</i> <sup>ɛ/</sup>	"Bisa people"
	<i>Yāt</i> <sup>ɛ/</sup>	"Yarsi language"	cf	<i>Yāɪs</i> <sup>ɛ/</sup>	"Yarsi people"
*m/ → nn	<i>Dàgbān</i> <sup>nɛ/</sup>	"Dagbani"	cf	<i>Dàgbām</i> <sup>ma/</sup>	"Dagomba"
	<i>Yàan</i> <sup>nɛ</sup>	"Yansi language"	cf	<i>Yàamɪs</i> <sup>ɛ</sup>	"Yansi people"
*n/ → nn	<i>Gōrín</i> <sup>nɛ</sup>	"Farefare language"	cf	<i>Gōrɪs</i> <sup>ɛ</sup>	"Farefare people"

Unexpected epenthesis is seen in

<i>Ñwāmpūru</i> <sup>ɛ/</sup>	"Mampruli"	cf	<i>Ñwāmpūɪs</i> <sup>ɛ/</sup>	"Mamprussi"
<i>Kàmbònrɪ</i> <sup>ɛ</sup>	"Twi"	cf	<i>Kàmbòmɪs</i> <sup>ɛ</sup>	"Ashanti"

### 6.2.1.1 Consonant changes in derivation

Stem-internal *single* alveolar consonants sometimes reflect original clusters. Single *-l-* apparently results from *\*dl* in *pìl*<sup>ɛ</sup> "put (hat etc) on someone":

	<i>pìd</i> <sup>ɛ</sup>	"put (hat etc) on"
	<i>pìdɪg</i> <sup>ɛ</sup>	"take (hat etc) off"
	<i>pìl</i> <sup>ɛ</sup>	"put (hat etc) on someone"
	<i>pìlɪg</i> <sup>ɛ</sup>	"take (hat etc) off someone"
cf	<i>yè</i> <sup>+</sup>	"dress oneself"
	<i>yèɛg</i> <sup>ɛ</sup>	"undress oneself"
	<i>yèɛl</i> <sup>ɛ</sup>	"dress another"

Single *-s-* may also represent an earlier cluster in some words. The agent nouns *sòs*<sup>a</sup> "beggar" and *tis*<sup>a</sup> "giver" drop the formant *-d-* in the sg and have Tone Pattern L like 3-mora stems [9.3.1](#). The similar Pattern H verb *gɔ̄s*<sup>ɛ</sup> "look" makes a Pattern HL gerund like *kīr*<sup>ɛ</sup> "hurry" above, as does *sōñs*<sup>ɛ</sup> "converse" [12.1.1.1.1](#).

Single *-n-* after an epenthetic vowel within a stem may represent an original cluster. *Pībin*<sup>nɛ</sup> pl *pībina*<sup>+</sup> "covering" [12.1.2](#) has single *-n-* for my informants, but the corresponding Mooré word has *-nd-*: *pìbìndgà* "couverture." The Mooré equivalent of the assume-stance suffix *-n-* [13.2.1.1](#) is *-nd-*: *zĩ* "être assis", *zĩndi* "s'asseoir"; *gǎe* "être couché", *gǎandè* "se coucher"; *vábè* "être à plat ventre", *vábende* "se mettre à plat

*ventre*"; *tàbe* "être collé aux parois de", *tàbende* "se coller à." A geminate origin for the Kusaal *-n-* may explain the fact that the suffix never assimilates further.

Consonant changes occur in the formation of invariable verbs [11.2](#) before a consonant which appears as *-y-* when not assimilated.

If the verb SF ends in vowel, the LF ends in *-ya*; stem-final root vowels become fronting diphthongs before the *-y-* [6.3.2](#); CVy roots remain CVy before *-a* [6.1.1.1](#):

<i>sō'e<sup>ya</sup>/</i>	"own"	cf <i>sō'ulím<sup>m</sup></i>	"possession"
<i>tōē<sup>a</sup>/</i>	"be bitter"	cf <i>tōcg<sup>ɔ</sup></i>	"bitter"

After stem-final *g b*, an epenthetic vowel is inserted before *-ya*:

<i>dīg<sub>i</sub><sup>ya</sup>/</i>	"be lying down"
<i>vāb<sub>i</sub><sup>ya</sup>/</i>	"be lying prone"

If the SF ends in *l m n r s*, *-a* is added to form the LF, with gemination of *l m n*; tonal evidence shows that *r* was also originally geminated:

<i>dō<sup>la</sup>/</i>	"be with someone in a subordinate rôle"
<i>nēn<sup>na</sup>/</i>	"envy"
<i>mōr<sup>a</sup>/</i>	"have"      cf gerund <i>mōrím<sup>m</sup></i> showing * <i>rr</i>

These forms can all be attributed to a suffix *\*-ya*. Historically, the *\*y* is probably derived from *\*ɣ*, becoming *y* before *a* but *-l-* elsewhere (cf *\*ŋ* [8.2.1.2](#).) In imperfective gerunds of relational verbs [13.1.1.4](#), verbs with SFs ending in vowels show *-l-*, parallel to *-d-* in variable verbs:

<i>sō'e<sup>ya</sup>/</i>	"own"	→	<i>sō'ulím<sup>m</sup></i>
<i>bōōd<sup>a</sup></i>	"like, want"	→	<i>bōōd<sub>i</sub>m<sup>m</sup></i>

Proto-Oti-Volta had palatal *\*c \*ɟ \*ŋ*, which appear in Kusaal as *s z ñy* respectively. Evidence for palatal *\*ɣ* is provided by the Gurma correspondences of Western Oti-Volta *y-*, which may be either *y-* or *l-*; thus with the Moba words

<i>yommg</i>	"slave"	Kusaal: <i>yàmm<sub>i</sub>g<sup>a</sup></i>
<i>yaalim</i>	"salt"	<i>yàar<sub>i</sub>m<sup>m</sup></i>
<i>nlwob</i>	"six"	<i>ñyúèb</i>
<i>nle</i>	"two"	<i>ñyí</i>
<i>lwot</i>	"open"	<i>yō'ōg<sup>ε</sup></i>
<i>lwo</i>	"close"	<i>yō<sup>+</sup></i>



Cf also the ancient loanword *yūgúm*<sup>nɛ</sup> "camel" (Farefare *yúgné*, pl *yugma*, Mooré *yúgémðè*) ultimately from Berber *\*a-ləqəm* (Souag 2016); Koromfe *logomde*. (Many languages have borrowed the word via Hausa *ràakumii* instead.)

If the primary adjective formant *-l-* [13.1.2](#) represents this same *\*ɿ*, it would explain the absence of any adjectival verbs like *\*sābil<sup>a/</sup>*, because *\*sabɿla* would result instead in *\*sābi<sup>ya/</sup>*; Manessy's Dagbani *sabla* "be black" seems to be a ghost form.

No cases of stem-final *d* occur in dynamic-invariable verbs; *\*Vdy* has perhaps become *V'Vy*.

Kusaal *r* is usually shown by toneme patterns to represent an original cluster [7.2.1.1](#), except in the class suffix *-r<sup>ɛ</sup>*. Possibly original single *\*r* was deleted after short root vowels, with glottalisation and lengthening of the vowel, unless it was followed by an affix vowel or by *\*y*, where *\*ry* subsequently gave rise to a new geminate *\*rr*; this would account for the relationships in

<i>gūr<sup>a/</sup></i>	"guard"
<i>gūr'ul<sup>ɛ/</sup></i>	"put on guard"
<i>gūr'us<sup>ɛ/</sup></i>	"take care, watch out"
<i>gūr'ud<sup>a/</sup></i>	agent noun

In derivation, *\*rg* may have become *\*dg*:

<i>gār<sup>a/</sup></i>	DK	"have neck extended"
<i>gārdɪg<sup>ɛ/</sup></i>	DK	"look up, extend neck"
<i>yāar<sup>ɛ/</sup></i>		"scatter"
<i>yārdɪg<sup>ɛ/</sup></i>		"scatter" (for the shortening see <a href="#">6.1.1.2</a> )
(but <i>ɛñrɪg<sup>ɛ</sup></i>		"shift along")

The sequence *-rd-* does occur with agent nouns involving the suffix *-d-* but variant forms suggest that the *-rd-* forms are analogical; agent noun formation is the most regular and flexion-like among derivational processes by suffix [13.1.1](#), and hence the most exposed to analogy:

<i>kpārɪd<sup>a</sup></i>	"lock-er"
<i>gūrɪd<sup>a/</sup></i>	"guard"
<i>gūr'ud<sup>a/</sup></i>	"guard"

The gerund *kīrɪb<sup>ɔ/</sup>* "hurrying" beside *kìkírùg<sup>ɔ</sup>* is probably an analogical formation reflecting the loss of gemination in *\*rr* and subsequent reanalysis of the stem as 2-mora; compare the unexpected gerund *pōñrɪb<sup>ɔ</sup>* from the adjectival verb *pōñr<sup>a</sup>* "be near." Tonemes do not support a geminate origin of *r* in the ethnonyms *Yāris<sup>ɛ/</sup>* *Bāris<sup>ɛ/</sup>* [32.5](#), however.

### 6.3 Vowel changes

The vowel changes described in this section apply before apocope but after consonant cluster assimilation and epenthetic vowel insertion.

#### 6.3.1 Deletion of \*g with vowel fusion

Underlying \*g is deleted after *a ja ɥa aň jaň ɥaň* before any vowel, with fusion resulting in glottalised 2-mora vowel sequences:

*agV	→ a'a	*aňgV	→ aň'a
*jagV	→ ja'a	*jaňgV	→ jaň'a
*ɥagV	→ ɥ'a (word-final ɥ'aa)	*ɥaňgV	→ ɥň'a (word-final ɥň'aa)

This rule applies later than the consonant cluster assimilation \*gg → *kk* 6.2.1; thus e.g.

<i>zàk</i> <sup>a</sup>	"compound"	<i>zàas</i> <sup>ε</sup>	plural	(g <sup>a</sup>  s <sup>ε</sup> class)
<i>lāuk</i> <sup>ɔ</sup>	"item of goods"	<i>lāad</i> <sup>ε</sup>	plural	(g <sup>ɔ</sup>  d <sup>ε</sup> class)
<i>yàk</i> <sup>ε</sup>	"unhang"	<i>yàal</i> <sup>ε</sup>	"hang up"	
<i>ɣjàɥňk</i> <sup>ɔ</sup>	"word"	<i>ɣjàňad</i> <sup>ε</sup>	plural	(g <sup>ɔ</sup>  d <sup>ε</sup> class)
<i>ɣyāk</i> <sup>a</sup>	"female" (adj)	<i>ɣyās</i> <sup>ε</sup>	plural	(g <sup>a</sup>  s <sup>ε</sup> class)
<i>bàk</i> <sup>ɔ</sup>	"pit"	<i>bàad</i> <sup>ε</sup>	plural	(g <sup>ɔ</sup>  d <sup>ε</sup> class)

The outcomes are the same if the vowel after \*g is an affix vowel:

<i>ɣjāň</i> <sup>a</sup>	"speak" pfv	<i>ɣjāňad</i> <sup>a/</sup>	ipfv	
<i>ɣyā</i> <sup>a</sup>	"woman"	<i>ɣyāb</i> <sup>a</sup>	plural	(a b <sup>a</sup> class)

The sole invariable-verb form unexpectedly has a fronting diphthong:

<i>kā</i> <sup>ε+</sup>	"not be" ← *kagi
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The sequences *ja'a ɥ'a jaň'a ɥň'a* contrast with long *i'a u'a iň'a uň'a*, except when shortened by apocope 2.3.2. However, there is no phonetic difference between the *a'a aň'a* arising from \*g deletion and underlying glottalised *a'a aň'a*, as in

<i>dàa</i> <sup>=</sup>	"market"	<i>dàas</i> <sup>ε</sup>	plural	(g <sup>a</sup>  s <sup>ε</sup> class)
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Deletion of \*g after short vowels is recent historically: such stems in the r<sup>ε</sup>|a<sup>+</sup> class may still behave as consonant-final: *bàar*<sup>ε</sup> "idol" (Farefare *bàgrè*), pl *bàa*<sup>+</sup> or *bàda*<sup>+</sup>; a glottalised affix vowel is seen only in *pà*<sup>+</sup> ← \*pag "earlier today"; and LF-final

long vowels can be predicted from the SF everywhere except where *i'a u'a* fall together in apocope with *ja'a v'a* [2.3.2](#). Haaf 1967 has *baga* for *bā'a* "diviner" and *winbagr* for *wīn-bá'àr* "altar", alongside *bab* for the plural *bā'ab<sup>a</sup>* "diviners."

Underlying **\*g is deleted after *aa iə uə aañ ɛɛñ ɔɔñ***, along with their glottalised counterparts, whenever an *affix* vowel *a* or *ɪ* (not an epenthetic vowel or *ʊ*) follows the *\*g*. Vowel fusion then creates three-mora vowel sequences:

<i>*aaga</i>	→ <i>aa</i> <a href="#">8.1</a>	<i>*aagi</i>	→ <i>ae</i>
<i>*iəga</i>	→ <i>iaa</i>	<i>*iəgi</i>	→ <i>iee</i>
<i>*uəga</i>	→ <i>uaa</i>	<i>*uəgi</i>	→ <i>uee</i>

and likewise with the glottalised vowels. (See below for the nasalised equivalents.)

The diphthongs *iaa uaa* arise from deletion of the *\*g* in *g<sup>a</sup>|s<sup>ɛ</sup>* class singulars:

	<i>būvs<sup>a</sup></i>		"goat"	pl <i>būvs<sup>ɛ</sup></i>
but	<i>bāa<sup>=</sup></i>	← <i>*baaga</i>	"dog"	pl <i>bāas<sup>ɛ</sup></i>
	<i>sīa<sup>+</sup></i>	← <i>*siəga</i>	"waist"	pl <i>sīas<sup>ɛ</sup></i>
	<i>sàbùa<sup>+</sup></i>	← <i>*sabuəga</i>	"lover"	pl <i>sàbùəs<sup>ɛ</sup></i>

The diphthongs *ae e ue* appear in variable verbs with stems in *\*Caag \*Ciəg \*Cuəg* and their glottalised counterparts (see below on the nasalised equivalents); compare the forms with the suffix *\*-g-* "become, make" seen in

	<i>kpi'e<sup>+</sup></i>	← <i>*kpi'əgi</i>	"approach"
	<i>kpi'əs<sup>ɛ</sup></i>	← <i>*kpi'əsɪ</i>	"neighbours"
cf	<i>tēbɪg<sup>ɛ/</sup></i>		"get/make heavy"
	<i>tēbɪsɪr<sup>ɛ</sup></i>		"heavy"

Many such "fusion verbs" exist, with perfectives ending *-ae -ie -ue* [11.1](#), e.g.

	<i>pāe<sup>+/</sup></i>	← <i>*paagi</i>	"reach"
	<i>dūe<sup>+/</sup></i>	← <i>*duəgi</i>	"raise, rise"

The LF *ae e ue* reduce to the two-mora diphthongs *ae ie ue* after apocope.

There are no underlying nasalised *iəñ uəñ*; instead *ɛɛñ ɔɔñ* appear [6.1](#). However, *\*g* is deleted after nasal *ɛɛñ ɔɔñ* (unlike their oral equivalents *ɛɛ ɔɔ*) in the same contexts as after *iə uə* (i.e. before an affix vowel *a* or *ɪ*), and the resulting diphthongs coincide in vowel quality with those produced with *iə uə*:

*ããga	→ aañ <a href="#">8.1</a>	*ããgi	→ aeeñ
*ĕĕga	→ iaañ	*ĕĕgi	→ ieeñ
*ṽṽga	→ uaañ	*ṽṽgi	→ ueeñ

and likewise with the corresponding glottalised vowels.

The rule gives rise to alternations in nouns and adjectives in the  $g^a|s^\epsilon$  class between SF-final *iañ uañ* and word-internal *εεñ ɔɔñ* before a consonant:

<i>ziñ'a<sup>+</sup></i>	← *zĕ'ĕga	"red" $g^a s^\epsilon$ class sg
<i>zèñ'εs<sup>ε</sup></i>	← *zĕ'ĕsɪ	"red" $g^a s^\epsilon$ class pl
<i>zèñ'εd<sup>ε</sup></i>	← *zĕ'ĕdɪ	"red" $g^ɔ d^\epsilon$ class pl
<i>dùañ<sup>+</sup></i>	← *dṽṽga	"dawadawa" sg
<i>dòɔñs<sup>ε</sup></i>	← *dṽṽsɪ	"dawadawa" pl
<i>nūa<sup>+/</sup></i>	← *nṽṽga	"hen"
<i>nṽṽs<sup>ε/</sup></i>	← *nṽṽsɪ	"hens"
<i>Mùa<sup>+</sup></i>	← *Mṽṽga	"Mossi person"
<i>Mṽṽs<sup>ε</sup></i>	← *Mṽṽsɪ	"Mossi people"
<i>Mṽṽg<sup>ɔ</sup></i>	← *Mṽṽgɔ	"Mossi country"
<i>Mṽṽl<sup>ε</sup></i>	← *Mṽṽlɪ	"Mooré language"

In derivation the rule causes alternation between fusion verb forms from \*-gi, ending in SF *ieñ ueñ*, and cognate forms with *εεñ ɔɔñ*:

<i>nìe<sup>+</sup></i>	← *nĕĕgi	"appear"
<i>nèeɪ<sup>ε</sup></i>	← *nĕĕlɪ	"reveal"
<i>pūñ'e<sup>+/</sup></i>	← *pṽ'ṽgi	"rot"
<i>pṽñ'ɔɪ<sup>ε/</sup></i>	← *pṽ'ṽlɪ	"cause to rot"
<i>ñyū'e<sup>+/</sup></i>	← *yṽ'ṽgi	"set alight"
<i>ñyṽ'ɔs<sup>ε/</sup></i>	← *yṽ'ṽsɪ	"smoke" (noun)
<i>sūeñ<sup>+/</sup></i>	← *sṽṽgi	"anoint"
<i>sṽñ<sup>+</sup></i>	← *sṽṽ	"rub"
<i>ziñ'a<sup>+</sup></i>	← *zĕ'ĕga	"red" $g^a s^\epsilon$ class sg
<i>zèñ'og<sup>ɔ</sup></i>	← *zĕ'ĕgɔ <a href="#">6.3.2</a>	"red" $g^ɔ d^\epsilon$ class sg

The fronting effect of \*-gi differs from the fronting caused by \*-y- [6.3.2](#):

<i>sūñ'e<sup>+/</sup></i>	← *sṽ'ṽgi	"become better than" WK
<i>sṽñ'e<sup>ya/</sup></i>	← *sṽ'ṽya	"be better than"

When *aa iə uə aañ* precede a \*g which is *not* followed by an affix vowel, they remain unchanged. The only remaining sign of the former presence of \*g is the resulting disturbance of toneme allocation in Tone Pattern H words [7.2.1.1](#).

<i>náaf<sup>p</sup></i>	← * <i>nāágfū</i>	"cow"	pl <i>nīgí<sup>+</sup></i>	cb <i>nā'</i> -
<i>dí'ər<sup>ε</sup></i>	← * <i>dī'əgrī</i>	"receiving"	cf <i>dī'e<sup>+/</sup></i>	"get" ← * <i>dī'əgí</i>
<i>vúər<sup>ε</sup></i>	← * <i>vū'égrī</i>	fruit of <i>vúəŋ<sup>a</sup></i> tree	pl <i>vūáa<sup>=</sup></i>	

Surface *iəñ uəñ* appear in just one context: fusion verbs with nasal vowels introduce *iəñ uəñ* into the imperfective, imperative and gerund forms:

	<i>nèər<sup>ε</sup></i>		"empty" (← "clear")
but	<i>nìər<sup>ε</sup></i>		gerund of <i>nìe<sup>+</sup></i> "appear"
	<i>pǔñ'ɔ<sup>ε/</sup></i>	← * <i>pǔ'ǔlɪ</i>	"cause to rot"
but	<i>púñ'ər<sup>ε</sup></i>		gerund of <i>pūñ'e<sup>+/</sup></i> "rot"
	<i>pūñ'əd<sup>a/</sup></i>		ipfv

This is readily attributable to analogy with verbs with oral vowels:

	<i>pūñ'e<sup>+/</sup></i>	pfv	<i>pūñ'əd<sup>a/</sup></i>	ipfv	<i>púñ'ər<sup>ε</sup></i>	ger	"rot"
cf	<i>dūe<sup>+/</sup></i>	pfv	<i>dūəd<sup>a/</sup></i>	ipfv	<i>dúər<sup>ε</sup></i>	ger	"raise"

However, the gerund vowels are probably original. Imperfectives like *pon'od pǔñ'ɔd* appear in texts, but not \**pon'or* or \**neer* for gerunds like *púñ'ər<sup>ε</sup>* "rotting" or *nìər<sup>ε</sup>* "appearing." Gerunds seem unlikely to be subject to levelling when finite forms are not [7.3](#) and tonal evidence suggests a different analysis.

Fusion verbs show no tonal evidence of a lost mora in the ipfv [7.3.1](#): *pūñ'əd<sup>a/</sup>* not \**púñ'əd<sup>a</sup>* "rot." Comparative evidence and variable-verb irregularities [11.1.1](#) suggest that dropping of derivational suffixes in ipfvs may once have been common. Fusion verbs may preserve this pattern, with \*g never present in the ipfv; forms like *pon'od pǔñ'ɔd<sup>a/</sup>* support this. Gerund *iəñ uəñ* correlate with tones reflecting loss of \*g: *púñ'ər<sup>ε</sup>* "rotting." Historically, \*g-deletion probably followed insertion of an epenthetic vowel between the \*g and a following consonant; absorption of this vowel by the preceding *iəñ uəñ* may have resulted in sequences which were still distinct from other *iəñ uəñ* at the point where those fell together with *εəñ ɔəñ*.

### 6.3.2 Before \*-ya \*-gu \*-kku \*-ηηυ

In the LF, vowels are subject to fronting before *y* and to rounding before a following rounded vowel if a velar intervenes.

The affected second morae are always high [i] [ɪ] [u] or [ʊ].

**Fronting:** short fronting diphthongs result when word-medial *-y-* of a LF would become syllable-closing after a short back vowel as a result of apocope and is instead changed to *ɛ* 2.3:

SF	<i>vōɛ</i>	LF	<i>vōyá</i>	"be alive"
SF	<i>tōɛ</i>	LF	<i>tōyá</i>	"be bitter"
SF	<i>sāɛñ</i>	LF	<i>sāñya</i>	"blacksmith"
SF	<i>sōɛñ</i>	LF	<i>sōñya</i>	"witch"

Before *y*, long vowels undergo fronting of a back second mora to *e* [ɪ]:

SF	<i>sō'e</i>	LF	<i>sō'eyá</i>	"own" <i>sō'e</i> <sup>ya/</sup>
cf	<i>sō'ulím<sup>m</sup></i>			"property"
SF	<i>sōñ'e</i>	LF	<i>sōñ'eyá</i>	"be better than" <i>sōñ'e</i> <sup>ya/</sup>

**Rounding:** short unrounded root vowels become diphthongs in *ɥ* before LF *\*kku* *\*ηηυ*:

<i>gbàɥŋ<sup>ɔ</sup></i>	← <i>*gbaηηυ</i>	"book"	pl <i>gbàna<sup>+</sup></i>
<i>lāɥk<sup>ɔ</sup></i>	← <i>*lakku</i>	"goods item"	pl <i>lā'ad<sup>ɛ</sup></i>
<i>yīɥŋ<sup>ɔ/</sup></i>	← <i>*yιηηυ</i>	"single"	pl <i>yīná<sup>+</sup></i>
<i>sàbùa<sup>+</sup></i>	← <i>*sabuøga</i>	"lover"	pl <i>sàbùø<sup>ɛ</sup></i>

Tense *i* does not become a diphthong in the only case in my materials:

<i>nìn-gbīŋ<sup>ɔ/</sup></i>	"body"	pl <i>nìn-gbīná<sup>+</sup></i>
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The vowel may simply be taken from the alternative singular *nìn-gbīn<sup>ɛ/</sup>*.

Short *ja* becomes the short diphthong *jaɥ*:

<i>bjāɥŋk<sup>ɔ</sup></i>	← <i>*bjākkku</i>	"shoulder"	pl <i>bjāñ'ad<sup>ɛ</sup></i>
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Short *ya* becomes *ɔ*: *\*ɥakkku* → *ɔkku*

<i>bòk<sup>ɔ</sup></i>	← <i>*bɥakkku</i>	"pit"	pl <i>bò'ad<sup>ɛ</sup></i>
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Long vowels undergo rounding of a back second mora before LF *\*gu \*ŋɣu*. The second mora is always high.

	<i>dàad<sup>ε</sup></i>		"logs"
but	<i>dàug<sup>ɔ</sup></i>	← <i>*daagu</i>	"log"
	<i>fěñ'ed<sup>ε/</sup></i>		"ulcers"
but	<i>fěñ'og<sup>ɔ/</sup></i>	← <i>*fě'ěgu</i>	"ulcer"

The second mora of the long vowel *ii* becomes tense *u*, giving *iu*; this contrasts with the second mora of the long vowel *iə*, which becomes [ɔ], giving *io* [iɔ]:

	<i>vīug<sup>ɔ/</sup></i>	← <i>*viigu</i>	"owl"	pl <i>vīid<sup>ε/</sup></i>
but	<i>dàbīog<sup>ɔ</sup></i>	← <i>*dabiəgu</i>	"coward"	pl <i>dàbīəd<sup>ε</sup></i>
	<i>kpī'oj<sup>ɔ</sup></i>	← <i>*kpī'əŋɣu</i>	"strong"	pl <i>kpī'əma<sup>+</sup></i>

A parallel case with *uu/uv* does not occur, because of a rule *\*uəgu → ɔɔgu*:

	<i>Sà'dàbɔɔ<sup>ɔ</sup></i>	← <i>*Sa'dabuəgu</i>	"place of the Sarabose clan"
cf	<i>Sà'dàbùə<sup>ε</sup></i>		"Sarabose clan members"
	<i>lām-fɔɔ<sup>ɔ</sup></i>	← <i>*lam-fuəgu</i>	"toothless"
			( <i>lām<sup>mε/</sup></i> "gum" <i>fùe+</i> "draw out")

The **epenthetic vowel** *i* is rounded to *u* before LF *\*-gu \*-ŋu*:

	<i>āāñdɪg<sup>a</sup></i>	← <i>*āāɪdɪga</i>	"black plum tree"
but	<i>gàadug<sup>ɔ</sup></i>	← <i>*gaadɪgu</i>	"(sur)passing" (gerund)
pl	<i>māluma<sup>+</sup></i>	← <i>*malɪmaa</i>	"sacrifices"
but	<i>māluj<sup>ɔ</sup></i>	← <i>*malɪŋɣu</i>	"sacrifice"

This multiplication of diphthongs and epenthetic vowels might be avoided by ascribing phonemic labialisation to word-final velars and positing abstract word-final /w/ or /j/ segments. However, there is no phonetic basis for such a contrast in velars, and word-final [j] or [w] do not behave as consonants: words like *dāu* "man" are followed by [ʔ] before pause in statements, just like words ending in short vowels [4.2.2](#). It is preferable to make word-internal fronting and rounding rules precede apocope [2.4](#). (Cf "Canadian Raising" in American English dialects which also show neutralisation of *t* and *d* after the vowel, where "writer" contrasts with "rider" in the vowels but with no phonetic contrast in the consonants themselves: Vance 1987.)

### 6.3.3 Length constraints

See also on CVV ~ CVC root alternations [6.1.1.1](#); in particular, note that unglottalised long vowels never occur before *y*.

Word-internally, long vowels are shortened before *k t p*:

<i>gàad</i> <sup>ε</sup>	"pass"	<i>gàt</i> <sup>a</sup>	"pass" ipfv
<i>tēεg</i> <sup>ε/</sup>	"drag" ILK	<i>tēk</i> <sup>ε/</sup>	"pull" (*tεεkkl)

Hausa loanwords show this to be phonological, not morphophonemic:

<i>àtìyuk</i> <sup>ɔ</sup>	"sea"	←	<i>tèeku</i>	"sea"
<i>kótò</i> <sup>+</sup>	"court"	←	<i>kootù</i>	"court" (← English)

3-mora vowel sequences arise by vowel fusion [6.3.1](#) or by liaison before the pronoun <sup>o</sup> [8.2.1](#). They are reduced by apocope to 2-mora diphthongs in the SF. 3-mora diphthongs mostly occur word-finally in LFs, but can appear in SFs:

<i>vūáa</i> <sup>=</sup>	←	* <i>vuεgaa</i>	"fruits of the <i>vúεŋ</i> <sup>a</sup> tree"
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A 3-mora *monophthong* appears with apocope-blocking in *mà'aa* "only" (but LF *mà'anē* [6.4](#)); everywhere else, 3-mora monophthongs reduce to two morae [8.1](#).

Before liaison, word-final 3-mora diphthongs are reduced to two morae and then monophthongised before all consonants except *y* [8.2.1](#).

Short *i u* may appear where long vowels might be expected. *Zūg*<sup>ɔ/</sup> "head" is the sole case where non-glottalised CV~CVV roots show a short allomorph before \*g [6.1.1.1](#) (cf Farefare *zúugó id.*) *Sūñf*<sup>/</sup> "heart" pl *sūñyá*<sup>+</sup> is the only instance of short *uñ* not attributable to apocope [4.2.1](#). *Nīf*<sup>/</sup> "eye" is the only case where \**nC* → *C* after a root vowel which remains short [6.2.1](#). *Bùgúm*<sup>m</sup> "fire" has the tonemes that would be regular for \**bùugúm*<sup>m</sup>. *Dūnīya*<sup>+</sup> "world" corresponds to Hausa *duuniyàa* and *tīlās*<sup>ε</sup> "necessity" to Hausa *tīlàs*. However, long *ii uu* occur in many words, and there seems to be no single regular shortening process involved.



## 6.4 Apocope-blocking

Certain full words have citation forms without apocope. The form is like a LF, without the lowering of postconsonantal final  $i$   $u$  to  $\varepsilon$   $\text{ɔ}$  seen before prosodic clitics. Words with apocope-blocking ending in SF M toneme have LF-final H [7.1](#).

This is a derivational feature seen in many adverbs and quantifiers (including number words), and as a downtoning measure with adjectives [16.11.1.2](#):

<i>bèdvgū</i>	"a lot"	$g^{\text{ɔ}} d^{\varepsilon}$ class sg
<i>sùḡā</i>	"well"	$g^{\text{a}} s^{\varepsilon}$ class sg
<i>yīnní</i>	"one"	$r^{\varepsilon} a^+$ class sg
<i>ànāasí</i>	"four"	$g^{\text{a}} s^{\varepsilon}$ class pl
<i>pāmm</i>	"a lot"	$m^{\text{m}}$ class

A number of nouns ending in  $-i^+$  or  $-u^+$  [9.6](#) also display apocope-blocking.

Words of one underlying mora also do not show apocope, e.g. *yā*<sup>+</sup> "houses", (SF *yā* LF *yáa*) and numerous enclitic particles.

Words with apocope-blocking may display final extra-long simple vowels: *mà'aa* "only." They change final  $-mu$  to  $-mm$ : *pāmm* "a lot."

Apocope-blocked words make secondary LFs before prosodic clitics by prolonging a short final vowel. Compare:

	<i>Lì à nē dɔ̀̀g.</i>	"It's a hut."
	<i>Lì kā' dɔ̀̀gɔ̀.</i>	"It's not a hut."
with	<i>Lì à nē bédvgū.</i>	"It's a lot."
	<i>Lì kā' bédvgúv.</i>	"It's not a lot."

Before prosodic clitics which neutralise preceding length distinctions, the final vowels of such LFs contrast in quality alone with  $\varepsilon$   $\text{ɔ}$  [8.1](#).

Forms not ending in a short vowel add  $-n\varepsilon$  to make the secondary LF:

<i>pāmm</i> SF <i>pāmné</i> LF	"a lot"	<i>mà'aa</i> SF <i>mà'anē</i> LF	"only"
<i>gòllum</i> <sup>nε</sup>	"only"	<i>kòtāa</i> <sup>nε</sup>	"at all"

The LF of *ñyāe*<sup>nε</sup>/ "brightly, clearly" [17.4](#) is *ñyāené* [jãĩnɛ̃].

Cf also *mè* DK KT SB NT *mèn* WK; clause-finally (all sources) *mèn*<sup>ε</sup> "also, too."

## 7 Word tonal structure

### 7.1 Tone Patterns

There are great constraints on the free occurrence of tonemes within words. Nominals show only three basic distinct overall patterns (labelled H, L and O), and verbs only two (H and LO.) Compounds have more tonal possibilities, being *phrases* composed of words with partly independent tones [8.4](#).

The distribution of tonemes on a word, prior to any effects of external tone sandhi or tone overlay, is specified by a **Tone Pattern**.

Regularities in derivation establish that roots themselves have identifiable tone patterns, which may be altered by derivational suffixes.

Synchronically, Tone Patterns are suprasegmental features of word *stems*, allocating tonemes mora-by-mora over the segmental structure of each complete word belonging to a flexional paradigm, with the precise instantiation changing as the segmental form changes. Allocation precedes apocope, and furthermore precedes the application of segmental rules which delete morae (reduction of consonant clusters to single consonants [6.2.1](#) and deletion of \*g [6.3.1](#)) and which disrupt the surface distribution of tonemes [7.2.1.1](#). For example, these two Pattern H nouns show different tonemes in the singular:

<i>sīĩŋʰ</i> <sup>P</sup> / sg	<i>sīĩŋs</i> <sup>ε</sup> / pl	<i>sīĩŋ-</i> cb	"bee"
<i>píĩŋʰ</i>	<i>pīĩní</i> <sup>+</sup>	<i>pīĩn-</i>	"genet"

The difference is due to the fact that "bee" has a 2-mora CVV stem *sīĩŋ-*, whereas "genet" has a 3-mora CVVC stem *pīĩn-*, and in the singular has lost a mora from simplification of the consonant cluster \**nf* to *f*.

A single paradigm only shows more than one Tone Pattern in the case of agent nouns which drop the derivational suffix *-d-* in the sg and cb; as agent nouns of Pattern LO verbs are Pattern O if they contain *-d-* and L otherwise, this produces a tonal alternation:

<i>pò'us</i> <sup>a</sup>	<i>pō'usidɪb</i> <sup>a</sup>	<i>pò'us-</i>	"worshipper"
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Only with 2-mora Pattern H and O stems are the SF tonemes alone insufficient to predict LF-final tonemes:

O	<i>Lì à nē kūk.</i>	"It's a chair."
O	<i>Lì kā' kūka.</i>	"It's not a chair."
H	<i>Lì à nē dūk.</i>	"It's a cooking pot."
H	<i>Lì kā' dūkó.</i>	"It's not a cooking pot."

With SFs like *kōk* "chair" and *dōk* "pot" there are just too few segments for a difference between Patterns H and O to be expressed in the surface form, but the Patterns remain distinguishable in the LF. There are words which show tonal distinctions in the SF which are lost in the LF, like like *náaf* "cow" versus *nú'ùg* "hand", but this is simply due to a late tone realisation rule 5.2. However, if the surface distribution of LF tonemes were adopted as a less abstract substitute for suprasegmental Tone Patterns, the alternation of the all-M sg/pl with the all-L cb in Pattern O 7.2.3 would still need simply to be declared part of the Pattern.

Synchronically, intrinsic LF-final tonemes are underspecified whenever the last stem toneme is L or H. For descriptive convenience, LF-final intrinsic tonemes are taken as

M	after H and L
M	in nouns and verbs of Tone Patterns O/LO whenever the stem is all-M
H	after M in all other cases

Words with apocope-blocking 6.4 with SFs ending in M toneme change to final H in the LF:

SF <i>yā</i>	LF <i>yáa</i>	"houses"	<i>yā</i> <sup>+/</sup>
SF <i>bèdvgū</i>	LF <i>bèdvgúu</i>	"a lot"	<i>bèdvgū</i> <sup>+/</sup>

Superscript notation writes *yā*<sup>+/</sup> *bèdvgū*<sup>+/</sup> by the usual convention 2.3.1. The only exception among free words is *kòbıgā*<sup>=</sup> "one hundred." Three basic Tone Patterns are distinguished in nominals:

Pattern H	initial M or H
Pattern L	initial L
Pattern O	all-M in sg/pl; all-L in cb

All Western Oti-Volta languages for which I have adequate tonal information have analogues of Patterns H, L and O; furthermore, the noun tone patterns of Buli correspond systematically to these, showing respectively H, L and mid tone stems:

<i>nááb</i>	"cow"	cf Kusaal <i>náaf</i> <sup>o</sup>	<i>id</i>
<i>tìib</i>	"tree"	cf Kusaal <i>tıg</i> <sup>a</sup>	<i>id</i>
<i>būūk</i>	"goat"	cf Kusaal <i>būvg</i> <sup>a</sup>	<i>id</i>

In the other Western Oti-Volta languages, Pattern O shows a regular alternation between all-H free forms and all-L cbs; in Buli, between all-mid free forms and all-L cbs, tonally identical to the cbs of the Buli equivalent of Pattern L.

Akanlig-Pare and Kenstowicz 2002 regard Mooré Pattern O stems as intrinsically tonally unmarked, copying the H tone (= Kusaal M) of a flexional suffix but otherwise defaulting to all-L. Olawsky 1999 takes Dagbani Pattern O stems as intrinsically toneless, but he follows Anttila and Bodomo (on Dagaare) in attributing the change to all-H to *stress*. This is not workable in Kusaal 2.2, and even in Dagbani, stressed verb forms often have all-L tonemes. The change to all-M in Pattern O is absent only in cbs and indicative perfectives, correlating with the imposition of L on the final morae of perfectives in liaison 8.2.3 and L spreading after cbs 8.4; this supports the tone-copying mechanism.

However, the addition of a derivational suffix to a Pattern L root or stem may result in a Pattern O stem, and it is difficult to reconcile this with an analysis of Pattern O stems as intrinsically toneless. The appearance of H tonemes on the third morae of Pattern L stems 7.2.2 suggests that such stems may have an underlying non-initial M<sup>4</sup> which becomes L or H or is deleted altogether by internal tone sandhi in the surface form; Pattern O stems would in contrast be intrinsically all-L. This analysis attributes individual underlying tonemes to consonantal derivational suffixes, but this level of abstraction is not necessary for descriptive purposes: Tone Patterns can simply be described in terms of their surface tonemes, with derivational suffixes classified by the Patterns they produce, rather than being assigned tonemes 7.5.

## 7.2 Nominals

Prefixed nominals are tonally distinctive only in that cbs with M prefixes always have H on the root; sg and pl follow normal patterns. L prefixes do not affect stem tonemes at all 7.2.4. Prefixes are ignored in counting stem morae below.

The tones of compounds are determined by external tone sandhi 8.3 8.4.

Noun and adjective examples will be given in the order sg, pl, cb 9.1. The cb cannot occur phrase-finally and is therefore always affected by apocope.

Quantifiers and adverbs have the same segmental and tonal structure as nouns and adjectives, though often with the addition of apocope-blocking 6.4.

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4) Toende Kusaal shows word-internal H after L in words where Agolle does not, such as *zìlím* "langue", Agolle SF *zìlum* versus the variable verb *sìbìg* "punir" (Niggli, "La phonologie du Kusaal" pp 134ff), but this is probably leftward docking of a following H tone left floating by apocope 8.3 rather than a survival of an earlier stem tone pattern; cf SF *bùj* LF *bùjá* "âne", Agolle LF *bùjā*.

### 7.2.1 Pattern H

Regular Pattern H displays H on the first, second or third mora of the LF (disregarding any prefix.) All tonemes before the H are M, and all following the H are L. This H falls on a third mora if it exists and is vocalic; if not, H falls on the second mora, prior to tautosyllabic delinking. Cbs have M tonemes up until any third vocalic mora, which carries H.

<i>vōr</i> <sup>ε/</sup>	<i>vōyá</i> <sup>+</sup>	<i>vōr-</i>	"alive"
<i>yīr</i> <sup>ε/</sup>	<i>yā</i> <sup>+/</sup>	<i>yī-</i>	"house"
<i>fūug</i> <sup>ɔ/</sup>	<i>fūud</i> <sup>ε/</sup>	<i>fū-</i>	"shirt, clothes"
<i>dōk</i> <sup>ɔ/</sup>	<i>dōgud</i> <sup>ε/</sup>	<i>dōg-</i>	"cooking pot"
<i>nīd</i> <sup>a/</sup>	<i>nīdɪb</i> <sup>a/</sup>	<i>nīn-</i>	"person"
<i>nīf</i> <sup>ɔ/</sup>	<i>nīnɪ</i> <sup>+</sup>	<i>nīn-</i> or <i>nīf-</i>	"eye"
<i>kūgur</i> <sup>ε/</sup>	<i>kūgá</i> <sup>+</sup>	<i>kūg-</i>	"stone"
<i>gōt</i> <sup>a/</sup>	<i>gōtɪb</i> <sup>a</sup> /tt/	<i>gōt-</i>	"seer, prophet"
<i>sābɪlíg</i> <sup>a</sup>	<i>sābɪlís</i> <sup>ε</sup>	<i>sābɪl-</i>	"black"
<i>yōgum</i> <sup>mε</sup>	<i>yōgumá</i> <sup>+</sup>	<i>yōgum-</i>	"camel"
<i>sābɪl</i> <sup>l ε</sup>	<i>sābɪlá</i> <sup>+</sup>	<i>sābɪl-</i>	"black"
<i>dīəs</i> <sup>a/</sup>	<i>dīəsɪdɪb</i> <sup>a</sup>	<i>dīəs-</i>	"receiver"
<i>sūguríd</i> <sup>a</sup>	<i>sūgurídɪb</i> <sup>a</sup>	<i>sūguríd-</i>	"forgiver, forbearer"
<i>kō'alíŋ</i> <sup>a</sup>	<i>kō'alís</i> <sup>ε</sup>	<i>kō'alíŋ-</i>	traditional smock

By tautosyllabic delinking, MH on a long vowel becomes single H:

<b>sú'əŋ</b> <sup>a</sup> /ŋŋ/	<i>sū'əmís</i> <sup>ε</sup>	<i>sū'əŋ-</i>	"rabbit"
<i>sāan</i> <sup>a/</sup>	<b>sáam</b> <sup>ma</sup>	<i>sāan-</i>	"stranger, guest"
<b>sáannim</b> <sup>m</sup>			"strangerhood"

Tautosyllabic delinking applies *after* apocope. Where LFs end in long vowels or diphthongs, or in *-mm* (where the second *m* was historically syllabic but is now consonantal) the SF forms are regular, but if the LF final mora would have carried H toneme by the usual rules, the H appears at the beginning of the final *syllable* [5.2](#). Superscript notation still writes the acute tone mark at the end [2.3.1](#):

<i>nūa</i> <sup>+/</sup>	SF <i>nūa</i>	LF <i>nūáa</i>	"hen"
<i>dāam</i> <sup>m/</sup>	SF <i>dāam</i>	LF <i>dáamm</i>	"millet beer"
<i>vōm</i> <sup>m/</sup>	SF <i>vōm</i>	LF <i>vúmm</i>	"life"
<i>tāyũ</i> <sup>+/</sup>	SF <i>tāyũ</i>	LF <i>táyũ</i>	"opposite-sex sibling"

### 7.2.1.1 Tonal effects of deleted morae

Pattern H forms which have lost an underlying mora may display the H toneme shifted to the left of its expected position. There are two groups of such words.

Some words have H on the second mora, when following *-r-* representing *\*-rr-*:

<i>ñyírí<sup>P</sup></i>	<i>ñyírí<sup>+</sup></i>		"egusi seed"
<i>tīntōñríg<sup>a</sup></i> <a href="#">7.2.4</a>	<i>tīntōñrís<sup>ε</sup></i>	<i>tīntōñr-</i>	"mole" (animal)

Many words have a long root vowel followed by a mora which has been deleted either by reduction of a consonant cluster to a single consonant by assimilation [6.2.1](#) or by deletion of *\*g* when no affix vowel follows [6.3.1](#). Tautosyllabic delinking [5.2](#) then always results in one H toneme applying to both morae of the long vowel.

<i>nís<sup>ε</sup></i>	← <i>*nī́nsī</i>	(beside <i>nīmís<sup>ε</sup></i> )	"birds" (sg <i>níj<sup>a</sup></i> /ŋŋ/)
<i>píñ<sup>P</sup></i>	← <i>*pī́nfū</i>	(cf pl <i>pī́n<sup>+</sup></i> )	"genet"
<i>náaf<sup>P</sup></i>	← <i>*nā́gfū</i>	(cf pl <i>nī́g<sup>+</sup></i> )	"cow"
<i>wáaf<sup>P</sup></i>	← <i>*wā́gfū</i>	(cf pl <i>wī́g<sup>+</sup></i> )	"snake"
<i>yáab<sup>a</sup></i>	← <i>*yā́gbā</i>		"grandparent"
<i>vúer<sup>ε</sup></i>	← <i>*vū́grī</i>		fruit of the <i>vúerj<sup>a</sup></i> tree

Here belong all regular gerunds in *-r<sup>ε</sup>* formed from Pattern H fusion verbs [11.1](#) which have phonologically-deleted *\*g* in the perfective:

	<i>náar<sup>ε</sup></i>	← <i>*nā́grī</i>	"end"
from	<i>nāe<sup>+/</sup></i>	← <i>*nā́gí</i>	"finish"
	<i>dí'ar<sup>ε</sup></i>	← <i>*dī́'grī</i>	"receiving"
from	<i>dī'e<sup>+/</sup></i>	← <i>*dī́'gí</i>	"get"
	<i>púñ'er<sup>ε</sup></i>	← <i>*pū́'ǵgrī</i>	"rotting"
from	<i>pūñ'e<sup>+/</sup></i>	← <i>*pū́'ǵgí</i>	"rot"

Fusion verbs show evidence of *\*g* only in perfectives and gerunds; in imperfectives and in derived agent nouns *\*g* is absent:

<i>nāad<sup>a/</sup></i>	"finish" ipfv
<i>nāad<sup>a/</sup></i>	"finisher"

### 7.2.1.2 Subpattern HL

Subpattern HL represents stems with intrinsic initial ML. Few words belong here, but several are very common. Sg/pl forms with consonant-initial flexions show root-initial H falling on a *short* vowel, or on a long vowel with L on the second mora in the SF; otherwise Subpattern HL coincides with regular Pattern H.

<i>nú'ùg</i> <sup>ɔ</sup>	<i>nú'ùs</i> <sup>ɛ</sup>	<i>nū'</i> -	"hand, arm"
<i>à-gáàǹg</i> <sup>ɔ</sup>	<i>à-gáàǹd</i> <sup>ɛ</sup>	<i>à-gāñ</i> -	"pied crow"
<i>nóbìr</i> <sup>ɛ</sup>	<i>nōbá</i> <sup>+</sup>	<i>nōb</i> -	"foot, leg"
<i>gél</i> <sup>lɛ</sup>	<i>gēlá</i> <sup>+</sup>	<i>gēl</i> -	"egg"
<i>gbéèǹm</i> <sup>m</sup>	no pl	<i>gbēñ</i> -	"sleep"
<i>kísùg</i> <sup>ɔ</sup>	<i>kīsá</i> <sup>+</sup>	<i>kīs</i> -	"hateful, taboo" (adj)
<i>áñsìb</i> <sup>a</sup>	<i>āñs-nám</i> <sup>a</sup>	<i>āñs</i> -	"mother's brother"

Here belong the irregularly formed gerunds

<i>sóñsìg</i> <sup>a</sup>	"conversing"
<i>gósìg</i> <sup>a</sup>	"looking"
<i>kìkírùg</i> <sup>ɔ</sup>	"hurrying" (L prefix)

Olawsky treats words like Dagbani *gállì* "egg" (Kusaal *gél*<sup>lɛ</sup>) as regular Pattern H, and the equivalent of Kusaal 2-mora Pattern H stems as a separate tone class.

Several HL words have probably lost a stem mora historically: *-s-* *-r-* can represent older *-ss-* *-rr-* 6.2.1.1, and cf Mooré *gǎoobgó* "pied crow." *Nú'ùg*<sup>ɔ</sup> "hand" has <sup>ɔ</sup>|<sup>ɛ</sup> class cognates in Nawdm *nú?ú* pl *ní?í* and Gurmanche *nùu* pl *nii*; Kusaal has probably added further class suffixes to the original sg/pl forms.

### 7.2.2 Pattern L

Pattern L comprises all nouns and adjectives beginning with L in sg/pl. All tonemes are L, except on third or fourth morae when followed by stem-internal *\*-m-* (including cases where *\*-mg-* has assimilated to *-ŋ-*), which carry H.

<i>sù'ug</i> <sup>a</sup>	<i>sù'us</i> <sup>ɛ</sup>	<i>sù'</i> -	"knife"
<i>zàk</i> <sup>a</sup>	<i>zà'as</i> <sup>ɛ</sup>	<i>zà'</i> -	"dwelling-compound"
<i>dìgir</i> <sup>ɛ</sup>	<i>dìga</i> <sup>+</sup>	<i>dìg</i> -	"dwarf"
<i>mòli</i> <sup>ɔ</sup>	<i>mòli</i> <sup>+</sup>	<i>mòl</i> -	"gazelle"
<i>kù'əm</i> <sup>m</sup>	no pl	<i>kɥ'à</i> -	"water"
<i>mà</i> <sup>+</sup>	<i>mà nám</i> <sup>a</sup>	<i>mà</i> -	"mother"
<i>mèεŋ</i> <sup>a</sup>	<i>mèεmɪs</i> <sup>ɛ</sup>	<i>mèεŋ</i> -	"turtle"
<i>pùgvɔɔb</i> <sup>a</sup>	<i>pùgvɔɔ-nàm</i> <sup>a</sup>	<i>pùgvɔɔ</i> -	"father's sister"

<i>sàam</i> <sup>ma</sup>	<i>sàam-nàm</i> <sup>a</sup>	<i>sàam-</i>	"father"
<i>dìam</i> <sup>ma</sup>	<i>dìam-nàm</i> <sup>a</sup>	<i>dìam-</i>	"man's parent-in-law"
<i>àñruŋ</i> <sup>ɔ</sup>	<i>àñrɪma</i> <sup>+</sup>	<i>àñruŋ-</i>	"boat"
<i>kàruŋ</i> <sup>ɔ</sup> or <i>kàrɪmυg</i> <sup>ɔ</sup>			"reading" (gerund)
<i>zùluŋ</i> <sup>ɔ</sup>	<i>zùlɪma</i> <sup>+</sup>	<i>zùluŋ-</i>	"deep"
<i>yàluŋ</i> <sup>ɔ</sup>	<i>yàlɪma</i> <sup>+</sup>	<i>yàluŋ-</i>	"wide"
<i>zìlɪm</i> <sup>mɛ</sup>	<i>zìlɪma</i> <sup>+</sup>	<i>zìlɪm-</i>	"tongue"
<i>sàal</i> <sup>a</sup> (cf <a href="#">7.3</a> )	<i>sàalɪb</i> <sup>a</sup>	<i>sàal-</i>	"human"
<i>nòŋɪd</i> <sup>a</sup>			"lover"
<i>siilɪŋ</i> <sup>a</sup>	<i>siilɪmìs</i> <sup>ɛ</sup>		
	<i>siilís</i> <sup>ɛ</sup>		
	<i>siilɪmà</i> <sup>+</sup>	<i>siilɪŋ-</i>	"proverb"
<i>zàaňsúŋ</i> <sup>ɔ</sup>	<i>zàaňsɪmà</i> <sup>+</sup>	<i>zàaňsúŋ-</i>	"dream"
<i>nòŋɪlɪm</i> <sup>m</sup>		<i>nòŋɪlɪm-</i>	"love"
<i>nòŋɪdɪm-tāa</i> <sup>=</sup>	<a href="#">13.1.1.4</a>		"fellow lover" WK
<i>sòŋɪdɪm-tāa</i> <sup>=</sup>			"fellow-helper"
<i>dàalɪm</i> <sup>m</sup>	<i>dàalɪmìs</i> <sup>ɛ</sup>	<i>dàalɪm-</i>	"male sex organs"
<i>pù'alɪm</i> <sup>m</sup>	<i>pù'alɪmìs</i> <sup>ɛ</sup>	<i>pù'alɪm-</i>	"female sex organs"
<i>bì'isɪm</i> <sup>m</sup>			"milk"

Nouns which are not *m*-stems do not show H before the class suffix *m*<sup>m</sup>:

<i>bòɔdɪm</i> <sup>m</sup>	no pl	<i>bòɔdɪm-</i> <a href="#">9.2.2</a>	"will"
<i>zòtɪm</i> <sup>m</sup>	no pl		"fear"
<i>dàalɪm</i> <sup>m</sup>	no pl		"maleness"
<i>pù'alɪm</i> <sup>m</sup>	no pl		"femininity"

Tonally exceptional in showing H before stem *m* on the *second* mora is

<i>bùgúm</i> <sup>m</sup>	no pl	<i>bùgúm-</i> or <i>bùgūm-</i>	"fire"
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These forms in *-mís*<sup>ɛ</sup> perhaps derive from *\*-mɪmsɪ*:

no sg	<i>tàdɪmís</i> <sup>ɛ</sup>	"weakness"
no sg	<i>bùdɪmís</i> <sup>ɛ</sup>	"confusion"



### 7.2.3 Pattern O

Pattern O shows M throughout in sg/pl forms and L throughout in the cb.

<i>būvg<sup>a</sup></i>	<i>būvs<sup>ε</sup></i>	<i>bù-</i>	"goat"
<i>tān<sup>nε</sup></i>	<i>tāna<sup>+</sup></i>	<i>tàn-</i>	"earth"
<i>sīd<sup>a</sup></i>	<i>sīdɪb<sup>a</sup></i>	<i>sìd-</i>	"husband"
<i>pū'ā<sup>a</sup></i>	<i>pū'ab<sup>a</sup></i>	<i>pū'à-</i>	"woman, wife"
<i>sā'ab<sup>ɔ</sup></i>	no pl	<i>sà'-</i>	"millet porridge"
<i>gbīgim<sup>nε</sup></i>	<i>gbīgima<sup>+</sup></i>	<i>gbìgim-</i>	"lion"
<i>ñwāaŋ<sup>a</sup></i>	<i>ñwāamɪs<sup>ε</sup></i>	<i>ñwàaŋ-</i>	"monkey"
<i>mēēd<sup>a</sup></i>	<i>mēēdɪb<sup>a</sup></i>	<i>mèēd-</i>	"builder"
<i>sĵākɪd<sup>a</sup></i>	<i>sĵākɪdɪb<sup>a</sup></i>	<i>sĵàkɪd-</i>	"believer"
<i>būtɪŋ<sup>a</sup></i>	<i>būtɪs<sup>ε</sup></i>	<i>bùtɪŋ-</i>	"cup"
<i>mēēdɪŋ<sup>a</sup></i>	<i>mēēdɪs<sup>ε</sup></i>	<i>mèēdɪŋ-</i>	"building tool"

Agent nouns of the types which have *-d-* only in the plural when derived from from Pattern LO verbs are tonally heteroclite, consistently showing Pattern L sg and Pattern O pl (the cb would have had L tonemes in either case) [7.5](#):

<i>pù'us<sup>a</sup></i>	<i>pū'usɪdɪb<sup>a</sup></i>	<i>pù'us-</i>	"worshipper"
<i>kùəs<sup>a</sup></i>	<i>kūəsɪdɪb<sup>a</sup></i>	<i>kùəs-</i>	"seller"

Pattern O nouns and adjectives are all either root-stems or stems in *m n* or *d* (including stems where the *d* has been assimilated into a consonant cluster or *t*); however, all three suffixes are also seen in Pattern L words.

The word *gīŋɪlɪm<sup>m</sup>* "shortness" is derived from the Pattern O adjective *gīŋ<sup>a</sup>* "short"; it is the only potential five-mora-stem Pattern O word in my data, so this may be the regular toneme assignment in such cases. Cf however *gīñlɪm<sup>m</sup> id.*

Pattern O all-M LFs become all-L at the end of questions [8.1](#):

*Lì kā' gbìgìmmεε?* "Isn't it a lion?"

Certain Pattern O words show **LF-final H** instead of the expected M toneme before prosodic clitics, but not before liaison words. For WK this occurs when the LF has > 3 *vocalic* morae and ends in *-VCV*, where *C* is a *single* consonant (i.e. not *ŋ*):

<i>yūgvɔɔr<sup>ε/</sup></i>	<i>yūgvda<sup>+</sup></i>	<i>yùgvɔ-</i>	"hedgehog"
<i>ñwāaŋ<sup>a</sup></i>	<i>ñwāamɪs<sup>ε/</sup></i>	<i>ñwàaŋ-</i>	"monkey"
<i>bāŋɪd<sup>a</sup></i>	<i>bāŋɪdɪb<sup>a/</sup></i>	<i>bàŋɪd-</i>	"wise man"
<i>kpārɪdɪŋ<sup>a</sup></i>	<i>kpārɪdɪs<sup>ε/</sup></i>	<i>kpàrɪdɪŋ-</i>	"thing for locking"

It also occurs with LFs with three vocalic morae ending in *-mmV*, and with LFs of two vocalic morae ending in *-mm* (which is derived historically from *\*-mmu*):

<i>gbīgim</i> <sup>mε/</sup>	<i>gbīgima</i> <sup>+</sup>	<i>gbìgim-</i>	"lion"
<i>zōom</i> <sup>mε/</sup>	<i>zōoma</i> <sup>+</sup>	<i>zòom-</i>	"fugitive"
<i>tādım</i> <sup>m/</sup>	<i>tādımıs</i> <sup>ε/</sup>	<i>tàdım-</i>	"weak person"

For some speakers, words of this type also have alternative forms with the final H in questions, alongside those displaying the usual change to all-L:

<i>Lì à nē gbīgımmées?</i>	"Is it a lion?" WK only; rejected by DK
<i>Lì à nē gbígımmεε?</i>	"Is it a lion?" both WK and DK

#### 7.2.4 Noun prefixes

On noun prefixes generally see [14](#). Tonally they are either M or L. L noun prefixes do not affect the rest of the tone pattern of the prefixed word:

H	<i>dàyūug</i> <sup>ɔ/</sup>	<i>dàyūud</i> <sup>ε/</sup>	<i>dàyū-</i>	"rat"
HL	<i>Bùsáj</i> <sup>a</sup>	<i>Bùsáàñs</i> <sup>ε</sup>	<i>Bùsāj-</i>	"Bisa person"
L	<i>kùkpàrig</i> <sup>a</sup>	<i>kùkpàris</i> <sup>ε</sup>	<i>kùkpàr-</i>	"palm tree"
O	<i>dàkīg</i> <sup>a</sup>	<i>dàkīs</i> <sup>ε</sup>	<i>dàkì-</i>	"sib-in-law via wife"

M toneme noun prefixes do not affect the tone of the remaining stem in the sg or pl, but the cb always has a H toneme after the prefix:

H	<i>zīnzāuḡ</i> <sup>ɔ/</sup>	<i>zīnzāná</i> <sup>+</sup>	<i>zīnzáuḡ-</i>	"bat"
H	<i>Ñwāmpūrıg</i> <sup>a/</sup>	<i>Ñwāmpūris</i> <sup>ε/</sup>	<i>Ñwāmpúr-</i>	"Mamprussi person"
H	<i>gūmpūzēr</i> <sup>ε/</sup>	<i>gūmpūzēyá</i> <sup>+</sup>	<i>gūmpūzér-</i>	"duck"
H	<i>tīntōñríg</i> <sup>a</sup>	<i>tīntōñris</i> <sup>ε</sup>	<i>tīntóñr-</i>	"mole" <a href="#">7.2.1.1</a>
H	<i>pīpīrig</i> <sup>a/</sup>	<i>pīpīris</i> <sup>ε/</sup>	<i>pīpír-</i>	"desert"
H	<i>bālērıg</i> <sup>ɔ/</sup>	<i>bālērıd</i> <sup>ε/</sup>	<i>bālér-</i>	"ugly person"
O	<i>fūfūm</i> <sup>mε</sup>	<i>fūfūma</i> <sup>+</sup>	<i>fūfúm-</i>	"envy; sty in the eye"
L	<i>sāmán</i> <sup>nε</sup>	<i>sāmánà</i> <sup>+</sup>	<i>sāmán-</i>	"courtyard"

One or two compounds behave tonally as if the first element were a prefix, with neutralisation of stem tonemes in the cb alone. All examples found involve cbs as premodifiers rather than heads, with cbs originally of the form CV-:

O	<i>zūg-kōgvr<sup>ε/</sup></i>	<i>zūg-kōga<sup>+</sup></i>	<i>zūg-kúg-</i>	"pillow" <a href="#">9.2.2</a>
O	<i>kā-wēnnir<sup>ε/</sup></i>	<i>kā-wēnna<sup>+</sup></i>	<i>kā-wén-</i>	"corn"
H	<i>pōkpāad<sup>a/</sup></i>	<i>pōkpāadíb<sup>a</sup></i>	<i>pōkpá-</i>	"farmer" <a href="#">14.1.4</a>

### 7.3 Verbs

Variable and dynamic-invariable verbs show just two Tone Patterns:

Pattern H	initial M or H
Pattern LO	L throughout in the indicative and imperative moods M throughout in the irrealis mood

Variable verbs have three finite forms [11.1](#). The *-m<sup>a</sup>* imperative is found only (and always) with tone overlay [19.6.1.1](#) so it is unnecessary to treat it further here; perfective and imperfective forms will be cited in that order. Dynamic-invariable verbs have a single finite form which behaves tonally like the ipfv of a variable verb.

The Tone Patterns of all regular deverbal nominals are predictable [7.5](#).

Variable verbs show levelling of variant subpatterns in Pattern H and conflation of Patterns O and L. This was probably driven by regular falling together of the tone patterns in perfectives, resulting from the inhibition there of the usual Pattern O change to all-M tonemes [7.1](#) and the loss of differing final tonemes in SFs. This would create analogical pressure to level gerund tones. Tonally anomalous 2-mora stem gerunds survive with Subpattern HL and with Pattern L [12.1.1.1.1](#), testifying to a once more complicated picture: segmental and tonal levelling correlate in the two gerunds of *kīr<sup>ε</sup>* "hurry, tremble": *kīkírùg<sup>ɔ</sup>* and *kīrīb<sup>ɔ/</sup>*.

Pattern LO *dynamic* imperfectives have all-L stem tonemes. They do not become all-M, unlike Pattern O nominal singulars and plurals [7.2.3](#), because the flexions *-d<sup>a</sup>* and *-y<sup>a</sup>* are historically the result of adding <sup>a</sup> to stems with *derivational -d-* or *-y-* Pattern-L-deriving suffixes [7.5](#); compare Pattern L nouns with the class suffix <sup>a</sup> like *sàa/<sup>a</sup>* "human being" [7.2.2](#). Patterns O and L in dynamic imperfectives thus fall together; significantly, the Patterns remain distinct in *stative* verbs [7.3.3](#).

The different tonemes of 4-mora stem Pattern LO pfvs like *zàańsim<sup>m</sup>* and ipfvs like *zàańsim<sup>ma</sup>* "dream" from Pattern L nouns like *zàańsúg<sup>ɔ</sup>* "dream" cb *zàańsúg-* must be attributed to levelling of the verbal forms on the analogy of 2- and 3-mora Pattern LO stems.

Irrealis mood triggers O Raising in perfectives, probably because the final mora does not then have an imposed L toneme [8.2.3](#). By analogy, the much less common irrealis forms of Pattern LO dynamic imperfectives and Pattern L stative verbs also change all L tonemes to M.

### 7.3.1 Pattern H

Pattern H resembles Pattern H in nominals. Again, it allocates H to one of the first three morae, with all preceding tonemes M and all following tonemes L. The H is placed on a third mora if it exists and is vocalic, and otherwise on the second, prior to tautosyllabic delinking [5.2](#); however, 2-mora perfectives carry MM. The form before interrogative clitics confirms the pattern, because it becomes LL like all other all-M sequences in this context:

<i>Ò p̄ ḡsɛ.</i>	"She didn't look"
<i>Ò p̄ ḡsɛɛ?</i>	"Didn't she look?"
<i>Ò p̄ d̄ɔgɛ.</i>	"She didn't cook."
<i>Ò p̄ d̄ɔgɛɛ?</i>	"Didn't she cook?"

The final mora carries H before liaison words, probably from the same imposition of underlying L as in Pattern LO verbs [8.2.3](#):

<i>Kà ò d̄ɔgí lī</i>	"And she cooked it."
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Unlike nouns, verbs show no anomalous patterns due to mora deletion (see on fusion verbs below), and no Subpattern HL.

Examples for Pattern H:

<i>ñyē<sup>+</sup></i>	<i>ñyēt<sup>a</sup>/</i>	"see"
<i>kū<sup>+</sup></i>	<i>kūvd<sup>a</sup>/</i>	"kill"
<i>dōg<sup>ɛ</sup></i>	<i>dōgvd<sup>a</sup>/</i>	"cook"
<i>p̄jāñ<sup>'a</sup></i>	<i>p̄jāñ'ad<sup>a</sup>/</i>	"speak", "praise"
<i>kū<sup>ɛ</sup></i>	<i>kūn<sup>na</sup>/</i>	"go home"
<i>yādıg<sup>ɛ</sup>/</i>	<i>yādıgíd<sup>a</sup></i>	"scatter"
<i>m̄ɔɔ<sup>ɛ</sup>/</i>	<i>m̄ɔɔn<sup>na</sup></i>	"proclaim"
<i>dīgı<sup>ɛ</sup>/</i>	<i>dīgín<sup>na</sup></i>	"lay down"
<i>n̄ɔk<sup>ɛ</sup> /kk/</i>	<i>n̄ɔkíd<sup>a</sup> /kk/</i>	"take"
<i>lāñím<sup>m</sup> /ŋŋ/</i>	<i>lāñím<sup>ma</sup> /ŋŋ/</i>	"wander searching"
	<i>dīgı<sup>ya</sup>/</i>	"be lying down"
	<i>t̄ı<sup>ya</sup>/</i>	"be leaning" (objects)
	<i>zāñ<sup>la</sup>/</i>	"be holding"
	<i>ḡɔ<sup>la</sup>/</i>	"have neck extended"

As with nominals [7.2.1](#), Tautosyllabic delinking results in MH on a long vowel becoming single H; again, as it applies after apocope, LFs ending in long vowels or diphthongs or *-mm* correspond to regular SFs, but where the LF final mora would have carried H toneme by the usual rules, the H appears at the beginning of the final syllable [5.2](#), with superscript notation writing the acute tone mark at the end [2.3.1](#):

*tōɔm*<sup>m/</sup>                      *tōɔm*<sup>ma</sup> or *tōɔm*<sup>íd</sup><sup>a</sup>                      "disappear"  
SF *tōɔm* LF *tōɔmm*

*pāe*<sup>+/</sup>    "reach"  
SF *pāe* LF *pāée*

Fusion verbs show no sign of \*g in the imperfective tonally:

<i>pāe</i> <sup>+/</sup>	<i>pāad</i> <sup>a/</sup>	not * <i>páad</i> <sup>a</sup>	"reach"
<i>dīe</i> <sup>+/</sup>	<i>dīəd</i> <sup>a/</sup>	not * <i>díəd</i> <sup>a</sup>	"get"
<i>pūñ'e</i> <sup>+/</sup>	<i>pūñ'əd</i> <sup>a/</sup>	not * <i>púñ'əd</i> <sup>a</sup>	"rot" WK

Contrast the corresponding gerunds in *-r*<sup>ε</sup>: *páar*<sup>ε</sup> *díər*<sup>ε</sup> *púñ'ər*<sup>ε</sup>.

### 7.3.2 Pattern LO

All stem tonemes are L in the indicative and imperative, and M in the irrealis.

<i>bùd</i> <sup>ε</sup>	<i>bùt</i> <sup>a</sup>	"plant"
<i>dì</i> <sup>+</sup>	<i>dít</i> <sup>a</sup>	"eat"
<i>mè</i> <sup>+</sup>	<i>mèəd</i> <sup>a</sup>	"build"
<i>zàb</i> <sup>ε</sup>	<i>zàbíd</i> <sup>a</sup>	"fight, hurt"
<i>bùø</i> <sup>ε</sup>	<i>bùøn</i> <sup>na</sup>	"call"
<i>bòdɪg</i> <sup>ε</sup>	<i>bòdɪgíd</i> <sup>a</sup>	"get lost, lose"
<i>nìj</i> <sup>ε</sup>	<i>nìjíd</i> <sup>a</sup>	"do"
<i>màa</i> <sup>ε</sup>	<i>màan</i> <sup>na</sup>	"sacrifice"
<i>dìgɪn</i> <sup>ε</sup>	<i>dìgɪníd</i> <sup>a</sup>	"lie down"
<i>wàŋɪm</i> <sup>m</sup>	<i>wàŋɪm</i> <sup>ma</sup>	"waste away"
<i>sìilm</i> <sup>m</sup>	<i>sìilm</i> <sup>ma</sup>	"cite proverbs"
<i>zàaŋsɪm</i> <sup>m</sup>	<i>zàaŋsɪm</i> <sup>ma</sup>	"dream"
	<i>zìñ'i</i> <sup>ya</sup>	"be sitting down"
	<i>tàbɪ</i> <sup>ya</sup>	"be stuck to"
	<i>tèñ</i> <sup>a</sup>	"remember"

In the irrealis, as with nominal Pattern O, the last toneme of the LF is M:

	<i>Ò nà b̄dɪg.</i>	"He'll get lost."
	<i>Ò kù zābɛ.</i>	"She won't fight."
	<i>Ò kù b̄dɪgɛ.</i>	"He won't get lost."
	<i>Ò kù b̄dɪgɪdɑ.</i>	"She won't be getting lost."
	<i>Ò kù b̄uənnɑ.</i>	"She won't be calling."
	<i>Ò nà b̄dɪgɪ m.</i>	"He will lose me."
	<i>Ò kù b̄dɪgɪ má.</i>	"He will not lose me."
	<i>Ò nà b̄dɪgɪ bá.</i>	"She will lose them."
	<i>Ò kù b̄dɪgɪ báɑ.</i>	"She won't lose them."
	<i>Ò kù b̄dɪgɪdɪ má.</i>	"He won't be losing me."
	<i>Ò kù zābɪdɪ má.</i>	"He won't be fighting me."
	<i>Ò kù zābɪdɪné.</i>	"He wouldn't have been fighting."
	<i>Ò kù s̄ilɪmm.</i>	"She won't cite proverbs" WK
but	<i>Ò kù lāŋɪmm.</i>	"She won't wander about searching ( <i>lāŋɪm<sup>m</sup></i> )."

Such forms are always followed by M spreading:

	<i>Ò nà zāb ná'àb lā.</i>	"He'll fight the chief."
	<i>Ò nà ḡs ná'àb lā.</i>	"He'll look at the chief."

The LF with the enclitic pronoun <sup>o</sup> can here show either M or H (all WK):

	<i>Ò kù zāb·ó-o.</i>	"He won't fight him."
or	<i>Ò kù zāb·o-o.</i>	"He won't fight him."
	<i>Ò kù kād·ó-o.</i>	"He won't drive him away."
or	<i>Ò kù kād·o-o.</i>	"He won't drive him away."

In questions, clause-final M...M become L...L just as with Pattern O nominals:

<i>Ì ná b̄dɪgɛɛ?</i>	"Will I get lost?"
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### 7.3.3 Stative verbs

Because their stems do not contain a Pattern-L-deriving suffix before the <sup>a</sup> flexion, stative verbs maintain distinct Patterns O and L. Where consonant gemination occurs before <sup>a</sup>, it is either part of an adjectival stem or due to analogy (so with all *m*-stems for WK [11.2](#).) Adjectives correspond to adjectival verbs with the same surface SF tones as the sg/pl of the adjective, HL being conflated with H:

H	<i>wōk</i> <sup>ɔ/</sup>	"long, tall"	<i>wā'am</i> <sup>ma/</sup>	"be long, tall"
	<i>bōgusír</i> <sup>ε</sup>	"soft"	<i>bōgus</i> <sup>a/</sup>	"be soft"
	<i>vūr</i> <sup>ε/</sup>	"alive"	<i>vūḡ</i> <sup>a/</sup>	"be alive"
	<i>zēm̄múg</i> <sup>ɔ</sup>	"equal"	<i>zēm</i> <sup>ma/</sup>	"be equal"
	<i>kísùg</i> <sup>ɔ</sup>	"hateful, taboo"	<i>kīs</i> <sup>a/</sup>	"hate"
L	<i>vènniḡ</i> <sup>a</sup>	"beautiful"	<i>vèn</i> <sup>na</sup>	"be beautiful"
	<i>zùlvḡ</i> <sup>ɔ</sup>	"deep"	<i>zùlv</i> <sup>ma</sup>	"be deep"
	<i>pòɔdḡ</i> <sup>a</sup>	"small"	<i>pòɔd</i> <sup>a</sup>	"be few, small"
O	<i>tōḡ</i> <sup>ɔ</sup>	"bitter"	<i>tōḡ</i> <sup>a/</sup>	"be bitter"
	<i>ḡīḡ</i> <sup>a</sup>	"short"	<i>ḡīm</i> <sup>ma/</sup>	"be short"
	<i>kpī'ovḡ</i> <sup>ɔ</sup>	"strong"	<i>kpī'əm</i> <sup>ma/</sup>	"be strong"
	<i>kpēēñm</i> <sup>m</sup>	"elder"	<i>kpēēñm</i> <sup>ma/</sup>	"be older than"
	<i>wēnnir</i> <sup>ε</sup>	"resembling"	<i>wēn</i> <sup>na/</sup>	"resemble"

However, the all-M tones of verbs corresponding to Pattern O adjectives have been reanalysed as verbal Pattern H, with LF-final H toneme. They never become all-L before the interrogative prosodic clitics (specifically checked with WK and DK.)

All-L SFs become all-M in the irrealis mood, by analogy with variable verbs [7.3](#):

*Ò nà vēn.* "She'll be beautiful."

## 7.4 Particles

Some particles have the segmental and tonal structure of nouns.

Proclitic liaison words all have a single mora with a fixed-L toneme [8.3.1](#).

Catenator-*n* is toneless and transparent to M spreading. Liaison enclitics carry H after a host-final M toneme and M otherwise; this M becomes H in the LF [8.2.3](#).

Enclitic particles with the Short Form CV which are *not* liaison words have three possible Tone Patterns, corresponding to the H, L and O Patterns of nominals. Most are Pattern H, like the article *lā*<sup>+/</sup>. Pattern L are *ñwà*<sup>+</sup> "this" and *sà*<sup>+</sup> "hence, ago"; Pattern O is the Independent/perfective marker *yā*<sup>+</sup> [19.6.2.1](#).

Pattern H enclitics change the M to H in the LF (compare the words with apocope-blocking [7.1](#).) Before the negative prosodic clitic [8.1](#) the Pattern H LFs thus end in H, while the Pattern O clitic ends in M, and before the two interrogative prosodic clitics [8.1](#), Pattern O becomes all-L. Thus with *nē*<sup>+/</sup> and *yā*<sup>+</sup>:

<i>Lì bōdḡ nē.</i>	"It's lost."
<i>Lì bōdḡ néε?</i>	"Is it lost?"
<i>Lì bōdḡ yā.</i>	"It's got lost."
<i>Lì bōdḡ yàa?</i>	"Has it got lost?"

*Ka o ba' ne o ma pu ban ye o kpelim yaa.*

*Kà ò bā' né ò mà pū báj yé ò kpèlím yāa* +∅.

and **3AN** father:**SG** with **3AN** mother:**SG** **NEG.IND** realise that **3AN** remain **PFV** **NEG.**  
 "His father and mother did not realise that he had remained." (Lk 2:43)

## 7.5 Tone in derivation

Root tone patterns can be deduced from the tone patterns of words with stems lacking any derivational suffix, and by comparing patterns in derived stems.

It is exceptional for forms derived from H roots to show L, O or LO Patterns, or vice versa; this happens systematically only with "assume-stance" verbs [13.2.1.1](#).

Roots showing Subpattern HL in nouns and adjectives [7.2.1.2](#) fall together with regular Pattern H in all other derived or cognate words:

<i>áñsìb<sup>a</sup></i>	"maternal uncle"	<i>āñsín<sup>a</sup></i>	"sister's child"
<i>kísùg<sup>ɔ</sup></i>	"hateful"	<i>kīs<sup>a/</sup></i>	"hate"
<i>gósìg<sup>a</sup></i>	"looking"	<i>gōs<sup>ε</sup></i>	"look"

After O/L roots derivational suffixes themselves differ in tonal behaviour, some producing Pattern L stems and others Pattern O. The Tone Pattern is determined entirely by the *last* derivational suffix, unless this is \**m* as a second suffix. Pattern O roots can give rise to Pattern L stems, and *vice versa*:

<i>bīig<sup>a</sup></i>	"child"	<i>bīilím<sup>m</sup></i>	"childhood" (-l-)
<i>nà'ab<sup>a</sup></i>	"chief"	<i>nā'am<sup>m</sup></i>	"chiefship" (-m-)

Most derivational suffixes added to O/L roots produce Pattern L/LO stems. No stem with \**g* \*/ \**s* or \**b* as a final derivational suffix is Pattern O.

All segmentally regular gerunds have predictable Tone Patterns; most segmentally irregular gerunds formed from root verbs are tonally regular.

from Pattern H verbs		Pattern H
from Pattern LO verbs		
2-mora stem perfective		Pattern O
otherwise		Pattern L
<i>dōg<sup>ε</sup></i>	"cook"	→ <i>dōgub<sup>ɔ/</sup></i>
<i>nōk<sup>ε/</sup></i>	"take"	→ <i>nōkír<sup>ε</sup></i>
<i>dīgul<sup>ε/</sup></i>	"lay down"	→ <i>dīgulóg<sup>ɔ</sup></i>



<i>mè</i> <sup>+</sup>	"build"	→	<i>mēɛb</i> <sup>ɔ</sup>	
		→	<i>mèɛdíɱ-tāa</i> <sup>=</sup>	"fellow-builder"
<i>sùŋ</i> <sup>ɛ</sup>	"help"	→	<i>sùŋɪ</i> <sup>ɛ</sup>	
<i>dìgɪn</i> <sup>ɛ</sup>	"lie down"	→	<i>dìgɪnug</i> <sup>ɔ</sup>	
<i>zàańsɪm</i> <sup>m</sup>	"dream"	→	<i>zàańsúŋ</i> <sup>ɔ</sup>	

The regular assignment of 3- and 4-mora stem Pattern LO verb gerunds to Pattern L can be explained by the fact that the great majority of such stems have a Pattern-L-deriving suffix; others would follow their analogy.

Imperfective gerunds [13.1.1.4](#) with \**d* from Pattern LO verbs are Pattern L, as in *bòɔdɪm*<sup>m</sup> "will" and *mèɛdíɱ-tāa*<sup>=</sup> "fellow-builder"; here as in finite imperfective forms [7.3](#), the suffix \**d* is Pattern-L-deriving.

Agent nouns, deverbal adjectives and instrument nouns also have predictable Tone Patterns:

from Pattern H verbs	Pattern H
from Pattern LO verbs	
containing derivational <i>-d-</i>	Pattern O
otherwise	Pattern L

The suffix \**d* in these formations is Pattern-O-deriving: *bōɔdɪr*<sup>ɛ</sup> "desirable", *mēɛdɪŋ*<sup>a</sup> "building implement." Stems where this \**d* is absent (not just assimilated into a cluster as *-mn-* or *-nn-*) are Pattern L, with a change of Tone Pattern possible even within a single noun paradigm [7.2.3](#).

There is little evidence for change of Tone Pattern alone, without any segmental stem alteration, as a derivational process, but a possible case might be *gbāuŋ*<sup>ɔ</sup>/ "skin", "book" DK, *gbàuŋ*<sup>ɔ</sup> "book" WK.

## 8 External sandhi

Kusaal shows a range of intricate external sandhi phenomena, comprising not only straightforward segmental contact phenomena [8.5](#), but also tone sandhi of two types, one which applies across phrase boundaries [8.3](#) and one limited to certain NP and AdvP constructions [8.4](#), and several processes related to apocope [2.3](#), with its complete suppression before certain "prosodic clitics", which have zero segmental form themselves [8.1](#), and partial suppression before several other particles and pronouns ("liaison words") [8.2](#), some of which also have no segmental form of their own in most contexts (see below.)

Sandhi between proclitic words and following hosts often differs from that between word-forms capable of ending a phrase and following dependents, including enclitics which are not liaison words. Finite verb forms here align with *proclitics*. Proclitics and verbs ending in a fronting diphthong monophthongise phrase-internally, but this does not happen with noun singulars, even before the article *lā*<sup>+</sup>:

<i>sāeñ lā</i>	"the blacksmith"	
<i>sàñ-kàṅā</i>	"this blacksmith"	
<i>Ò sù'v lór.</i>	"She owns a lorry."	<i>sū'e</i> <sup>ya</sup> / "own"
<i>Lì nàa nē.</i>	"It is finished."	<i>nāe</i> <sup>+</sup> / "finish"

In tone sandhi verb perfectives also resemble proclitics. Toende Kusaal perfectives behave like proclitics with respect to word-final stop devoicing [3.1](#) fn.

Two groups of very common words lack all segmental realisation, with their presence only detectable through segmental and/or tonal effects on preceding words. Prosodic clitics [8.1](#) cause the preceding word to appear as a LF instead of the usual SF. Four liaison enclitics [8.2.1](#) are reduced to zero by apocope. The 3sg animate object pronoun <sup>o</sup> and the post-imperative 2pl *subject* pronoun <sup>ya</sup> remain detectable after apocope only by the changes induced by the liaison preceding them. Nominaliser-*ñ* and catenator-*n* may be realised as [ŋ], but more often also appear only as segmental zero preceded by liaison. In interlinear glosses prosodic clitics are written as <sup>+</sup>∅, while these liaison enclitics are written <sub>—</sub>∅.

## 8.1 Prosodic clitics

All four prosodic clitics<sup>5</sup> cause lowering of short LF-final *i u* to *ɛ ɔ* respectively, which are realised slightly closer in this case than as root vowels.

Before prosodic clitics, and in forms with apocope-blocking, final *-mi* and *-mu* become *-mm* whenever the *m* is not geminated. The final *m* was presumably once syllabic, but the current realisation of *-mm* is [m:].

<i>tìum</i> <sup>m</sup>	"medicine"	SF <i>tìum</i>	LF <i>tīumm</i>	← * <i>tìumō</i>
<i>dāam</i> <sup>m/</sup>	"millet beer"	SF <i>dāam</i>	LF <i>dāamm</i>	← * <i>dāamú</i>
<i>vōm</i> <sup>m/</sup>	"life"	SF <i>vōm</i>	LF <i>vómm</i>	← * <i>vōmmú</i>

Word-final *iə uə* diphthongise to *ia ua* before prosodic clitics [4.1.1](#).

None of these changes occur before liaison [8.2](#).

Extra-long simple vowels, unlike diphthongs, are not permitted before prosodic clitics; they reduce to two morae. This results in a few words which have segmentally identical SF and LF, as for example:

	<i>sīa</i> <sup>+</sup>	"waist"	SF <i>sīa</i>	LF <i>sīaa</i>	← * <i>sīəga</i>
but	<i>dà'a</i> <sup>=</sup>	"market"	SF <i>dà'a</i>	LF <i>dā'a</i>	← * <i>dà'agā</i>
	<i>bāa</i> <sup>=</sup>	"dog"	SF <i>bāa</i>	LF <i>bāa</i>	← * <i>bāaga</i>
	<i>kō-ó</i> <sup>=</sup>	"kill him"	←	<i>kō</i> <sup>+</sup> "kill" + <sup>o</sup> "him/her"	SF/LF [k <sup>h</sup> o:]

The **negative prosodic clitic** appears at the end of a clause containing a negated or negative verb [19.5](#). Superscript notation [2.3.1](#) represents LFs as they appear before the negative prosodic clitic, both segmentally and tonally.

*Lì à nē nóbìr.* "It's a leg."  
**3INAN COP FOC leg:SG.**

*Lì kā' nóbìrē<sup>+</sup>∅.* "It's not a leg."  
**3INAN NEG.BE leg:SG NEG.**

*Lì à nē dūk.* "It's a cooking pot."  
**3INAN COP FOC pot:SG.**

5) The concept of prosodic "clitics" is also useful for describing complex clause structures [24.2](#). Mooré has the clause-final particle *yé* after negative VPreds, and segmental vocative and interrogative clitics are also common in West Africa. For clitic-like elements cross-linguistically which lack segmental form see Spencer and Luís 2012: 5.5.1 on Tongan "definitive accent."

*Lì k̄ā' dōkɔ́* +∅. "It's not a pot."  
**3INAN NEG.BE pot:SG NEG.**

Unlike short *ɪ ʊ*, long final *ɪ ʊ* are not lowered:

*Bà à nē mólì.* "They are gazelles."  
**3PL COP FOC gazelle:PL.**

*Bà k̄ā' mólī* +∅. "They are not gazelles."  
**3PL NEG.BE gazelle:PL NEG.**

The **vocative prosodic clitic** ends a NP used as a vocative. It has identical tonal and segmental effects to the negative clitic, except that it neutralises preceding LF-final vowel length as short. The audio NT version sometimes shows a change of final H tone to falling (found also with some Hausa speakers, Jaggat p18.)

*M̄ bīiga* +∅! "My child!"  
**1SG child:SG VOC!**

*M̄ bīise* +∅! "My children!"  
**1SG child:PL VOC!**

*Pu'aa, bɔ ka fu kaasida?*

*Pɔ'āa* +∅, *bɔ́ kà fù k̄āsídà* +∅?

Woman:SG VOC, what and 2SG cry:IPFV CQ?

"Woman, why are you crying?" (Jn 20:13)

This is not a vocative noun form, but a particle following the entire NP:

*dau one an yadda niɲida*

*dāy ɔ̀nì àñ yàddā-níɲìdā* +∅

man:SG REL.SG COP faith-doer:SG VOC

"You man, who are a believer!" (1 Cor 7:16)

Two **interrogative prosodic clitics** end questions. Final vowel length distinctions are neutralised to short in content questions, long in polar questions:

*Lì à nē nóbìr.* "It's a leg (*nóbìr*<sup>ɛ</sup>)."  
**3INAN COP FOC leg:SG.**

Ànó'ɔ̀nì_ø ñyē nóbɪrè +ø?	"Who saw a leg?"
Who CAT see leg:SG CQ?	
Lì à nē nóbɪrèè +ø?	"Is it a leg?"
3INAN COP FOC leg:SG PQ?	
Lì à nē dūk.	"It's a cooking pot ( <i>dūk<sup>ɔ</sup></i> )."
Ànó'ɔ̀nì ñyē dūkó?	"Who saw a pot?"
Lì à nē dūkó?	"Is it a pot?"
Lì à nē kūk.	"It's a chair ( <i>kūk<sup>a</sup></i> )."
Ànó'ɔ̀nì ñyē kúkà?	"Who saw a chair?"
Lì à nē kúkàa?	"Is it a chair?"
Lì à nē gbīgim.	"It's a lion ( <i>gbīgim<sup>nɛ</sup></i> )."
Ànó'ɔ̀nì ñyē gbígimnɛ?	"Who saw a lion?"
Lì à nē gbígimnɛɛ?	"Is it a lion?"

Length neutralisation results in a five-way *a e ɔ i u* contrast in LF-final vowels by quality alone in this context:

Ànó'ɔ̀nì ñyē kúkà?	"Who saw a chair( <i>kūk<sup>a</sup></i> )?"
Ànó'ɔ̀nì ñyē yīrɛ?	"Who saw a house( <i>yīr<sup>ɛ</sup></i> )?"
Ànó'ɔ̀nì ñyē dɔ̀ɔ̀gò?	"Who saw a hut ( <i>dɔ̀ɔ̀g<sup>ɔ</sup></i> )?"
Ànó'ɔ̀nì ñyē mólì?	"Who saw gazelles( <i>mólì<sup>+</sup></i> )?"
Ànó'ɔ̀nì ñyē bédugú?	"Who saw a lot ( <i>bédugú<sup>+/l</sup></i> )?"

The two interrogative prosodic clitics induce a tonal change in the preceding LF. Kusaal is cross-linguistically unusual<sup>6</sup> in signalling questions with a final *falling intonation*. All questions, polar or content, end with a L or H toneme.

**Word-final M changes to L. Words with all-M tonemes change to all-L.**

This is an actual change of tonemes, not just a matter of intonation; the new L tonemes are subject to M spreading 8.3. In Kusaal (unlike Dagbani) this lowering only affects the final word, not a sequence of several all-M words.

As part of the falling intonation, **the last H tone syllable in the question is not preceded by downstep after a preceding M toneme even if the next syllable is stressed 5.3.**

6) This is not uncommon in West Africa: cf Jagger pp513, 525 on Hausa. Hausa also shows raising of the pitch of the last H tone preceding the fall in polar questions.

Ànó'wòní\_ø ñyḗ bà bìiga +ø?  
 Who CAT see 3PL child:SG CQ?  
 "Who saw their child (bīig<sup>a</sup>)?"

Ànó'wòní ñyḗ bíigà? "Who saw a child?" tonally identical to  
 Ànó'wòní ñyḗ sù'ugà? "Who saw a knife (sù'ug<sup>a</sup>)?"  
 Fù bṣṣḍ bṣ? "What (bṣ<sup>+</sup>) do you want?"  
 Ànó'wòní ñyḗ zṙḗyà? "Who saw hills (zṙḗya<sup>+</sup>)?"

Similarly with Pattern LO verbs in the irrealis mood:

M̃ ná bṵdṙg. "I will get lost."  
 M̃ ná bṵdṙgḗ? "Will I get lost?"

With 2-mora stem Pattern H verb perfectives:

Ò pṵ gṵsḗ. "She didn't look"  
 Ò pṵ gṵsḗḗ? "Didn't she look?"  
 Ò pṵ dṵgḗ. "She didn't cook."  
 Ò pṵ dṵgḗḗ? "Didn't she cook?"

### 8.1.1 Presubject Long Forms

There is often a pause after any pre-subject elements. Nevertheless, probable cases of liaison before subject pronouns occur:

Fù ná kṵl bḗog. "You'll go home tomorrow."  
 2SG IRR go.home tomorrow.

but Bḗogú\_ fù ná kṵl. "You're going home tomorrow." SB  
 Tomorrow 2SG IRR go.home.

All the examples in my materials of a LF ending a *yà'*-clause seem explicable as liaison before a subject pronoun:

Buṅ ya'a kpi **be'ede**, ba siido ne be'ed.  
 Bṵṅ yá' kpi bḗ'edḗ [ʔbḗ'edṙ], bà sìid·ō\_ø nḗ bḗ'ed.  
 Donkey:SG if die bad:PL, 3PL flay:IPFV 3AN.OB FOC bad:PL.  
 "When a donkey dies wrongly, they skin it wrongly." KSS p42  
 (i.e. "Make the best of a bad job.")

However, several conjunctions [24.1.3](#) have forms ending in LFs which resemble LFs preceding the negative prosodic clitic rather than liaison; thus KB consistently shows final *-v* in the apocope-blocked [6.4](#) form *bɛdegv* for *bɛdʊg̃<sup>+/</sup>* "a lot", and equally consistently has final *-ɔ* in *bɔzugɔ* for *b̃ɔ z̃ug̃ɔ* "because", *dinzugɔ* for *d̃in z̃ug̃ɔ* "therefore" and *alazugɔ* for *àlá z̃ug̃ɔ* "therefore." This phenomenon is thus best regarded as an idiosyncratic derivational formation for conjunctions.

*Ka o kaas bɛdegv.* "And he wept greatly." (Genesis 27:38)

*Kà ò k̃aas bɛdʊg̃ɔ.*

And **3AN** weep great:**ADV**.

*bɔzugɔ ba zi' onɛ tumi m la naa.*

*b̃ɔ z̃ug̃ɔ, bà z̃i' ɔ̀nì t̃òm̃ m l̃a náa +∅.*

because **3PL NEG.KNOW REL.AN** send **1SG.OB ART** hither **NEG**.

"Because they do not know him who sent me here." (Jn 15:21)

## 8.2 Liaison

Certain words cause a preceding word to appear, not in the usual clause-medial Short Form, but in the Long Form, modified by loss of vowel quality contrasts in the final mora. These **liaison words** may or may not be enclitic. Non-enclitic liaison words furthermore all share the distinctive tonal property of having an initial fixed L toneme not susceptible to change by tone sandhi [8.3.1](#), with the exception of catenator-*n*, which is toneless.

### 8.2.1 Liaison enclitics

Certain enclitics cause the preceding host word to appear as a modified LF instead of a SF.

They comprise two sets:

#### Position 1:

Locative	<i>n<sup>ɛ</sup></i>	<a href="#">17.3</a>
Discontinuous-past	<i>n<sup>ɛ</sup></i>	<a href="#">27.1.1</a>
Postposed 2pl subject pronoun	<i>ya</i>	<a href="#">25.2.3</a>

The locative enclitic attaches directly to noun words; the discontinuous-past marker and the enclitic 2pl subject pronoun attach directly to verb words.

In this grammar, the Position 1 type words are hyphenated to the preceding host word, except with the enclitic 2pl subject when it is completely deleted by apocope [8.2.1.2](#).

Position 2:

all bound personal pronoun objects

[16.3.1](#)

	<u>Singular</u>	<u>Plural</u>
1st	<i>m</i> <sup>a</sup>	<i>tɪ</i> <sup>+</sup>
2nd	<i>f</i> <sup>ɸ</sup>	<i>ya</i> <sup>+</sup>
3rd animate	<sup>o</sup> [ʊ]	<i>ba</i> <sup>+</sup>
3rd inanimate	<i>ɪ</i> <sup>+</sup>	

These pronouns either attach directly to a verb word or after either of the Position 1 clitics, discontinuous-past *n*<sup>ɛ</sup> or 2pl subject *y*<sup>a</sup>. They are written as separate words, except with the 3sg animate pronoun, which is altogether deleted by apocope [8.2.1.1](#); the preceding host-final rounded vowel mora is written *·o* [1.3](#).

Liaison enclitics prevent apocope applying to the preceding word, which retains its final affix vowel in **downranked** form with loss of quality contrasts. The downranked vowel is not epenthetic and occurs where epenthesis does not:

	<i>dùm</i> <sup>m</sup>	"bite"			
		+ suffix <i>-b</i> <sup>ɸ</sup>	→	<i>dūm</i> <sup>mɸ</sup>	gerund "biting"
but		+ <i>ba</i> <sup>+</sup> "them"	→	<i>dùmɪ bā</i>	"bite them"

If the host word LF ends in a short vowel, this is downranked to *ɪ* by default, rounded to *ʊ* after *g* preceded by a rounded vowel unless the clitic begins with *y*, and always rounded to *·o* [ʊ] before <sup>o</sup> "him/her" [8.2.1.1](#).

LF-final *-iə -uə* remain as such before liaison, not becoming *-ia -ua* [4.1.1](#).

Examples with host LFs ending in short vowels:

<i>kōk</i> <sup>a</sup>	"chair"	+ <i>n</i> <sup>ɛ</sup> "at, in"	→	<i>kōkɪ-n</i> <sup>ɛɪ</sup>
<i>dōk</i> <sup>ɸ</sup>	"pot"	+ <i>n</i> <sup>ɛ</sup> "at, in"	→	<i>dōkɪ-n</i> <sup>ɛ</sup>
<i>bòɔd</i> <sup>a</sup>	"want"	+ <i>tɪ</i> <sup>+</sup> "us"	→	<i>bòɔdɪ tɪ</i> <sup>+</sup>
		+ <i>f</i> <sup>ɸ</sup> "you"	→	<i>bòɔdɪ f</i> <sup>ɸ</sup>
<i>pōvg</i> <sup>a</sup>	"inside"	+ <i>n</i> <sup>ɛ</sup> "at"	→	<i>pōvgʊ-n</i> <sup>ɛɪ</sup>
<i>pōvg</i> <sup>ɸ</sup>	"field"	+ <i>n</i> <sup>ɛ</sup> "at"	→	<i>pōvgʊ-n</i> <sup>ɛ</sup>
<i>yàvg</i> <sup>ɸ</sup>	"grave"	+ <i>n</i> <sup>ɛ</sup> "at"	→	<i>yàvgʊ-n</i> <sup>ɛɪ</sup>

<i>Bà bòɔdɪ m.</i>	"They love me."
<i>Bà pō bòɔdɪ má.</i>	"They don't love me."
<i>M̄ bòɔdɪ f.</i>	"I love you."
<i>M̄ pō bòɔdɪ fɸ.</i>	"I don't love you."
<i>Bà bòɔdɪ ɪ.</i>	"They want it."
<i>Bà pō bòɔdɪ ɪɪ.</i>	"They don't want it."



<i>Bà b̀̀ɔdī bá.</i>	"They love them."
<i>Bà p̄ b̀̀ɔdī báa.</i>	"They don't love them."

Examples with host LFs ending in long vowels:

After CVV perfectives:

<i>Kà bà kúv m.</i>	"And they killed me." ( <i>k̄v</i> <sup>+</sup> "kill")
<i>Kà bà p̄v kúv m̄.</i>	"And they didn't kill me."
<i>Kà bà kúv b̄.</i>	"And they killed them."
<i>Kà bà p̄v kúv báa.</i>	"And they didn't kill them."

<i>Kà bà kíə f.</i>	"And they cut you." ( <i>k̄jə</i> <sup>+</sup> "cut")
<i>Kà bà p̄v kíə f̄.</i>	"And they didn't cut you."
<i>Kà bà kíə l̄.</i>	"And they cut it."
<i>Kà bà p̄v kíə lí.</i>	"And they didn't cut it."

<i>Kà bà ñȳé m.</i>	"And they saw me." ( <i>ñȳé</i> <sup>+</sup> "see")
<i>Kà bà p̄v ñȳé m̄.</i>	"And they didn't see me."
<i>Kà bà ñȳé b̄.</i>	"And they saw them."
<i>Kà bà p̄v ñȳé báa.</i>	"And they didn't see them."

LFs ending in *-mm* behave as *-mV* before liaison:

<i>t̀̀m<sup>m</sup></i>	"send"	+ <i>t̄</i> <sup>+</sup> "us"	→	<i>t̀̀m̄ t̄</i> <sup>+/</sup>
<i>d̄āam<sup>m/</sup></i>	"beer"	+ <i>n<sup>ε</sup></i> "at, in"	→	<i>d̄āam̄ín<sup>ε</sup></i>
<i>k̀̀'ə<sup>m</sup></i>	"water"	+ <i>n<sup>ε</sup></i> "in"	→	<i>k̀̀'ə<sup>m̄</sup>ī-n<sup>ε/</sup></i>

If the host LF ends in a three-mora vowel sequence it is reduced to two, and fronting diphthongs are simplified to monophthongs just as in sandhi between closely connected words within a phrase [8.5.3](#).

<i>d̀̀'a<sup>=</sup></i>	"market"	+ <i>n<sup>ε</sup></i> "at, in"	→	<i>d̄ā'an<sup>ε/</sup></i> <a href="#">2.3.1</a>
<i>p̄āe<sup>+/</sup></i>	"reach"	+ <i>t̄</i> <sup>+</sup> "us"	→	<i>p̄áa t̄</i> <sup>+/</sup>
		+ <i>f̄</i> "you"	→	<i>p̄áa f̄</i>
<i>p̄īe<sup>+/</sup></i>	"wash"	+ <i>t̄</i> <sup>+</sup> "us"	→	<i>p̄íə t̄</i> <sup>+/</sup>
		+ <i>f̄</i> "you"	→	<i>p̄íə f̄</i>
<i>d̄ūe<sup>+/</sup></i>	"raise"	+ <i>t̄</i> <sup>+</sup> "us"	→	<i>d̄úə t̄</i> <sup>+/</sup>
		+ <i>f̄</i> "you"	→	<i>d̄úə f̄</i>

Invariable verbs with LFs ending in *-ya* make forms analogous to those of fusion verb perfectives. They drop the *ya*, monophthongise diphthongs and prolong preceding short vowels (see further [2.3.2](#)):

<i>sū'e<sup>ya/</sup></i>	"own"	+ <i>l<sup>+</sup></i>	"it"	→	<i>sú'v lī<sup>+</sup></i>
<i>vūe<sup>a/</sup></i>	"live"	+ <i>n<sup>ε</sup></i>	dp	→	<i>vūv-n<sup>ε/</sup></i>

Fronting of the second mora of a LF-final long vowel occurs before the 2pl object pronoun *ya<sup>+</sup>*, with exactly the same fronting changes as are seen word-internally before *y* [6.3.2](#) with any back second mora becoming *e* [ɪ] but no change with front second morae:

<i>Bà bòcdī yá.</i>		"They love you."
<i>Bà pū bòcdī yáa.</i>		"They don't love you."
<i>Kà bà kúe yā.</i>	[kʰɪja]	"And they killed you (pl)." ( <i>kū<sup>+</sup></i> "kill")
<i>Kà bà pū kúe yáa.</i>		"And they didn't kill you (pl)."
<i>Kà bà kíe yā.</i>	[kʰiɪja]	"And they cut you (pl)." ( <i>kjā<sup>+</sup></i> "cut")
<i>Kà bà pū kíe yáa.</i>		"And they didn't cut you (pl)."
<i>Kà bà ñyέe yā.</i>		"And they saw you (pl)." ( <i>ñyē<sup>+</sup></i> "see")
<i>Kà bà pū ñyέe yáa.</i>		"And they didn't see you (pl)."
<i>Kà bà páe yā.</i>		"And they reached you (pl)." ( <i>pāe<sup>+</sup></i> "reach")
<i>Kà bà pū páe yáa.</i>		"And they didn't reach you (pl)."

For some speakers, rounding of unrounded long vowel second morae and of the default LF-final short vowel *ɪ* takes place before the 2 sg object pronoun *f<sup>o</sup>* "you":

<i>Kà bà kía f.</i>	"And they cut you (sg)."
or <i>Kà bà kíó f.</i>	
<i>Kà bà ñyέe f.</i>	"And they saw you (sg)."
or <i>Kà bà ñyéó f.</i>	
<i>Kà bà páa f.</i>	"And they reached you (sg)."
or <i>Kà bà páv f.</i>	

*M gbáñ'a f.* "I've grabbed you (sg)."  
or *M gbáñ'v f.*

Rounded forms are invariable in the 1996 NT version; this may simply reflect an orthographic decision to write *uf* rather than *if* consistently for the supposed object pronoun "you."

There is never rounding word-internally before the  $F|l^+$  class singular suffix.

### 8.2.1.1 3sg animate pronoun °

The 3sg animate object pronoun ° [ʊ] "him/her" loses its entire segmental form when subject to apocope [2.3](#), after causing the host final vowel mora to become [ʊ]; this rounded final mora remains to signal the silent presence of the pronoun. This mora is written *·o* [1.3.1](#). It is always lax. In the LF the pre-liaison mora fuses with the [ʊ] of the LF of the pronoun itself create a long vowel [ʊ:], written *·o-o*:

<i>b̀̀̀̀dā</i>	"wants"	+ °	"him" →	<i>b̀̀̀̀d·ó-o</i>	(SF <i>b̀̀̀̀d·ō</i> )
<i>kīā</i>	"cut"	+ °	"him" →	<i>kì·ō-o</i>	(SF <i>kì·o</i> )
<i>ñyēē</i>	"see"	+ °	"him" →	<i>ñyē·ó-o</i>	(SF <i>ñyē·o</i> )

*F̀̀̀̀ b̀̀̀̀d·ō\_∅.* "You love her." [fʊbɔ:dʊ]  
**2SG want 3AN.OB.**

*F̀̀̀̀ p̄ b̀̀̀̀d·ó-o +∅.* "You don't love her." [fʊpʰɔbɔ:dʊ:]  
**2SG NEG.IND want-3AN.OB NEG.**

*F̀̀̀̀ ñyē·o\_∅.* "You've seen her." [fʊjẽõ]  
**2SG see 3AN.OB.**

*F̀̀̀̀ p̄ ñyē·ó-o +∅.* "You've not seen her." [fʊpʰɔjẽõ:]  
**2SG NEG.IND see-3AN.OB NEG.**

The second morae of pre-liaison long vowels always become [ʊ], never [u] (contrast word-internal rounding before *\*kkv* *\*ŋɣv* [6.3.2](#)):

<i>zū<sup>+</sup></i>	"steal"	+ °	"him/her" →	<i>zū·ó<sup>-0</sup></i>	SF [zuʊ]	LF [zuʊ:]
<i>ñyē<sup>+</sup></i>	"see"	+ °	"him/her" →	<i>ñyē·ó<sup>-0</sup></i>	SF [jẽʊ]	LF [jẽʊ:]
<i>dì<sup>+</sup></i>	"eat"	+ °	"him/her" →	<i>dì·o<sup>-0</sup></i>	SF [dɪʊ]	LF [dɪʊ:]
<i>kjà<sup>+</sup></i>	"cut"	+ °	"him/her" →	<i>kì·o<sup>-0</sup></i>	SF [kʰiʊ]	LF [kʰiʊ:]

<i>pāe</i> <sup>+/</sup>	"reach"	+ 0	"him/her"	→	<i>pā·ó</i> <sup>-0</sup>
<i>pīe</i> <sup>+/</sup>	"wash"	+ 0	"him/her"	→	<i>pī·ó</i> <sup>-0</sup>
<i>dūe</i> <sup>+/</sup>	"raise"	+ 0	"him/her"	→	<i>dū·ó</i> <sup>-0</sup>
<i>àeñ</i> <sup>a</sup>	"be"	+ 0	"him/her"	→	<i>àñ·o</i> <sup>-0</sup>

*Mane a o.* "I am he." (Jn 18:5, 1976)

*Māni* ∅ *áñ·o* ∅.

**1SG.CNTR CAT COP 3AN.OB.**

LFs ending in *-mm* behave as *-mV* before liaison:

*tùm*<sup>m</sup> "send" + 0 "him/her" → *tùm·o*<sup>-0</sup>

The two final LF morae are subject to tautosyllabic delinking [5.2](#):

*M bɔ́ɔd·ō.* "I love him/her."

*M pū bɔ́ɔd·ó·o.* (←·ō·ó) "I don't love him/her."

*Kà bà kú·o.* [k<sup>h</sup>ʊ:] "And they killed him."

*Kà bà pū kú·o.* [8.1](#) "And they didn't kill him."

*Kà bà kí·o.* "And they cut him."

*Kà bà pū kí·ō·o.* "And they didn't cut him."

*Kà bà ñyÉ·o.* "And they saw her."

*Kà bà pū ñyĒ·ó·o.* "And they didn't see her."

### 8.2.1.2 Postposed 2pl subject pronoun <sup>ya</sup>

The enclitic 2pl subject pronoun <sup>ya</sup> loses its entire segmental form in the SF [2.3](#), and its presence is revealed only by the word-final *-ɪ* on the preceding LF:

	<i>gòsɪm</i>		"look!"	
SF	<i>gòsɪmī</i> ∅		"look ye!"	Traditional: <i>gosimi</i>
LF	<i>gòsɪmī</i> <b>yá</b>		<a href="#">25.2.3</a>	Traditional: <i>gosimiya</i>

Before the pronoun <sup>ya</sup> the pre-liaison mora is invariably replaced by lax [ɪ], usually written *e* as normal. In many cases this has the same outcome as word-internal fronting before *y* [6.3.2](#) and before the 2pl object pronoun *ya*<sup>+</sup>:

<i>kō</i> <sup>+</sup>	"kill"	+ ya	"ye"	→	<i>kōe</i> <sup>-ya/</sup>	[k <sup>h</sup> ɔɪ]
<i>kjà</i> <sup>+</sup>	"cut"	+ ya	"ye"	→	<i>kjē</i> <sup>-ya/</sup>	[k <sup>h</sup> iɪ]
<i>pāe</i> <sup>+/</sup>	"reach"	+ ya	"ye"	→	<i>pāe</i> <sup>-ya/</sup>	
<i>pīe</i> <sup>+/</sup>	"wash"	+ ya	"ye"	→	<i>pīe</i> <sup>-ya/</sup>	
<i>dūe</i> <sup>+/</sup>	"raise"	+ ya	"ye"	→	<i>dūe</i> <sup>-ya/</sup>	

However, the replacement also affects front vowels:

<i>bè</i> <sup>+</sup>	"be"	+ ya	"ye"	→	<i>bēe</i> <sup>-ya/</sup>	[bɛɪ] written <i>bei</i>
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The pronoun *y<sup>a</sup>* adopts the allomorph *-ní-* before liaison, both before pronoun objects and before *àlá*<sup>+</sup> "thus" 19.4. The pronoun was historically \**ɲa*, which regularly became \**yǎ* 3.1 with subsequent loss of emic nasalisation, as always with affix vowels 4.4. When the *-a* is deleted by apocope, *y* is also deleted 2.3. When followed by a liaison word, the vowel *a* was not deleted but became *ɪ*, before which *ɲ* became *n-*. (Cf also *nìŋ*<sup>ɛ</sup> "do" = Toende Kusaal *ěŋ*, locative *n<sup>ɛ</sup>* ~ *nī*<sup>+/</sup> = Toende *-ɪ*, *nìe*<sup>+</sup> "appear" = Toende *yěe*, *nīŋ*<sup>a</sup> "body" = Mooré *yĩnga*.)

*Dā dɔllɪ\_ yá* <sup>+ø!</sup> "Follow ye not!"  
NEG.IMP follow 2PL.SUB NEG!

*Dì'amī\_ ø!* "Receive ye!"  
receive:IMP 2PL.SUB!

*Dì'amī-ní\_ bā!* "Receive ye them!"  
receive:IMP-2PL.SUB 3PL.OB

*Dì'amī-n·ó\_ ø!* "Receive ye her!"  
receive:IMP-2PL.SUB 3AN.OB.

*Sidiba, nɔŋgimini ya pu'ab.*

*Sīdiba* <sup>+ø,</sup> *nòŋumī-ní\_ yà pū'ab.*

Husband:PL VOC, love:IMP-2PL.SUB 2PL wife:PL.

"Husbands, love your wives!" (Eph 5:25)

*Biise, siakimini ya du'adib nɔya.*

*Bīise* <sup>+ø,</sup> *sjàkımī-ní\_ yà dū'adib nóyà.*

Child:PL VOC, agree:IMP-2PL.SUB 2PL parent:PL mouth:PL.

"Children, obey your parents." (Eph 6:1)

*Dìgī-ní* *àlá!* "Keep ye on lying down!"  
Be.lying-2PL.SUB ADV:thus!

*Dì'amī-ní* *àlá!* "keep ye on receiving!"  
receive:IMP-2PL.SUB ADV:thus!

*Dì'amī-ní lá /dì'amī-n álá!* "keep ye on receiving!" See [8.2.2](#)

## 8.2.2 Non-enclitic liaison words

Non-enclitic liaison words comprise

proclitic personal pronouns	<i>m̀ fù ò lì tì yà bà</i>	<a href="#">16.3.1</a>
personifier clitics	<i>à ò m̀</i>	<a href="#">16.6</a>
<i>àn'ò'n<sup>ε</sup></i> "who?"		<a href="#">16.3.4</a>
nominaliser	<i>ò</i>	<a href="#">28</a>
catenator	<i>n</i>	<a href="#">23.1</a>

along with all words beginning with

number prefixes	<i>à bà bù</i>	<a href="#">14.3</a>
manner-adverb prefix	<i>à</i>	<a href="#">14.2</a>

All these words have an initial fixed-L toneme [8.3.1](#), except VP catenator *n*, which has no toneme.

Even when proclitic, these words are like liaison enclitics in that the *preceding* word may appear as a modified LF with loss of quality distinctions in the **downranked** final affix vowel. Evidence for this is found in the allomorphy shown by the postposed 2pl pronoun <sup>ya</sup> equally before all liaison words [8.2.1.2](#), and in the *lack* of vowel lengthening before non-enclitic liaison words of forms which have not undergone apocope, such as *kà*, *yē* and the proclitic pronouns; this demonstrates that the phenomenon is due to inhibition of apocope.

After a consonant, the quality of the downranked vowel preceding liaison is determined by the liaison word, but is generally *ɪ*, rounding to *ʊ* when the word ends in a velar preceded by a rounded vowel mora. (Many cases where in traditional orthography a word has seemingly gained a mysterious final *-i* or *-u* are due to this.)

Non-clitic words ending in a short *root* vowel prolong the vowel before liaison.

Except with the clause nominaliser *ò* and with the VP catenator *n* (see below), this phenomenon is very limited in my informants' speech. It is only invariable with personal pronouns immediately preceded by a verb within the same verb phrase:

*Tì gòsí\_ bà bīis.* "We looked at their children."  
**1PL** look.at **3PL** child:**PL**. (Liaison before *bà* "their")

Older written sources show the phenomenon more widely, though always within a phrase:

*bane na yel Zugsobi ba tuuma a si'em la*  
*bàni nà yēl Zūg-sób\_ bà tūmá\_ø àñ sī'em lā*  
**REL.PL** **IRR** say head-one:**SG** **3PL** deed:**PL** **NZ** **COP** **INDF.ADV** **ART**  
 "Those who will tell the Lord how their deeds are." (Heb 13:17, 1996)  
 (as read by WK, with a SF before *bà tūma*.)  
 The [audio version](#) has ...*Zūg-sóbí bà*...

Words which do not have apocope-blocking and which end in short root vowels prolong them before liaison:

... [n] *loo Abaa zuur* "... tying Dog's tail" [16.6](#) KSS p20  
 ... *n ló\_À-Bāa zùr*  
 ...**CAT** tie **PERS-dog:SG** tail:**SG**

Before liaison words beginning with *à-* the quality of the final vowel mora of the preceding word is not predictable from the phonology alone.

Before *àń'òn<sup>ε</sup>* "who?" [16.3.4](#), the manner-adverb prefix and the personifier clitic the LF-final vowel is *ι* (*υ* after a velar preceded by a rounded vowel):

*Ò niń\_àlá.* "She did thus."  
**3AN** do **ADV:thus** (contrast *àlá* "how many?" below)

*yeli Abaa* "said to Dog" KSS p20  
*yèl\_À-Bāa*  
 say **PERS-dog:SG**

Fusion verbs [11.1](#) show forms in final *e* [ɪ] in these two cases, instead of the monophthongs *aa iə uə* usual before another word in the VP [8.5.3](#):

*ka ba gban'e Adayuug* "and they seized Rat" KSS p20  
*kà bà gbáń'e\_À-Dàyūug*  
 and **3PL** seize **PERS-rat:SG**

However, the verb *àęń<sup>a</sup>* "be something" always appears as *àań*, not *àeń*.

*Ka fù aan anɔ'ɔnɛ?* "And who are you?" (Jn 1:19)  
*Kà fù áañ ànɔ'ɔnɛ* +∅?  
 And **2SG COP** who **CQ?**

Before the number prefix *a-* the pre-liaison vowel is instead *-a*:

*M̄ mór nē bīsá\_ àtáñ'.* "I have three children."  
**1SG** have **FOC** child:**PL** **NUM**:three.

*Pèédá\_ àlá* +∅? "How many baskets?"  
 basket:**PL** **NUM**:how.many **CQ?** (contrast *àlá* "thus" above)

These rules are consistent in written materials. However my informants contract *-á à-* to *á-* with the number prefix (effectively just treating it as having an ordinary L toneme susceptible to M spreading):

*Nū'-bíbìs álá kà fù ñyētá* +∅?  
 hand-small:**PL** **NUM**:how.many and **2SG** see:**IPFV** **CQ?**  
 "How many fingers do you see?"

With other words beginning with *a-* my informants generally do not show liaison at all, except with *àlá* after imperatives, where the *-í à-* is contracted to either *-á-* or *-í-* depending on the speaker.

*gòsımí lá* or *gòsım álá* "Keep on looking!"

WK and DK both always round the LF-final vowel before *ò* "his/her":

*Bà gòsú\_ ò bīg.* "They've looked at her child."  
**3PL** look:at **3AN** child:**SG**.

All my written sources, the NT, literacy materials and ILK, consistently show *-i* (i.e. *-ɪ* [ɪ]), which is presumably the original older form.

The distinctive sandhi of the number prefix *a-* can be accounted for historically. The prefix originated as *\*ɲa-*, the old *r<sup>ɛ</sup>|a<sup>+</sup>* class agreement [14.3](#). Original word-internal *\*ɲ* has disappeared completely throughout Western Oti-Volta (synchronic non-initial *ɲ* being always from *\*mg* or *\*ng* → *ɲɲ*), whereas word-medial *y w* survive in many contexts. Initial *\*ɲ* preceding unstressed vowels may likewise have disappeared early. Sandhi effects may outlive the complete phonetic disappearance of a consonant, as with the French "*H aspiré*." The data could be thus accounted for by supposing that *\*ɲa* lost its initial consonant earlier than the personifier clitic or the



manner-adverb prefix, representing (as it were) the "*H muet*" corresponding to the "*H aspiré*" left by later deletion of initials such as *y* or *w*, but expressing this in terms of underlying synchronic phonological distinctions would be methodologically suspect in view of the absolute neutralisation involved (Kiparsky 1982.)

### 8.2.2.1 Nominaliser-*ḥ*

The post-subject clause nominaliser *ḥ* 28 combines with a preceding pronoun subject to produce a special set of pronouns 16.3.1. Note the contrasts between these pronouns and the plain and contrastive series in e.g.

*mán zàb nà'ab lā* "I having fought the chief." (*ḥ*-clause)  
**1SG:NZ fight chief:SG ART**

*Mān<sub>ḥ</sub> ∅ záb nà'ab lā.* "I have fought the chief." (*n*-focus)  
**1SG.CNTR CAT fight chief:SG ART**

*tīnámì<sub>ḥ</sub> ∅ zàb nà'ab lā* "we having fought the chief" (*ḥ*-clause)  
**1PL NZ fight chief:SG ART**

*Tīnámì<sub>ḥ</sub> ∅ záb nà'ab lā.* "We have fought the chief." (*n*-focus)  
**1PL CAT fight chief:SG ART**

Elsewhere, my informants show neither *n* nor the segmental changes of preceding liaison, and the particle is represented by  $\emptyset$  in interlinear glossing. However, *ḥ* carries a fixed-L toneme 8.3.1 which causes a preceding M toneme to become H even when the particle has no segmental realisation itself.

*Dāy lā záb ná'àb lā.* "The man has fought the chief."  
**man:SG ART fight chief:SG ART**

*Dāy lā gós ná'àb lā.* "The man has looked at the chief."  
**man:SG ART look.at chief:SG ART**

but *dāy lá<sub>ḥ</sub> ∅ zàb nà'ab lā* "the man having fought the chief"  
**man:SG ART NZ fight chief:SG ART**

*dāy lá<sub>ḥ</sub> ∅ gōs ná'àb lā*  
**man:SG ART NZ look.at chief:SG ART**  
 "the man having looked at the chief"

Older texts frequently show *n* and/or liaison, but even texts which use *n* nearly always omit it after words with SFs ending in nasal consonants. In KB, *n* (without liaison) occurs mostly after foreign proper names. Texts confirm that the particle is a liaison word, with LF geminate consonants kept before the affix vowel:

*ya zuobid wusa kalli an si'em*  
*yà zūébíd wūsa kállì\_ ∅ àñ sī'əm*  
 2PL hair:PL all number:SG NZ COP INDF.ADV  
 "how much the number of all your hairs is" (Lk 12:7)

### 8.2.2.2 Catenator-*n*

The VP catenator *n* [23.1](#) carries no toneme; a LF-final toneme before it is M after a M toneme and L otherwise.

After pause, all sources realise catenator-*n* as a syllabic nasal assimilated to the position of the following consonant. Elsewhere, WK has liaison before a particle with no segmental realisation, written  $\emptyset$  in interlinear glossing:

*Kà ò zóó\_ ∅ kēŋ nā.* "And he came running"  
 And 3AN run CAT come hither.

After a final vowel which is not a full word root vowel, WK has a consonantal nasal, assimilated to the position of the following consonant. Almost all instances of *n* in KB similarly appear after words with apocope-blocking, or after foreign names; the particle is usually segmental zero, with preceding liaison. Older sources again often show *n* and/or liaison, with *n* rare after words with SFs ending in nasal consonants.

Realisations with neither *n* nor liaison also occur, particularly after verbs often used as "auxiliaries"; some preverbs probably originated in this way. This is significantly more frequent in NT/KB after words ending in *-m -n -l* or in vowels.

Written materials confirm that catenator-*n* is a liaison word by showing LF geminate consonants preserved before the affix vowel, e.g.

*tuum kanε ka m tummi tisid Wina'am la.*  
*tùum-kànι kà m túmmī\_ ∅ tísid Wínà'am lā*  
 work-REL.SG and 1SG work:IPFV CAT give:IPFV God ART  
 "The work which I do for God" (Rom 15:17)

The *n* of non-verbal predicators [22](#) is phonologically identical to catenator-*n*:

*B5ó\_ ∅ lá +∅?* "What's that?"  
 What CAT that CQ?

### 8.2.3 Tonemes before liaison

Liaison enclitics themselves carry H toneme after host-final M toneme and M after L or H. The M becomes H before prosodic clitics:

	<i>M zábī bá.</i>	"I've fought them."
	<i>Kà m̄ zábī bā.</i>	"And I've fought them."
	<i>M̄ pū bǔwǎdī bāa.</i>	"I don't love them."
cf	<i>M̄ pū bǔwǎdī f̄s.</i>	"I don't love you."
	<i>Kà m̄ pū zábī bāa.</i>	"And I didn't fight them."
cf	<i>Kà m̄ pū zábī f̄s.</i>	"And I didn't fight you."
	<i>Àn'ɔ̀nì kúv bá?</i>	"Who has killed them?" SF <i>kúv bā</i>

The locative enclitic  $n^{\epsilon}$  does not alter the preceding toneme:

<i>pūvg<sup>a</sup></i>	"inside"	+ $n^{\epsilon}$	"at"	→ <i>pūvgv-n<sup>ε</sup>/</i>	(Pattern O)
<i>bīig<sup>a</sup></i>	"child"	+ $n^{\epsilon}$	"at"	→ <i>bīigi-n<sup>ε</sup>/</i>	WK
<i>mù'ar<sup>ε</sup></i>	"dam, lake"	+ $n^{\epsilon}$	"at"	→ <i>mù'arī-n<sup>ε</sup>/</i>	
<i>pǔwǎg<sup>ɔ̄</sup></i>	"field"	+ $n^{\epsilon}$	"at"	→ <i>pǔwǎgú-n<sup>ε</sup></i>	
<i>yàad<sup>ε</sup></i>	"graves"	+ $n^{\epsilon}$	"at"	→ <i>yàadī-n<sup>ε</sup>/</i>	WK
<i>kūvdí<sup>b</sup></i>	"killers"	+ $n^{\epsilon}$	"at"	→ <i>kūvdíbī-n<sup>ε</sup>/</i>	WK
<i>dà'a<sup>=</sup></i>	"market"	+ $n^{\epsilon}$	"at"	→ <i>dā'a-n<sup>ε</sup>/</i> for <i>dā-ā-n<sup>ε</sup>/</i> <a href="#">5.2</a>	

Note that in *dūk lā pūvgv-n<sup>ε</sup>* "inside the pot", *pūvg<sup>a</sup>* "inside" shows the normal LF-final M after L/H despite being changed by L spreading [8.4](#).

Discontinuous-past  $n^{\epsilon}$  and the postposed 2pl  $y^a$  both impose M tone on the preceding LF-final mora, regardless of its intrinsic toneme:

	<i>dūg<sup>ε</sup></i>	"cook"	+ $n^{\epsilon}$	dp	→ <i>dūgv-n<sup>ε</sup>/</i>
	<i>b̀̀dɪg<sup>ε</sup></i>	"lose"	+ $n^{\epsilon}$	dp	→ <i>b̀̀dɪgī-n<sup>ε</sup>/</i>
	<i>yādɪg<sup>ε</sup>/</i>	"scatter"	+ $n^{\epsilon}$	dp	→ <i>yādɪgi-n<sup>ε</sup>/</i>
ipfv	<i>kūvd<sup>a</sup>/</i>	"kill"	+ $n^{\epsilon}$	dp	→ <i>kūvdī-n<sup>ε</sup>/</i>
ipfv	<i>yādɪgíd<sup>a</sup></i>	"scatter"	+ $n^{\epsilon}$	dp	→ <i>yādɪgídī-n<sup>ε</sup>/</i>
	<i>m̀̀ɛ<sup>+</sup></i>	"build"	+ $n^{\epsilon}$	dp	→ <i>m̀̀ɛɛ-n<sup>ε</sup>/</i> for <i>m̀̀ɛ-ɛ-n<sup>ε</sup>/</i> <a href="#">5.2</a>

*Dā d̄ɔ̄llɪ\_ yá +ø!* "Follow ye not!"

**NEG.IMP follow 2PL.SUB NEG!**

Indicative perfectives without independency-marking tone overlay [19.6.1.1](#)  
change LF-final LM → LL and MM → MH before enclitic object pronouns

<i>b̀̀dɪg<sup>ɛ</sup></i>	"lose"	+ <i>m<sup>a</sup></i> "me"	→ <i>b̀̀dɪgɪ m<sup>a</sup></i>
<i>dì<sup>+</sup></i>	"eat"	+ <i>l<sup>+</sup></i> "it"	→ <i>dìl l̄<sup>+</sup>/</i>
<i>yāɪgɪ<sup>ɛ/</sup></i>	"scatter"	+ <i>m<sup>a</sup></i> "me"	→ <i>yāɪgɪ́ m<sup>a</sup></i>
<i>dōg<sup>ɛ</sup></i>	"cook"	+ <i>l<sup>+</sup></i> "it"	→ <i>dōgɪ́ l̄<sup>+</sup>/</i>
<i>gōs<sup>ɛ</sup></i>	"look"	+ <sup>o</sup> "him/her"	→ <i>gōs·ó<sup>-o</sup></i>
<i>kū<sup>+</sup></i>	"kill"	+ <i>m<sup>a</sup></i> "me"	→ <i>kúv m<sup>a</sup></i> for <i>kūv m<sup>a</sup></i> <a href="#">5.2</a>

Pattern H fusion verb perfectives behave exactly like CVV-stems:

<i>pāe<sup>+/</sup></i>	"reach"	+ <i>m<sup>a</sup></i> "me"	→ <i>páa m<sup>a</sup></i>
<i>dīe<sup>+/</sup></i>	"get"	+ <i>ba<sup>+</sup></i> "them"	→ <i>díə bā<sup>+/</sup></i>

After all other verb forms, object pronouns do not alter the host tonemes:

<i>zàbɪd<sup>a</sup></i>	"fights"	+ <i>m<sup>a</sup></i> "me"	→ <i>zàbɪd̄ m<sup>a/</sup></i>
<i>dít<sup>a</sup></i>	"eats"	+ <i>l<sup>+</sup></i> "it"	→ <i>dít̄ l̄<sup>+</sup></i>
<i>yāɪgɪ́d<sup>a</sup></i>	"scatters"	+ <i>ba<sup>+</sup></i> "them"	→ <i>yāɪgɪ́d̄ bā<sup>+</sup></i>
<i>kūvd<sup>a/</sup></i>	"kills"	+ <i>m<sup>a</sup></i> "me"	→ <i>kūvd̄ m<sup>a</sup></i>
<i>sū'e<sup>ya/</sup></i>	"own"	+ <i>l<sup>+</sup></i> "it"	→ <i>sú'v l̄<sup>+/</sup></i>

The sequence *·o·o* resulting from the LF of the 3sg animate pronoun <sup>o</sup> fusing with the vowel before liaison is subject to tautosyllabic delinking [5.2](#):

<i>Ṁ b́ɔɔd·ō.</i>	"I love him/her."
<i>Ṁ pū b́ɔɔd·ó-o.</i> (← <i>·ō-ó</i> )	"I don't love him/her."

Irrealis mood forms of Pattern LO verbs:

<i>Ò nà b̄ɔɔɪgɪ m.</i>	"He will lose me."
<i>Ò kù b̄ɔɔɪgɪ má.</i>	"He will not lose me."
<i>Ò nà b̄ɔɔɪgɪ bá.</i>	"She will lose them."
<i>Ò kù b̄ɔɔɪgɪ b́áa.</i>	"She won't lose them."
<i>Ò kù b̄ɔɔɪgɪdɪ má.</i>	"He won't be losing me."
<i>Ò kù zābɪdɪ má.</i>	"He won't be fighting me."
<i>Ò kù zāb·ó-o.</i>	"He won't fight him."
or <i>Ò kù zāb·o-o.</i>	"He won't fight him."

Irrealis Pattern LO and indicative Pattern H thus contrast before object pronouns in 2-mora stems:

*zābe* + *m*<sup>a</sup> → *zābi m*<sup>a/</sup> "...will fight me"  
*dōge* + *m*<sup>a</sup> → *dōgí m*<sup>a</sup> "...cook for me"

All non-enclitic liaison words begin with a fixed-L toneme [8.3.1](#) except for catenator-*n*, which has no toneme.

Verbs before the fixed-L clitics show the same final tonemes as with liaison enclitics, except that M tonemes necessarily change to H.

Perfectives without tone overlay:

*Kà tì dí\_* *bà dīb.* "And we ate their food."  
 And **1PL** eat **3PL** food.

*Kà ò bódígì\_* *bà bùmí.* "And he lost their donkeys."  
 And **3AN** lose **3PL** donkey:PL.

*Kà ò dōgí\_* *bà dīb.* "And he cooked their food."  
 And **3AN** cook **3PL** food.

Imperfective without tone overlay:

*Kà bà dītī\_* *bá.* "And they were eating them."  
 And **3PL** eat:PFV **3PL.OB**.

but *Kà bà dítí\_* *bà dīb.* "And they were eating their food." (ML → HL)  
 And **3PL** eat:IPFV **3PL** food.

Noun LFs before fixed-L liaison words end in H toneme as expected; I could not elicit such forms reliably from informants, but examples appear in the audio NT:

*bane na yel Zugsobi ba tuuma a si'em la*  
*bàni nà yēl Zūg-sóbí* *bà tūmá\_* *ə* *àñ sī'em lā*  
**REL.PL IRR** say head-one:SG **3PL** deed:PL **NZ COP INDF.ADV ART**  
 "Those who will tell the Lord how their deeds are." (Heb 13:17, 1996)

Before nominaliser-*ñ* a final M tone becomes H:

*dāy* *lá\_* *ə* *ñyē ná'àb* *lā* "the man having seen the chief"  
 man:SG **ART NZ** see chief:SG **ART**

Before catenator-*n* the final toneme of a modified LF is M after M toneme and L otherwise. M spreading follows whenever the *preceding* word would induce it [8.3](#).

*M̄ nók sú'ugù\_ø kǎ́ nīm lā.*

**1SG** pick.up knife:**SG** **CAT** cut meat:**SG** **ART**.

"I cut the meat with a knife."

*amaa o kena ye o tum tisi ba*

*àmáa ò kē nā yé ò tùm\_ø tìsì\_bā*

but **3AN** come hither that **3AN** work **CAT** give **3PL.OB**

"but he came to serve them" (Mt 20:28)

### 8.3 M spreading

Most words other than proclitics ending in L or H tonemes cause an initial L toneme in a following word to change to H toneme. If the L toneme is "fixed" [8.3.1](#) a preceding M toneme becomes H instead [5.3](#). M spreading follows

all words, clitic or free, ending in M toneme

all other words which are not proclitic *except*

Verb perfectives without independency-marking tone overlay [19.6.1.1](#)

Certain words affected by L spreading [8.4](#)

Words ending in an affix vowel with H toneme

bound subject pronouns [19.6.1.2](#) (including ellipted subjects [24.1.5.2](#))

*ò ì bà* *except* preceding independency marking

*m̄ fù tì yà* *except* preceding independency marking after *yē*

The VP catenator *n* is transparent to M spreading [8.2.3](#).

The number and manner-adverb prefixes *à-* [14.2](#) [14.3](#) are followed by M spreading to the stem, probably reflecting an origin as class agreement flexions.

M spreading crosses phrase boundaries if there is no intervening pause, but it does not occur after conjunctions [24.1.3](#) or presubject adjuncts [25.1.1](#).

*Bà tìs ná'àb lā búŋ.*

**3PL** give chief:**SG** **ART** donkey:**SG**.

"They gave the chief a donkey (*bùŋ*<sup>a</sup>)."

*Bà ñwè' ná'àb lā súŋā.* "They beat the chief well (*sùŋā*<sup>+/</sup>)."

**3PL** beat chief:**SG** **ART** good:**ADV**.

Raising is absent after words ending in an affix vowel with H toneme:

*M̐ d̐iga l̐ú yā.* "My dwarfs have fallen down."  
**1SG dwarf:PL fall PFV.**

but *M̐ yōgumá l̐ù yā.* "My camels have fallen down."  
**1SG camel:PL fall PFV.**

M spreading examples, with *zàb<sup>ε</sup>* "fight" *gōs<sup>ε</sup>* "look at" *nà'ab<sup>a</sup>* "chief":

*Kà*-clause, without independency-marking tone overlay; all subject pronouns are followed by raising; perfectives are followed by raising only if ending in M:

*Kà m̐ záb nà'ab lā.* "And I've fought the chief."  
*Kà ò záb nà'ab lā.* "And he's fought the chief."  
*Kà m̐ gōs ná'àb lā.* "And I've looked at the chief."  
*Kà ò gōs ná'àb lā.* "And he's looked at the chief."

Main clause, with independency marking; the verbs have tone overlay and are now both followed by M spreading; 3rd persons are not followed by M spreading:

*M̐ záb ná'àb lā.* "I've fought the chief."  
*Ò zàb ná'àb lā.* "He's fought the chief."  
*M̐ gōs ná'àb lā.* "I've looked at the chief."  
*Ò gòs ná'àb lā.* "He's looked at the chief."

A minimal pair: *ba* "them" is followed by M spreading; *bà* "they, their" is not:

*Ò gòsī bá bédugū.* "She looked at them a lot." (*ba* object)  
*Ò gòsī bà bédugū.* "She looked at a lot of them." (*bà* possessive)

After proclitics ending in M toneme this is transparent tone spreading, H representing ML on a single mora [5.1](#). Clitic pronouns have fixed-L tonemes for my informants even when followed by M spreading, but in such cases ILK and Niggli's materials show them carrying M tonemes, which can be taken as having given rise to floating M tonemes in current Agolle. To account for M spreading after SFs ending in H or L, floating tonemes can similarly be invoked, historically arising from the tonemes of affix vowels deleted by apocope. However, the occurrence of M spreading after SFs ending in H or L is now almost entirely determined morphosyntactically. Words with segmentally identical sg and cb forms ending in L like *mà* "mother" *zùà* "friend" *dù'átà* "doctor" and *lànning* "squirrel" [9.2.2](#) distinguish a sg followed by M spreading from a cb which is not. The only Pattern LO invariable verb with no suffix,

*bè* "exist", is followed by M spreading. *LÈÈ* "but" is followed by M spreading when affected by independency marking [19.6.1.1](#) but it is not a verb, has no flexion, and has not undergone apocope. An analogous case is the "consonant mutations" of Insular Celtic, where loss of word-final segments has led to original sandhi phenomena becoming pure morphosyntactic processes.

### 8.3.1 Fixed L tonemes

Certain words carry an initial/sole L toneme which is never subject to M spreading. These fixed-L words comprise all non-enclitic liaison words [8.2.2](#) except for catenator-*n*, which is toneless, along with the linker particle *kà* "and":

proclitic personal pronouns	<i>m̀ f̀ ò l̀ t̀ ỳ à b̀</i>
personifier clitics	<i>à- ò- m̀-</i>
<i>à n'ò n</i> <sup>ε</sup> "who?"	
nominaliser	<i>ò</i>
all words with number prefixes	<i>à- b̀- b̀-</i>
manner-adverb prefix	<i>à-</i>
linker particle	<i>k̀</i>

Initial *à-* in loanwords may be treated as fixed-L by analogy [15.1](#).

**If there is no intervening pause, a preceding M toneme must become H:**

*B̀ à k̀ò v̀ d̀ í\_ b̀ á.* "They kill them."  
**3PL kill:IPFV 3PL.OB.**

but *B̀ à k̀ò v̀ d̀ í\_ b̀ à b̀ ū v̀ s.* "They kill their goats."  
**3PL kill:IPFV 3PL goat:PL.**

*L̀ ò à n\_ é\_ à- d̀ à a l̀ ú\_ ŋ.* "It's a stork"  
**3INAN COP FOC PERS-stork:SG.**

*b̀ a d̀ i i b̀ n\_ ỳ i t\_ n\_ a' a t\_ e\_ ŋ\_ l\_ a\_ n\_ a\_ z\_ u\_ g*  
*b̀ à d̀ í\_ v̀ b̀ ò\_ ò\_ ỳ i\_ t\_ n\_ á- t\_ ē\_ ŋ\_ l\_ ā\_ n\_ ā\_ z\_ ú\_ g*  
**3PL food NZ emerge:IPFV king-land:SG ART hither upon**  
 "because their food came from the king's land" (Acts 12:20, 1996)

*w\_ ū\_ s\_ a\_ a\_ n\_ a\_ n\_ i\_ i\_ a\_ n\_ k\_ y\_ a\_ n\_ y\_ a' a\_ ŋ\_ n\_ t\_ i\_ p\_ a\_ a\_ e\_ y\_ a\_ t\_ u\_ o\_ n\_ a\_ l\_ a.*  
*w\_ ū\_ v\_ s\_ á\_ a\_ ∅\_ n\_ ā\_ a\_ n\_ i\_ j\_ á\_ ñ\_ k\_ y\_ à\_ ñ\_ y\_ á' a\_ ŋ\_ n\_ t\_ í\_ p\_ á\_ e\_ y\_ à\_ t\_ ū\_ e\_ n\_ a\_ l\_ ā*  
**like rain:SG NZ then jump 2PL behind CAT afterwards reach 2PL before.ADV ART**  
 "like when lightning leaps from East to West" (Mt 24:27, 1996)



## 8.4 L spreading

L spreading takes place exclusively within NPs and AdvPs. It occurs after any free form as a pre-dependent, with the exception of the contrastive personal pronouns (like *mān* "my"); it also occurs after any cb ending in M toneme, whether as modifier or head. Historically, L spreading after cbs may have arisen from a final L toneme like that imposed on verb perfectives 8.2.3; this might explain its absence after some 1-mora forms 7.2.4. After free pre-dependents, it may reflect an old associative L toneme.

L spreading affects only the one following word, which may be a cb.

Words beginning with M or H tonemes change all tonemes to L<sup>7</sup>.

Pattern L words are completely unaffected.

L spreading applies before initial M spreading; in the majority of cases the preceding word also induces M spreading, and the new initial L toneme becomes H.

Examples with a cb as head:

<i>bù-pìəlìg<sup>a</sup></i>	"white goat"	<i>bù-pāalìg<sup>a</sup></i>	"new goat"
<i>bī-púŋ-pìəlìg<sup>a</sup></i>	"white girl"	<i>bī-púŋ-pāalìg<sup>a</sup></i>	"new girl"
<i>n̄-píəlìg<sup>a</sup></i>	"white hen"	<i>n̄-pāalìg<sup>a</sup></i>	"new hen"

Cb as premodifier (*n̄ɔr<sup>ε/</sup>* "mouth", *dīəs<sup>a/</sup>* "receiver" pl *dīəsídìb<sup>a</sup>*):

<i>n̄-dí'əs<sup>a</sup></i>	"chief's interpreter"
pl <i>n̄-dí'əsídìb<sup>a</sup></i>	

No L spreading after personal pronouns:

<i>̀m̄ bīg</i>	"my child" ( <i>bīg<sup>a</sup></i> )
<i>̀m̄ tìg</i>	"my tree" ( <i>tìg<sup>a</sup></i> )
<i>mān bīg</i>	"my child"
<i>mān tìg</i>	"my tree"
<i>̀m̄ gbīgim</i>	"my lion" ( <i>gbīgim<sup>nε</sup></i> )
<i>̀m̄ yūgúm</i>	"my camel" ( <i>yūgúm<sup>nε</sup></i> )

L spreading after words which do not also induce M spreading:

<i>̀m̄ b̄jēyá b̄iis</i>	"my elder same-sex siblings' children ( <i>b̄iis<sup>ε</sup></i> )"
<i>̀m̄ b̄jēyá f̄uud</i>	"my elder same-sex siblings' clothes ( <i>f̄uud<sup>ε/</sup></i> )"

7) Unfortunately I did not think to check how words with M prefixes behave with L spreading. e.g *dāy lā ?tíntòŋrìg/tíntòŋrìg/tíntòŋrìg* "the man's mole (*tíntòŋrìg<sup>a</sup>*)."

L spreading after free noun phrases also followed by M spreading:

<i>dāy bîg</i>	"a man's child" (cf <i>dāy-bîg<sup>a</sup></i> "male child")
<i>dāy tîg</i>	"a man's tree"
<i>nà'ab bîg</i>	"a chief's child"
<i>dāy lā gbígìm</i>	"the man's lion"
<i>dāy lā yúgùm</i>	"the man's camel"

Unlike M spreading, L spreading occurs only *within* NPs and AdvPs; there is thus a tonal minimal pair between

<i>Bà tìs ná'àb lā bîg.</i>	"They've given (it) to the chief's child." (L spreading applied to <i>bîg<sup>a</sup></i> "child")
<i>Bà tìs ná'àb lā bîg.</i>	"They've given the chief a child." (No L spreading applied to <i>bîg<sup>a</sup></i> )

It occurs regardless of the meaning or rôle of the preceding dependent:

<i>m̄w̄ḡu-n wábùg lā</i>	"the wild (in-the-bush) elephant ( <i>wābug<sup>3/</sup></i> )"
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After *heads*, L spreading only occurs with cb heads, not free forms:

	<i>kūg-yínnì</i>	"one stone" with <i>yínnì</i> as adjective <a href="#">16.4.2.1</a>
but	<i>kūḡur yīnní</i>	"one stone"
	<i>wābug lā</i>	"the elephant"
	<i>wāb̄is pīiga</i>	"ten elephants"
	<i>wāb̄is pīiga lā</i>	"the ten elephants"

The final element of a compound induces following M spreading in accordance with the usual rules [8.3](#) regardless of whether it has been subject to L spreading, so that M spreading appears everywhere except after words ending in a affix vowel with H toneme and cbs ending in L or H:

<i>b̄w̄-w̄k</i>	"tall goat"
<i>n̄w̄-w̄k</i>	"tall hen"
<i>b̄w̄-w̄k-p̄iəl̄ìg</i>	"tall white goat"
<i>b̄w̄-w̄k-p̄áal̄ìg</i>	"tall new goat"
<i>n̄w̄-w̄k-p̄iəl̄ìg</i>	"tall white hen"
<i>n̄w̄-w̄k-p̄áal̄ìg</i>	"tall new hen"

*b̀̀- w̄k díib*

"a tall goat's food"

*n̄- w̄k díib*"a tall hen's food" (*d̄ib*<sup>ɔ</sup> "food")

**A word with only one or two tonemes, affected by both M and L spreading after a free pre-dependent is not itself followed by M spreading.**

The final vowel mora of a word affected by L spreading always has M toneme before the locative enclitic *n*<sup>ɛ</sup>:

*dāy lā p̄ɔɔḡ-n*"in the man's field (*p̄ɔɔḡ*<sup>ɔ</sup>)"*dāy lā p̄uv̄ḡ-n*"inside the man" (*p̄uv̄ḡ*<sup>a</sup> "inside")like *dāy lā d̄ɔɔḡ-n*"in the man's hut (*d̄ɔɔḡ*<sup>ɔ</sup>)"

Examples, using the frames "the man's (*dāy lā*) X has got lost (*b̀̀d̄iḡ yā*)" and "my elder same-sex siblings' (*m̄ b̄jēyá*) X has got lost":

Pattern L, not subject to L spreading:

*b̀̀n̄<sup>a</sup>* "donkey"*Dāy lā b̀̀n̄ b̀̀d̄iḡ yā.**àñrv̄ḡ<sup>ɔ</sup>* "boat"*Dāy lā àñrv̄n̄ b̀̀d̄iḡ yā.**d̄ɔɔḡ<sup>ɔ</sup>* "house"*Dāy lā d̄ɔɔḡ b̀̀d̄iḡ yā.*

Pattern HO nouns appear unchanged after L and M spreading, and by analogy have unchanged following tone sandhi; words like *náaf*<sup>ɔ</sup> "cow" fluctuate:

*à-gáùñḡ<sup>ɔ</sup>* "pied crow"*Dāy lā gáùñḡ b̀̀d̄iḡ yā.**náaf<sup>ɔ</sup>* "cow"*Dāy lā náaf b̀̀d̄iḡ yā* or *Dāy lā náaf b̀̀d̄iḡ yā.*

Pattern H and O nouns, affected by L spreading:

*wābuḡ<sup>ɔ</sup>/* "elephant"*Dāy lā wāb̀̀ḡ b̀̀d̄iḡ yā.**p̄ɔɔḡ<sup>ɔ</sup>/* "field"*Dāy lā p̄ɔɔḡ b̀̀d̄iḡ yā.**bān̄<sup>a</sup>* "ring"*Dāy lā bān̄ b̀̀d̄iḡ yā.**p̄uv̄ḡ<sup>a</sup>* "inside"*Dāy lā p̄uv̄ḡ b̀̀d̄iḡ yā.*but *wābuḡ<sup>ɔ</sup>/* "elephant"*M̄ b̄jēyá wāb̀̀ḡ b̀̀d̄iḡ yā.*

no M spreading

*bān̄<sup>a</sup>* "ring"*M̄ b̄jēyá bān̄ b̀̀d̄iḡ yā.*

no M spreading

*yūgv̄dir<sup>ɛ</sup>* "hedgehog"*M̄ b̄jēyá yūgv̄dir b̀̀d̄iḡ yā.*

no M spreading

*yūgv̄dir<sup>ɛ</sup>* "hedgehog"*Dāy lā yūgv̄dir b̀̀d̄iḡ yā.*

three tonemes

L spreading applies sequentially, reflecting the substructure of NPs and AdvPs.

When L spreading affects the first component of an existing compound, the second component retains any effects of prior L and M spreading even though the first element no longer ends in M toneme:

<i>bù-pìəlìg</i>	"white goat"
<i>bù-pāalíg</i>	"new goat"
<i>n̄-pìəlìg</i>	"white hen"
<i>n̄-pāalíg</i>	"new hen"

<i>dāy lā bú-pìəlìg</i>	"the man's white goat"
<i>dāy lā bú-pāalíg</i>	"the man's new goat"
<i>dāy lā n̄-pìəlìg</i>	"the man's white hen"
<i>dāy lā n̄-pāalíg</i>	"the man's new hen"

but <i>dōg-kánā</i>	"this pot" ( <i>dōk</i> <sup>ɔ</sup> / cb <i>dōg</i> - "pot")
[ <i>sālima dúg-</i> ]kánā	"this [golden pot]"

The order of applications of L spreading may also be revealed by the absence of M spreading after some words affected by L spreading (see above.) Thus

[ <i>fūug dɔ̀g</i> ]	"tent" ( <i>fūug</i> <sup>ɔ</sup> / "cloth", <i>dɔ̀g</i> <sup>ɔ</sup> "house")
<i>pù'usug</i> [ <i>fúùg dɔ̀g</i> ]	(not *[ <i>pù'usug fúùg</i> ] <i>dɔ̀g</i> )
	"tabernacle" ( <i>pù'usug</i> <sup>ɔ</sup> "worship")

*Lì kā'* [[[*dāy lā bìg*] *bìər*] *náaf*] *zòvɛ̄*.

"It's not the man's child's elder-same-sex-sibling's cow's tail." WK  
(*bīg*<sup>a</sup> "child" *bìər*<sup>ɛ</sup>/ "elder sib of same sex" *náaf*<sup>ɔ</sup> "cow" *zòvɛ̄*<sup>ɛ</sup> "tail")

## 8.5 Segmental contact phenomena

### 8.5.1 Consonant assimilation

Both the initial consonant and the emic nasalisation of the deictic *ńwà*<sup>+</sup> "this" are lost when it appears as an enclitic after a word ending in a consonant:

<i>bīs ńwá</i>	"these children"	[bi:sa]
<i>zàam ńwá</i>	"this evening"	[za:ma]
but <i>pɹ'ā ńwá</i>	"this woman" (e.g. as vocative)	[p <sup>h</sup> ɹ̥awǎ]

The initial *l* of the definite article *lā*<sup>+</sup> assimilates totally to a preceding word-final *-r*, and [r:] simplifies to [r]:

<i>yīr lā</i>	"the house"	[jira]
<i>pòkòǎnr lā</i>	"the widow"	[pʰɔkʰɔ:ra]

Toende Kusaal shows this assimilation after all final consonants (Niggli 2012). The 1976 NT occasionally shows forms like *nidiba* for *nīdib lā* "the people."

Initial *n* of focus-*nē*<sup>+/</sup> often assimilates completely to a preceding word-final *d t n r l m* in normal rapid speech. Subsequently [r:] becomes [r] and [d:] becomes [d]:

<i>Bà kpìid nē.</i>	"They're dying."	[ba k̄pi:dɛ]
<i>M̄ zót nē.</i>	"I'm afraid."	[m̄ zɔt:ɛ]
<i>M̄ mór nē bīisá àyí.</i>	"I have two children with me."	[m̄ mɔrɛ bi:sa:ji]
<i>Lì pè'ei nē.</i>	"It's full."	[lɪ pʰɛ:l:ɛ]
<i>Lì sàñ'am nē.</i>	"It's spoilt."	[lɪ sã:m:ɛ]

Other accounts of Kusaal have taken this as a "progressive flexion" *-de/te*.

Final nasal consonants of proclitics, cbs and noun prefixes assimilate to the place of articulation of a following stop:

<i>dànkòŋ</i>	"measles"	[daŋkʰɔŋ]
<i>nīn-bámmā</i>	"these people"	[nimbam:a]

Before *s z* such word-final nasals are realised as [ŋ]; in the case of noun prefixes, I follow traditional orthography in writing these nasals as *n* everywhere except before *p b m*, where I write *m*.

<i>bōn-zíidìr</i>	"thing for carrying on head"	[bɔŋzi:dir]
<i>nàm zī'</i>	"still not know"	[naŋzɪ]

### 8.5.2 Loss of nasalisation

Word-final short vowels denasalise before a clitic with initial *n* or *m*:

<i>àwá nā</i>	"like this here" ( <i>àñwá</i> "like this")
<i>kē nā</i>	"come hither" ( <i>kēñ</i> <sup>+</sup> "come")

Some unstressed CVñ- elements lose nasalisation even when the following consonant is not a nasal. Thus with compounds of *sūñf*<sup>ɔ</sup> "heart" like *sū-málsim*<sup>m</sup> "joy", *sūñ-kpí'òŋ*<sup>ɔ</sup> "boldness", *sūñ-péèñ*<sup>nɛ</sup> "anger" the 1996 NT and older sources write *sumalism sukpi'oj/sukpi'euj supeen*, reflecting the bleaching and phonological simplification which has created noun prefixes from some original cbs [14.1.4](#). KB restores the nasalisation in writing: *sunkpi'euj* "boldness", *sunpɛɛn* "anger."

With *àɛ̃<sup>a</sup>* "be something/somehow" there is loss of nasalisation before the focus particle *nē<sup>+/</sup>* (for the loss of the *ɛ* see below [8.5.3](#)):

*M á nē dāy.* "I'm a man."  
but *Lì àñ súnā.* "It's fine."

Older written materials write *àñ* directly before a complement as *a* not *ann*, but KB consistently has *an* [ã] whenever the form is not followed by *nē<sup>+/</sup>*.

### 8.5.3 Loss of fronting

Regardless of origin, fronting diphthongs occur only word-finally and before *y*.

Combining forms, and verb forms which are not phrase final, may not end in fronting diphthongs unless the next word begins with *y*. Otherwise, the fronting diphthongs are replaced by the corresponding monophthongs [4.1.1](#):

<i>aɛ̃</i> → <i>a</i>	<i>oɛ̃</i> → <i>o</i>	<i>uɛ̃</i> → <i>u</i>
<i>ae</i> → <i>aa</i>		<i>ue</i> → <i>uu</i>
	<i>ie</i> → <i>iə</i>	<i>ue</i> → <i>uə</i>

*sāɛ̃ñ* "blacksmith"  
*sāɛ̃ñ lā* "the blacksmith"  
but *sàñ-kàñā* "this blacksmith"

<i>Ò sù'v lór.</i>	"She owns a lorry."	<i>sū'e<sup>ya/</sup></i>	"own"
<i>Lì àñ súnā.</i>	"It's good."	<i>àɛ̃<sup>a</sup></i>	"be something"

*Ti ya'a vve, ti vve tis Zugsɔb la.*

*Tì yá' vūɛ̃, tì vú nē\_∅ tís Zūg-sób lā.*

**1PL** if be.alive, **1PL** be.alive **FOC CAT** give head-one:**SG ART**.

"If we live, we live to the Lord." (Rom 14:8): (*vūɛ̃<sup>a/</sup>* "be alive")

*Èñrigim\_ ∅ pāa dū'átà.*

Shift.along:**IMP CAT** reach doctor:**SG**.

"Shift along up to the doctor." (*pāe<sup>+/</sup>* "reach")

<i>Lì nàa nē.</i>	"It is finished."	<i>nāe<sup>+/</sup></i>	"finish"
<i>Dúə wēlá?</i>	"[You] arose how?" <a href="#">31</a>	<i>dūe<sup>+/</sup></i>	"arise"

See also the examples with fusion verb perfectives before liaison at [8.2.1](#).

The SF of the negative verb *kā'e*<sup>+</sup> "not be" loses the final *e* before the particle *nē* or an object; *kā'e* only occurs VP-finally:

*Sɔ' kae na nyanji dɔl zugdaannam ayi'...*

*Sɔ' kā'e\_∅ ná ñyāŋi\_∅ dɔl zūg-dáàn-nàm àyí ...*

**INDF.AN NEG.BE CAT IRR** prevail **CAT** follow head-owner:**PL NUM:two** ...

"Nobody can serve two masters." (Mt 6:24)

*Dāy kā'e dɔɔgū-n láa +∅.*

**Man:SG NEG.BE room:SG-LOC ART NEG.**

"There's no man in the room." (*dɔɔgū-n lā* is a clause adjunct)

but *Dāy lā kā' dɔɔgū-n láa +∅.*

**Man:SG ART NEG.BE room:SG-LOC ART NEG.**

"The man's not in the room." (*dɔɔgū-n lā* is the complement of *kā'*)

cf *Ò kā' bīiga +∅.* "She is not a child."

**3AN NEG.BE child:SG NEG.**

This fronting loss is regular in my informants' speech and in the audio version of the NT, but older written materials very frequently still write fronting diphthongs:

<i>voen</i>	= <i>vōun</i>	"would live" (Gal 3:21, 1996)
<i>Kristo da faaen ti</i>	= <i>Kristo dá fāañ tí</i>	"Christ saved us." (Gal 5:1)
<i>m wa'e ne</i>	= <i>m wá'a nē.</i>	"I'm going" ILK

*Àeñ*<sup>a</sup> "be something" always appears as *aa* before liaison; this might be due to lack of stress 2.2, but it seems more likely that the rarity of phrase-final *àeñ*<sup>a</sup> 21.2 has prevented the analogical introduction of phrase-final spelling phrase-medially. Many other cases involve *fāeñ*<sup>+/</sup> "save", perhaps written *faaenn* specifically to distinguish the forms from those of *fāñ*<sup>+</sup> "grab, rob"; the 1996 NT has two instances of the certainly spurious *faaenm* for imperative *faanm*; contrast KB *Fu yadda ningir la faanf* "Your faith has saved you." (Lk 7:50.) Cf on *faangid* "saviour" *faangir* "salvation" 15.1. Clearcut errors like *Noñilim pu naae da* (1 Cor 13:8, 1996 NT) for KB *Noñilim pu naada* "Love does not come to an end" confirm that the orthographic tradition has encompassed the writing of fronting diphthongs for undoubted monophthongs.

## Morphology

### 9 Noun flexion

#### 9.1 Noun classes

Nouns inflect for singular and plural by adding noun class suffixes to the stem; the bare stem is used as a combining form (cb) in composition with a following nominal. This is a regular and frequent occurrence, being for example the regular method of construing a noun with a following adjective or demonstrative. The cb is always subject to apocope, as it can never appear clause-finally or before liaison. Archaisms like the place name *Wìdì-ńyá'anj*<sup>a</sup> "Woriyanga" (*wìd-ńyá'anj*<sup>a</sup> "mare") and *nwadibil* (Mt 2:2, 1996) for *ńwā́d-bíl*<sup>a</sup> "star" (KB *nwadbil*) suggest that consonant-final cbs once ended in an epenthetic vowel, but this is no longer the case.

In the paradigms, noun forms are cited as sg, pl and cb in order.

Each noun class suffix has a basic singular, plural or non-count meaning. Count nouns pair a singular and a plural suffix. Five pairings account for the majority of count nouns: these are labelled using superscript notation forms of the suffixes, as the <sup>a</sup>*|b*<sup>a</sup>, <sup>g</sup>*|s*<sup>ε</sup>, <sup>g</sup>*|d*<sup>ε</sup>, <sup>r</sup>*|a*<sup>+</sup> and <sup>f</sup>*|t*<sup>+</sup> **noun classes**. Two unpaired non-count suffixes *-b*<sup>ɔ</sup> *-m*<sup>m</sup> form two more noun classes mostly containing mass nouns.

The noun classes were once grammatical genders, with separate 3rd person pronouns and agreement of adjectives and numerals. Kusaal, like Dagbani and Mooré, now has a natural gender system opposing persons and non-persons, with pronouns based respectively on the original <sup>a</sup>*|b*<sup>a</sup> and <sup>r</sup>*|a*<sup>+</sup> classes [16.2.2](#). A few isolated remnants of agreement will be pointed out as they occur.

Apocope of final vowels can leave expected morphological forms ambiguous, close to or identical with another form from the paradigm or from another word. Ambiguity may be avoided by **substitution** of a different flexional suffix for that expected for the class (cf Inkelas, 3.1 "Suppletive Allomorphy.") This has become *regular* in the case of class <sup>g</sup>*|d*<sup>ε</sup> stems ending in *m n* following a short vowel, which always use the plural suffix *-a*<sup>+</sup> instead of *-d*<sup>ε</sup>, creating a <sup>g</sup>*|a*<sup>+</sup> **subclass**. Adjectives avoid potentially ambiguous suffixes altogether [10.1](#).

Two further subclasses have arisen by **reinterpretation** of SFs of one flexional suffix as the SF of a different suffix and remodelling of the LF [2.3.2](#). The <sup>r</sup>*|b*<sup>a</sup> subclass of <sup>a</sup>*|b*<sup>a</sup> has reinterpreted SFs ending in *n r l* as *n*<sup>nε</sup> *r*<sup>rε</sup> *l*<sup>lε</sup> instead of *n*<sup>a</sup> *r*<sup>a</sup> *l*<sup>a</sup>, and the <sup>g</sup>*|s*<sup>ε</sup> subclass of <sup>g</sup>*|s*<sup>ε</sup> has reinterpreted SFs ending in *g* after a rounded vowel mora as *g*<sup>ɔ</sup> instead of *g*<sup>a</sup>.

Two remaining subclasses are **semantically** motivated: a subclass of <sup>a</sup>*|b*<sup>a</sup> referring to older/important people uses *b*<sup>a</sup> as the *singular* suffix, and names of languages belong to a subclass of <sup>r</sup>*|a*<sup>+</sup> with the singular suffix *l*<sup>ε</sup>.

The regular classes and subclasses are thus as follows:



$a b^a$	$sīd^a$	$sīd b^a$	$sìd-$	"husband"
$r^ε b^a$	$Bìn^{nε}$	$Bìm^{ma}$	$Bìn-$	"Moba person"
$b^a$ (sg)	$nà'ab^a$	$nà'-nàm^a$	$nà'-$	"chief"
$g^a s^ε$	$bōvg^a$	$bōvs^ε$	$bù-$	"goat"
$g^ɔ s^ε$	$nú'ùg^ɔ$	$nú'ùs^ε$	$nū'-$	"hand"
$g^ɔ d^ε$	$dòɔg^ɔ$	$dòɔd^ε$	$dò-$	"hut"
$g^ɔ a^+$	$gbàɯŋ^ɔ$	$gbàna^+$	$gbàn-$	"book"
$r^ε a^+$	$nōɔr^ε/$	$nōyá^+$	$nō-$	"mouth"
$ʃ^ε$	$Kūsáàl^ε$			"Kusaal"
$f l^+$	$mòlɪf^ɔ$	$mòlɪ^+$	$mòl-$	"gazelle"
$b^ɔ$	$sā'ab^ɔ$		$sà'-$	"porridge"
$m^m$	$tìlm^m$		$tì-$	"medicine"

*M*-stems with long root vowels in the  $a|b^a$  class avoid the plural suffix  $b^a$  9.3.1. Some  $g^a|s^ε$  class nouns with human reference have alternative plurals with  $b^a$  9.3.2. Countable nouns in the  $m^m$  class form plurals with  $-a^+$  or  $-s^ε$  or  $nàm^a$  9.4 9.3.7. The small  $f|l^+$  class has some members with  $f|l^+$  suffixes in only one number 9.3.5. The sg suffix  $-l^a$  is found only in the irregular adjective  $bīl^a$  "little" 10.1.

There are few other cases of irregular sg/pl pairing with nouns; examples are

$pē'og^ɔ/$	$pē'εs^ε/$	$pē'-$	"sheep"
$gbè'og^ɔ$	$gbè'εd^ε$	$gbè'-$	"forehead"
	$gbèda^+$		
$bḷāyũk^ɔ$	$bḷāñ'ad^ε$	WK $bḷāñ'-$	"shoulder"
	$bḷāñ'ada^+$	SB	

The sg SF is usually enough to identify the noun class correctly, given whether the word has human reference. Where it is not, there is often vacillation between classes, suggesting that speakers actually do use these criteria to determine class membership; compare too the assignment of loanwords to noun classes 9.7.

Nouns with sg SF ending in a long vowel, or in an unrounded vowel mora followed by a velar, belong to  $g^a|s^ε$ ; nouns ending in a rounding diphthong followed by a velar belong to  $g^ɔ|d^ε$  or its  $g^ɔ|a^+$  subclass, except for a few in the  $g^ɔ|s^ε$  subclass of  $g^a|s^ε$ . All nouns in SF  $-f$  belong to  $f|l^+$ .

Human-reference nouns otherwise default to  $^a|b^a$  (or its  $r^\varepsilon|b^a$  subclass), except for stems ending in a long vowel, which have been transferred to  $r^\varepsilon|a^+$  in Agolle Kusaal. Exceptional are *nàyyīg<sup>a</sup>* "thief" ( $^a|b^a$ ) *bā'a<sup>=</sup>* "traditional diviner" ( $^a|b^a$ ) *zōm<sup>nε</sup>* "fugitive" ( $r^\varepsilon|a^+$ ). The  $b^a$ -singular subclass is responsible for most human-reference nouns in sg SF *-b*, and also for *sàam<sup>ma</sup>* "father", *dìam<sup>ma</sup>* "man's parent-in-law", *dàyáam<sup>ma</sup>* "woman's parent-in-law."

Gerunds in SF *-m* belong to  $b^ɔ$ ; otherwise, mass nouns in *-m* belong to the  $m^m$  class, and *-b* or *-p* to the  $b^ɔ$  class.

Names of languages belong to the  $l^\varepsilon$  subclass of  $r^\varepsilon|a^+$ .

Non-human-reference count nouns ending in *l n r* belong to the  $r^\varepsilon|a^+$  class, as do those ending in *m* apart from a few  $m^m$  class count nouns like *yām<sup>m/</sup>* "gall, common sense" and hence "gall bladder", *pūum<sup>m/</sup>* "flower(s), flora", *dàalím<sup>m</sup>* "male sex organs", *pò'alím<sup>m</sup>* "female sex organs." *Pīim<sup>m/</sup>* "arrow" is a relic of a lost  $ɔ|^\varepsilon$  class.

### 9.1.1 Noun class and meaning

As with almost all noun class systems, there a number of correlations between class membership and meaning, though with frequent exceptions. Phonologically motivated subclasses have the same correlations with meaning as their main classes.

The association of noun class and meaning can be exploited to change the significance of a stem [12.2](#).

The  $^a|b^a$  class has exclusively human-reference membership, though many nouns referring to people belong to other classes. There is a subclass of nouns for elders and other important people which use the plural  $b^a$  as singular.

The  $g^a|s^\varepsilon$  class has general membership but notably includes the great majority of tree names [32.6](#), many larger animals, and tools. Almost all ethnic group names belong to  $^a|b^a$  or  $g^a|s^\varepsilon$  (*Zàngbèog<sup>ɔ</sup>* "Hausa" and *Nàsāara<sup>+</sup>* "European" are the only exceptions in my materials); the place inhabited by the group has sg *-g<sup>ɔ</sup>* [32.5](#).

The  $g^ɔ|d^\varepsilon$  and  $r^\varepsilon|a^+$  classes are the default non-human countable classes. They include all names of fruits [32.6](#), and most names of body parts [32.7](#). Human-reference nouns in  $g^ɔ|d^\varepsilon$  seem to be pejorative (*bālērvug<sup>ɔ/</sup>* "ugly person", *dàbīog<sup>ɔ</sup>* "coward", *zōlvug<sup>ɔ/</sup>* "fool.") Some original  $^a|b^a$  class nouns have been reallocated to  $r^\varepsilon|a^+$  for phonological reasons e.g. *bīār<sup>ε/</sup>* "elder same-sex sibling."

The subclass in  $-l^\varepsilon$  includes all names of languages.

The small  $f^ɔ|l^+$  class includes two groups: animals, and small round things. It contains all names of seeds. No  $f^ɔ|l^+$  noun refers to people.

The  $b^ɔ$  class has only two members in my own materials that are not gerunds: *sā'ab<sup>ɔ</sup>* "millet porridge, TZ" and *tāñp<sup>ɔ</sup>* "war." There is also a word *kī'ib<sup>ɔ</sup>* "soap" in written materials; WK has instead *kīibú<sup>+</sup>* cb *kīib-*, a Mampruli loan [15.1](#).

The  $m^m$  class includes names of liquids and substances and abstract nouns. There are few count nouns, and none referring to people or animals. Names of liquids are all  $m^m$  or  $b^{\text{p}}$  or formally plural.

Deverbal nouns have predictable class membership: agent nouns belong to  $^a|b^a$ , instrument nouns to  $g^a|s^e$ , and gerunds take  $g^{\text{p}}$   $r^e$   $b^{\text{p}}$  or  $m^m$  by rule [12.1.1.1](#).

## 9.2 Stem levelling

### 9.2.1 Singulars and plurals

Sometimes a morphophonemic rule is triggered only by the singular or plural noun suffix in a paradigm. In such cases the resulting stem allomorphy is often levelled in favour of the form shown in the more frequently used number.

Length changes in CV~CVV root-stems are levelled on the singular in e.g.

$fūug^{\text{p}}$  "clothing"                      pl  $fūt^{e/}$  or  $fūud^{e/}$

and some  $r^e|a^+$  singulars may have short vowels by analogy with plurals [6.1.1.1](#).

Quality changes between singular and plural stem forms occur in the  $g^a|s^e$  class as a result of the merger of nasalised  $iəñ$   $uəñ$  with  $εəñ$   $ɔəñ$  [6.3.1](#):

$nūa^{+/}$  "hen"                       $nōɔs^{e/}$  "hens"

Such alternations are never levelled. However, the distribution of oral  $iə$   $uə$  versus  $εε$   $ɔɔ$  is strikingly different between the  $g^a|s^e$  and the  $g^{\text{p}}|d^e$  classes. There are no stems in final  $uə$  before singular  $g^{\text{p}}$  and very few stems with  $iə$ :  $dābīog^{\text{p}}$  "coward" (pl  $dābīād^{e/}$ ) and  $kpīoŋ^{\text{p}}$  "strong" (pl  $kpīəma^+$ ); there are very few with oral  $εε$  or  $ɔɔ$  before the singular  $g^a$ , e.g.  $Gōɔg^a$  sg of  $Gōɔs^e$  "Goosi clan",  $tè'εg^a$  "baobab". There is an actual alternation in the stems before  $g^a|s^e$  and  $g^{\text{p}}|d^e$  suffixes in

$bīa^+$                        $bīəs^e$                        $bj̄à'-$                       "bad"  
 $bē'og^{\text{p}}$                        $bē'εd^e$                        $bē'-$

$Bīəm^m$  "enemy" is derived from the same root with derivational  $*m$  [13.1.2](#). The alternation is most likely due to a rule  $*iəCv \rightarrow εεCv$ , parallel to  $*uəgv \rightarrow ɔɔgv$  [6.3.2](#), with the plural vowels remodelled on the sg; cf  $lām-fōɔg^{\text{p}}$  ( $\leftarrow *lam-fuəgv$ :  $lām^{m^e/}$  "gum"  $fūe+$  "draw out") pl  $lām-fōɔd^e$  "toothless." The vowel of  $dābīog^{\text{p}}$  "coward" is perhaps reintroduced from  $dābīəm^m$  "fear."

Levelling may account for the lack of any clear pattern in the CVVC~CVC root alternation in flexion [6.1.1.2](#); when length alternations do occur, it is plurals and cbs that have short-vowel allomorphs, which may have been the original rule.

### 9.2.2 Combining forms

Combining forms, lacking a flexional suffix and always subject to apocope, would be often reduced by the usual rules to ambiguous forms. Often the expected cb is replaced by a form which is segmentally **but not tonally** that of the singular.

<i>nīf</i> <sup>ɔ/</sup>	<i>nīn</i> <sup>í+</sup>	<i>nīn-</i> or <i>nīf-</i>	"eye"
<i>zìñ'a</i> <sup>+</sup>	<i>zèñ'ɛs</i> <sup>ɛ</sup>	<i>zìàñ'-</i> or <i>zèñ'-</i>	"red" (adjective)
<i>wōk</i> <sup>ɔ/</sup>	<i>wā'ad</i> <sup>ɛ/</sup>	<i>wā'-</i> or <i>wōk-</i>	"long, tall" (adjective)
<i>tāñp</i> <sup>ɔ</sup>		<i>tāñp-</i>	"war" <a href="#">6.1.1.1</a>
<i>zūg</i> <sup>ɔ/</sup>	<i>zūt</i> <sup>ɛ/</sup>	<i>zū-</i> or <i>zūg-</i>	"head"

Mooré and Toende both show *zu-* consistently in cases where Agolle has *zūg-*:

<u>Mooré</u>	<u>Toende</u>	<u>Agolle</u>	
<i>zusoaba</i>	<i>zùsóp</i>	<i>zūg-sób</i> <sup>a</sup>	"boss"
<i>zúkúká</i>	<i>zùkúk</i>	<i>zūg-kōgvr</i> <sup>ɛ</sup>	"pillow"

*Zūg-sób*<sup>a</sup> "Lord" is very frequently read *Zū-sób*<sup>a</sup> in the audio version of the NT. The cb *zūg-* sometimes behaves tonally like a noun prefix [7.2.4](#).

The "regular" cb of *nīf*<sup>ɔ/</sup> "eye" is *nīn-*, but as a head it appears as *nīf-*:

*nīf-kánā* "this eye"

*Nīn-* still predominates as a premodifier: *nīn-dáa*<sup>=</sup> "face", *nīn-tám*<sup>m</sup> "tears", *nīn-gótis*<sup>ɛ</sup> "spectacles." *Gbàuy*<sup>ɔ</sup> "letter, book" now has the cb *gbàuy-*, but the "regular" cb *gbàn-* still occurred as a generic argument in the 1976 NT e.g. *gbanmi'id gbàn-mī'id* "scribe" ("book-knower") where later versions have *gbaunmi'id*. Similarly, the 1976 NT *ziŋban'ad zīm-gbáñ'àd* "fisherman" has been replaced by KB *ziŋban'ad*.

With *m* and *n* stems, the remodelled forms have become the regular cbs:

<i>zīnzāuy</i> <sup>ɔ/</sup>	<i>zīnzāná</i> <sup>+</sup>	<i>zīnzāuy-</i>	"bat"
<i>àñrvy</i> <sup>ɔ</sup>	<i>àñrma</i> <sup>+</sup>	<i>àñrvy-</i>	"boat"

So too with CV-stems in the *r<sup>ɛ</sup>|a*<sup>+</sup> class:

<i>gbēr</i> <sup>ɛ/</sup>	<i>gbēyá</i> <sup>+</sup>	<i>gbēr-</i>	"thigh"
<i>kùkōr</i> <sup>ɛ/</sup>	<i>kùkōyá</i> <sup>+</sup>	<i>kùkōr-</i>	"voice"
		(but <i>kùkō-títā'ar</i>	"loud voice" NT)

*Vūm*<sup>m/</sup> cb *vūm-* "life", *kūm*<sup>m</sup> cb *kùm-* "death" are probably actual *CVm-* stems.

The cb may be remodelled after the *plural* if there is no sg extant, or if the plural has a distinct specialised meaning:

no sg	<i>kī</i> <sup>+/</sup>	<i>kī-</i> or <i>kā-</i>	"cereal, millet"
<i>lā'aP</i>	<i>līgidi</i> <sup>+</sup>	<i>là'-</i> or <i>lìg-</i>	"cowrie" pl "money"

Two words have distinct sg- and pl-reference cbs:

<i>dāy</i> <sup>+</sup>	<i>dāp</i> <sup>a</sup>	<i>dày-</i> sg <i>dàp-</i> pl	"man, male person"
<i>tāyñ</i> <sup>+/</sup>	<i>tāñp</i> <sup>a/</sup>	<i>tāyñ-</i> sg <i>tāñp-</i> pl	"sib of opposite sex"

Disambiguation is clearly involved with some longer remodelled cbs:

<i>kòlvɔ</i> <sup>ɔ</sup>	<i>kòn</i> <sup>nɛ</sup>	<i>kòlvɔ-</i>	"bag"
<i>lànnɔ</i> <sup>a</sup>	<i>lànnɪs</i> <sup>ɛ</sup>	<i>lànnɔ-</i>	"squirrel"
<i>kòlvɔ-kàŋā</i>	"this bag"	cf cb <i>kòl-</i> from	<i>kòlvɔ</i> <sup>a</sup> "river"
<i>lànnɔ-pìəlvɔ</i>	"white squirrel"	cf cb <i>là-</i> from	<i>lān</i> <sup>nɛ</sup> "testicle"

Remodelling of cbs after sg/pl forms never affects tones, revealing that cases where a sg/pl seems to precede an adjective or modifier pronoun in fact show cbs:

<i>dày-sùŋ</i>	"good man"	cf <i>dāy</i>	"man"
<i>dàp-sùma</i>	"good men"	cf <i>dāp</i>	"men"

Remodelled cbs are traditionally written as separate words; as the orthography does not mark tone, this can lead to ambiguous forms. e.g. *yamug bipuŋ* (Acts 16:16, 1976) for *yàmmug-bī-púŋ* "slave girl" not *yàmmug bí-púŋ* "slave's girl" [16.11.1.5](#).

### 9.3 Noun paradigms

For tones see [7.2](#). Combining forms are frequently remodelled segmentally after the singular [9.2.2](#), regularly so with stems in *m* and *n*.

The default for sg and pl is for class suffixes simply to attach after a stem-final epenthetic vowel or root vowel. Complications arise from rounding of stem-final vowels before the suffix *g*<sup>ɔ</sup> in singulars in *-g*<sup>ɔ</sup> *-k*<sup>ɔ</sup> *-ŋ*<sup>ɔ</sup>, deletion of \**g* after *aa iə uə aañ ɛɛñ ɔɔñ* with the *g*<sup>a</sup>|*s*<sup>ɛ</sup> class sg, consonant assimilation instead of epenthesis in all classes, and the combination of root-vowel-final stems with the flexions <sup>a</sup> sg, <sup>+</sup> pl and <sup>a</sup> pl [6.1.1.1](#) [9.3.1](#).

### 9.3.1 a|b<sup>a</sup> class

Most stems ending in consonants straightforwardly show -<sup>a</sup> in the sg:

<i>sīd<sup>a</sup></i>	<i>sīdɪb<sup>a</sup></i>	<i>sìd-</i>	"husband"
<i>sàal<sup>a</sup></i>	<i>sàalɪb<sup>a</sup></i>	<i>sàal-</i>	"human being"
<i>kpāad<sup>a</sup>/</i>	<i>kpāadɪb<sup>a</sup></i>	<i>kpāad-</i>	"farmer"
<i>kpīkpīn<sup>na</sup>/</i>	<i>kpīkpīnɪb<sup>a</sup></i>	<i>kpīkpín-</i>	"merchant"
<i>sàam-pīt<sup>a</sup>/</i>	<i>sàam-pītɪb<sup>a</sup></i>	<i>sàam-pīt-</i>	"father's younger brother"
<i>bì-pīt<sup>a</sup>/</i>	<i>bì-pītɪb<sup>a</sup></i>	<i>bì-pīt-</i>	"younger child"
<i>wād-tís<sup>a</sup></i>	<i>wād-tísɪb<sup>a</sup></i>	<i>wād-tís-</i>	"lawgiver" NT
<i>zà'-nō-gúr<sup>a</sup></i>	<i>zà'-nō-gúrɪb<sup>a</sup></i>	<i>zà'-nō-gúr-</i>	"gatekeeper" NT
<i>nīd<sup>a</sup>/</i>	<i>nīdɪb<sup>a</sup>/</i>	<i>nīn-</i> irreg	"person"

Most deverbal agent nouns are completely regular:

<i>kūvd<sup>a</sup>/</i>	<i>kūvdɪb<sup>a</sup></i>	<i>kūvd-</i>	"killer"
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Agent nouns from 3-mora stems in *s* regularly drop the *d* formant in sg and cb, which can result in "tonal heteroclites" [7.2.3](#). Many also have *nàm<sup>a</sup>* plurals [9.4](#).

<i>kùəs<sup>a</sup></i>	<i>kūəsɪdɪb<sup>a</sup></i>	<i>kùəs-</i>	"seller"
<i>pù'us<sup>a</sup></i>	<i>pū'usɪdɪb<sup>a</sup></i>	<i>pù'us-</i>	"worshipper"
<i>dì'əs<sup>a</sup></i>	<i>dī'əsɪdɪb<sup>a</sup></i>	<i>dì'əs-</i>	"receiver"
<i>tù'as-tù'as<sup>a</sup></i>	<i>tū'as-tū'asɪdɪb<sup>a</sup></i>	<i>tù'as-tù'as-</i>	"talker"
<i>sīgɪs<sup>a</sup>/</i>	<i>sīgɪsɪdɪb<sup>a</sup></i>	<i>sīgɪs-</i>	"lowerer"
<i>dìs<sup>a</sup></i>	<i>dīs-nàm<sup>a</sup></i>	<i>dìs-</i>	"glutton"

The same behaviour is found with agent nouns from a few other verbs too:

<i>sòs<sup>a</sup></i>	<i>sōsɪdɪb<sup>a</sup></i>	<i>sòs-</i>	"beggar"
<i>tìs<sup>a</sup></i>	<i>tīsɪdɪb<sup>a</sup></i>	<i>tìs-</i>	"giver" WK
<i>kīs<sup>a</sup>/ or kīsɪd<sup>a</sup>/</i>	<i>kīsɪdɪb<sup>a</sup></i>	<i>kīsɪd-</i> (only)	"hater"

These may be original 3-mora stem verbs with \**ss* → *s*. There are also

<i>zàb-zàb<sup>a</sup></i>	<i>zàb-zàb-nàm<sup>a</sup></i> <i>zàb-zābɪdɪb<sup>a</sup></i>	<i>zàb-zàb-</i>	"warrior"
<i>gbān-záb<sup>a</sup></i>	<i>gbān-záb-nàm<sup>a</sup></i>	<i>gbān-záb-</i>	"leatherbeater"
<i>ñwī-ték<sup>a</sup></i>	<i>ñwī-tékɪdɪb<sup>a</sup></i>		"rope-puller"

Exceptionally, consonant assimilation of \**md* does not appear in the plural in

	<i>pɥ'à-sāñ'am</i> <sup>ma</sup>	<i>pɥ'à-sāñ'amɪdɪb</i> <sup>a</sup>	<i>pɥ'à-sàñ'am-</i>	"adulterer"
(cf	<i>yūum-yú'ùm</i> <sup>na</sup>	<i>yūum-yú'ùmnɪb</i> <sup>a</sup>	<i>yūum-yú'ùm-</i>	"singer")

Stems ending in vowels in this class are problematic because of the vowel-initial sg suffix. There is no single systematic rule for the outcome.

Four highly irregular nouns end in diphthongs in the sg [2.3.2](#):

<i>dāɥ</i> <sup>+</sup>		<i>dāp</i> <sup>a</sup>	<i>dàɥ-</i> , <i>dàp-</i>	<a href="#">6.1.1.1</a> "man" ( <i>vir</i> )
<i>tāɥñ</i> <sup>+/</sup>		<i>tāñp</i> <sup>a/</sup>	<i>tāɥñ-</i> , <i>tāñp-</i>	<a href="#">6.1.1.1</a> "sib of opposite sex"
<i>sāeñ</i> <sup>+</sup>	WK	<i>sāañb</i> <sup>a</sup>	<i>sāñ-</i>	"blacksmith"
<i>sāeñ</i> <sup>a</sup>	DK			
<i>sōeñ</i> <sup>+</sup>	WK	<i>sōɔñb</i> <sup>a</sup>	<i>sōñ-</i>	"witch"
<i>sōeñ</i> <sup>a</sup>	DK			

There are also the two original \**g*-stems

<i>pɥ'ā</i> <sup>a</sup> ← * <i>pɥaga</i>	<i>pū'ab</i> <sup>a</sup>	<i>pɥ'à-</i>	"woman, wife"
<i>bā'a</i> <sup>a</sup> ← * <i>ba'aga</i>	<i>bā'ab</i> <sup>a</sup>	<i>bà'a-</i>	"traditional diviner"

Some CVV stems introduce *-d-* in some forms but not others:

<i>wìɪd</i> <sup>a</sup>	<i>wìɪb</i> <sup>a</sup>	<i>wìɪd-</i>	"hunter"
<i>sōñ'ɔd</i> <sup>a/</sup>	<i>sōñ'ɔb</i> <sup>a/</sup>	<i>sōñ'ɔd-</i>	agent noun of <i>sōñ'e</i> <sup>+/</sup> "be better than"
<i>pūkpaad</i> <sup>a/</sup>	<i>pūkpaadɪb</i> <sup>a</sup>	<i>pūkpa-</i>	"farmer" (but <i>kpaad</i> <sup>a/</sup> <i>id</i> is regular)

Sg final *-v* is dropped elsewhere in the paradigm of

<i>pītú</i> <sup>+</sup>	<i>pītɪb</i> <sup>a</sup>	<i>pīt-</i>	"younger sibling of same sex"
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*Sàam-pīt*<sup>a/</sup> "father's younger brother" and *bì-pīt*<sup>a/</sup> "younger child" are regular.

Another solution to the difficulty of adding sg <sup>a</sup> to stems ending in a long vowel is to use the suffix *r<sup>ɛ</sup>* instead; related languages, including Toende Kusaal, keep *-b<sup>a</sup>* plural forms, but in Agolle Kusaal such words have acquired *-a<sup>+</sup>* plurals and passed over completely into the *r<sup>ɛ</sup>|a<sup>+</sup>* class:

Agolle	<i>pùkòǎnr<sup>ε</sup></i>	<i>pùkòǎnya<sup>+</sup></i>	<i>r<sup>ε</sup> a<sup>+</sup></i>	"widow"
Toende	<i>pókóót</i>	<i>pókõp</i>	<i>r<sup>ε</sup> b<sup>a</sup></i>	
Farefare	<i>pókõore</i>	<i>pókõpa</i>	<i>r<sup>ε</sup> b<sup>a</sup></i>	
Agolle	<i>dà-kòǎnr<sup>ε</sup></i>	<i>dà-kòǎnya<sup>+</sup></i>	<i>r<sup>ε</sup> a<sup>+</sup></i>	"bachelor"
Toende	<i>dákóót</i>	<i>dakõp</i>	<i>r<sup>ε</sup> b<sup>a</sup></i>	
Farefare	<i>dàkõore</i>	<i>dakõpa</i>	<i>r<sup>ε</sup> b<sup>a</sup></i>	

This transfer explains several human-reference nouns found in *r<sup>ε</sup>|a<sup>+</sup>*, e.g. *bīār<sup>ε</sup>* "elder sibling of the same sex", *pòǎ'ɔr<sup>ε</sup>* "cripple", *ǎyē'εr<sup>ε</sup>* "next-younger sibling" (but Toende sg *yě'et* pl *yěra id.*)

Stems in a short root vowel followed by single *m n l* regularly adopt a sg form resembling that of the the *r<sup>ε</sup>|a<sup>+</sup>* class [9.3.1.1](#).

Stems in *VVn-* undergo consonant assimilation in the pl: *\*nb* → *mm*:

*sāan<sup>a</sup>* / *sáam<sup>ma</sup>* *sāan-* "guest, stranger"

Stems in *VVm-* have sg *-m<sup>m</sup>* instead of *-m<sup>a</sup>*. The assimilation *\*mb* → *mm* would cause SF sg and pl to coincide at least segmentally; this is avoided by using pl *s<sup>ε</sup>* or by pluralising with *nàm<sup>a</sup>* [9.4](#):

*kpī'im<sup>m</sup>* / *kpī'imís<sup>ε</sup>* *kpī'im-* "dead person, corpse"  
*zū'əm<sup>m</sup>* / *zū'amís<sup>ε</sup>* *zū'əm-* "blind person"  
*tādım<sup>m</sup>* / *tādımıs<sup>ε</sup>* *tādım-* "weak person"  
*tādım-nàm<sup>a</sup>*

In two words WK accepted *-b<sup>a</sup>* pl forms as LFs but not SFs, demonstrating that avoidance of ambiguity drives the variations:

*kpēēñm<sup>m</sup>* *kpēēñmma* LF only  
*kpēēñm-nàm<sup>a</sup>* *kpēēñm-* "elder"  
*bī'əm<sup>m</sup>* *bī'əmma* LF only  
*bī'əm-nàm<sup>a</sup>* *bī'əm-* "enemy"

### 9.3.1.1 *r<sup>ε</sup>|b<sup>a</sup>* subclass

Stems in *l n r* following a *short* root vowel show LF *-ε* with *l* and *n* geminated. This represents remodelling based on the SF [2.3.2](#), which could be the outcome of adding either *-<sup>a</sup>* or *-r<sup>ε</sup>*. If the SF could *not* result from attachment of sg *-r<sup>ε</sup>*, as with stems in *nn mm mn* [6.2.1](#), nouns with *b<sup>a</sup>* plurals always have sg *-<sup>a</sup>*.

The assimilation *\*nb* → *mm* takes place in the plural:



<i>Dàgbān</i> <sup>nɛ/</sup>	<i>Dàgbām</i> <sup>ma/</sup>	<i>Dàgbān-</i>	"Dagomba person"
<i>Bìn</i> <sup>nɛ</sup>	<i>Bìm</i> <sup>ma</sup>	<i>Bìn-</i>	"Moba person"
<i>Kùtān</i> <sup>nɛ/</sup>	<i>Kùtām</i> <sup>ma/</sup>	<i>Kùtān-</i>	member of EW's clan

An *r*-stem with an irregular stem change in the plural is seen in

<i>Mṣr</i> <sup>ɛ/</sup>	<i>Mṣɔm</i> <sup>ma</sup>	<i>Mṣr-</i>	"Muslim"
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Agent nouns from invariable verbs with stems in *-ll* or *-r(r)* not only show alternative *-ɛ* LF sg forms but also have analogical plurals in *-a*<sup>+</sup> alongside *-b*<sup>a</sup>.

	<i>ñyà'an-d̀l</i> <sup>la</sup>	<i>ñyà'an-d̀ll</i> <sup>lb<sup>a</sup></sup>	<i>ñyà'an-d̀l-</i>	"disciple" NT
	<i>ñyā'an-d̀l</i> <sup>lɛ</sup>	<i>ñyā'an-d̀llá</i> <sup>+</sup>	<i>ñyā'an-d̀l-</i>	<i>id</i> WK
	<i>gbàn-zāñ</i> <sup>la/</sup>	<i>gbàn-zāñll</i> <sup>lb<sup>a</sup></sup>	<i>gbàn-zāñl-</i>	"one with a book in hand" KT WK
	<i>b̀- zāñ</i> <sup>la/</sup>	<i>b̀- zāñll</i> <sup>lb<sup>a</sup></sup>	<i>b̀- zāñl-</i>	"goat-carrier" WK
or	<i>b̀- zāñ</i> <sup>lɛ/</sup>	<i>b̀- zāñllá</i> <sup>+</sup>		
	<i>gbàn-mṣr</i> <sup>a/</sup>	<i>gbàn-mṣr</i> <sup>lb<sup>a</sup></sup>	<i>gbàn-mṣr-</i>	"book-owner" DK
	<i>gbàn-tār</i> <sup>a/</sup>	<i>gbàn-tār</i> <sup>lb<sup>a</sup></sup>	<i>gbàn-tār-</i>	<i>id</i> DK
	<i>b̀- mṣr</i> <sup>a/</sup>	<i>b̀- mṣr</i> <sup>lb<sup>a</sup></sup>	<i>b̀- mṣr-</i>	"goat-owner" WK
or	<i>b̀- mṣr</i> <sup>ɛ/</sup>	<i>b̀- mṣrá</i> <sup>+</sup>		

WK specifically rejected all interpretations as head + deverbal adjective.

### 9.3.1.2 *b*<sup>a</sup> as singular

A subclass of nouns referring to older/important people has *-b*<sup>a</sup> in the sg, and makes the plural with *nàm*<sup>a</sup> 9.4:

<i>nà'ab</i> <sup>a</sup>	<i>nà'-nàm</i> <sup>a</sup>	<i>nà'-</i>	"chief"
<i>yáab</i> <sup>a</sup> (*yāágbā)	<i>yāa-nám</i> <sup>a</sup>	<i>yāa-</i>	"grandparent"
<i>p̀gvd</i> <sup>lb<sup>a</sup></sup>	<i>p̀gvd-nàm</i> <sup>a</sup>	<i>p̀gvd-</i>	"father's sister"
<i>áñsìb</i> <sup>a</sup>	<i>áñs-nám</i> <sup>a</sup>	<i>áñs-</i>	"mother's brother"

With *\*mb* → *mm*:

<i>sàam</i> <sup>ma</sup>	<i>sàam-nàm</i> <sup>a</sup>	<i>sàam-</i>	"father"
<i>dìam</i> <sup>ma</sup>	<i>dìam-nàm</i> <sup>a</sup>	<i>dìam-</i>	"man's parent-in-law"
<i>dàyáam</i> <sup>ma</sup>	<i>dàyāam-nám</i> <sup>a</sup>	<i>dàyāam-</i>	"woman's parent-in-law"

### 9.3.2 $g^a|s^\epsilon$ class

Straightforward examples include:

<i>būvg<sup>a</sup></i>	<i>būvs<sup>ε</sup></i>	<i>bù-</i>	"goat"
<i>tè'eg<sup>a</sup></i>	<i>tè'εs<sup>ε</sup></i>	<i>tè'-</i>	"baobab"
<i>tìg<sup>a</sup></i>	<i>tìs<sup>ε</sup></i>	<i>tì-</i>	"tree"
<i>ñwādig<sup>a/</sup></i>	<i>ñwādis<sup>ε/</sup></i>	<i>ñwād-</i>	"moon, month"
<i>lōdig<sup>a/</sup></i>	<i>lōdis<sup>ε/</sup></i>	<i>lōd-</i>	"corner"
<i>āañdig<sup>a</sup></i>	<i>āañdis<sup>ε</sup></i>	<i>àañd-</i>	"Vitex doniana"
<i>bù-dìbig<sup>a</sup></i>	<i>bù-dìbis<sup>ε</sup></i>	<i>bù-dìb-</i>	"male kid"
<i>kpiibig<sup>a</sup></i>	<i>kpiibis<sup>ε</sup></i>	<i>kpiib-</i>	"orphan"
<i>yàmmig<sup>a</sup></i>	<i>yàmmis<sup>ε</sup></i>	<i>yàm-</i>	"slave"
<i>kōlig<sup>a</sup></i>	<i>kōlis<sup>ε</sup></i>	<i>kòl-</i>	"river"
<i>kpòkpàrig<sup>a</sup></i>	<i>kpòkpàris<sup>ε</sup></i>	<i>kpòkpàr-</i>	"palm tree"
<i>pūsig<sup>a/</sup></i>	<i>pūsis<sup>ε/</sup></i>	<i>pūs-</i>	"tamarind"
<i>zōog<sup>a</sup></i>	<i>zōos<sup>ε</sup></i>		"run, race"
<i>būdig<sup>a</sup></i>			"planting"

Root-stems in *Caa Cīə Cuə* delete the \**g* of the sg suffix *-g<sup>a</sup>* [6.3.1](#):

<i>bāa<sup>=</sup></i> <a href="#">8.1</a>	<i>bāas<sup>ε</sup></i>	<i>bà-</i>	"dog"
<i>sīa<sup>+</sup></i>	<i>sīəs<sup>ε</sup></i>	<i>sjà-</i>	"waist"
<i>sàbùa<sup>+</sup></i>	<i>sàbùəs<sup>ε</sup></i>	<i>sàbùà-</i>	"lover, girlfriend"

Nasal *iañ uañ* here alternates with *εñ ɔñ* [6.3.1](#)

<i>ziñ'a<sup>+</sup></i>	<i>zèñ'εs<sup>ε</sup></i>	<i>ziàñ'-</i> or <i>zèñ'-</i>	"red" (adjective)
<i>nū'-íñ'a<sup>+</sup></i>	<i>nū'-éñ'ès<sup>ε</sup></i>	<i>nū'-éñ'-</i>	"fingernail"
<i>Mùa<sup>+</sup></i>	<i>Mòos<sup>ε</sup></i>	<i>Mò-</i>	"Mossi person"
<i>nūa<sup>+/</sup></i>	<i>nōos<sup>ε/</sup></i>	<i>nō-</i>	"hen"

\**Cag-* \**Cīag-* \**Cuag-* stems [6.3.1](#) show singulars with *-k<sup>a</sup>*:

<i>zàk<sup>a</sup></i>	<i>zà'as<sup>ε</sup></i>	<i>zà'-</i>	"compound"
<i>puāk<sup>a</sup></i>	<i>pū'as<sup>ε</sup></i>	<i>pu'à-</i>	"female" (adjective)

Stems in \**CVg-* display consonant assimilation in the sg via \**gg* → *kk*:

<i>gìk<sup>a</sup></i>	<i>gìgis<sup>ε</sup></i>	<i>gìg-</i>	"dumb person"
<i>kūk<sup>a</sup></i>	<i>kūgus<sup>ε</sup></i>	<i>kùg-</i>	"chair"

Stems in *-m-* and *-n-* show *-ŋ-* in the sg, via *\*mg* → *ŋŋ* and *\*ng* → *ŋŋ*, and the cbs adopt the sg form; in the pl *\*ns* → *ʔs* [6.2.1](#) whereas *\*ms-* remains with 2-mora-stems, but is frequently assimilated in longer stems. There are, however, no unequivocal three- of four-mora *n-*stems in this class in any case.

<i>bāŋ<sup>a</sup></i>	<i>bāaŋs<sup>ε</sup></i>	<i>bàŋ-</i>	"ring, chain, fetter"
<i>tēŋ<sup>a</sup></i>	<i>tēēŋs<sup>ε</sup></i>	<i>tèŋ-</i>	"land"
<i>pàŋ<sup>a</sup></i>	<i>pàaŋs<sup>ε</sup></i>	<i>pàŋ-</i>	"power"
<i>bùŋ<sup>a</sup></i>	<i>bùmɪs<sup>ε</sup></i>	<i>bùŋ-</i>	"donkey"
<i>nāŋ<sup>a</sup></i>	<i>nāmɪs<sup>ε</sup></i>	<i>nàŋ-</i>	"scorpion"
<i>sū'əŋ<sup>a</sup></i>	<i>sū'əmɪs<sup>ε</sup></i>	<i>sū'əŋ-</i>	"rabbit"
<i>ñwāaŋ<sup>a</sup></i>	<i>ñwāamɪs<sup>ε</sup></i>	<i>ñwàaŋ-</i>	"monkey"
<i>nīŋ<sup>a</sup></i>	<i>nīs<sup>ε</sup></i>	<i>nīŋ-</i>	"bird"
	<i>nīimɪs<sup>ε</sup></i>		
<i>kòlŋ<sup>a</sup></i>	<i>kòlɪs<sup>ε</sup></i>	<i>kòlŋ-</i>	"door"
	<i>kòlɪmɪs<sup>ε</sup></i>		
<i>kō'alíŋ<sup>a</sup></i>	<i>kō'alɪs<sup>ε</sup></i>	<i>kō'alíŋ-</i>	sleeveless traditional
	<i>kō'alímɪs<sup>ε</sup></i>		smock

So too with all deverbal instrument nouns:

<i>mēēdŋ<sup>a</sup></i>	<i>mēēdɪs<sup>ε</sup></i>	<i>mèēdŋ-</i>	"building tool"
	<i>mēēdɪmɪs<sup>ε</sup></i>		
<i>pīəsíŋ<sup>a</sup></i>	<i>pīəsís<sup>ε</sup></i>	<i>pīəsíŋ-</i>	"sponge"
	<i>pīəsímɪs<sup>ε</sup></i>		← <i>pīe<sup>+/</sup></i> "wash (self)"

Various irregular stem alternations are seen in

<i>bīŋ<sup>a</sup></i>	<i>bīs<sup>ε</sup></i>	<i>bī-</i> or <i>bì-</i>	"child"
<i>bèrŋ<sup>a</sup></i>	<i>bèrɪɪs<sup>ε</sup></i>		a plant used for fibre
<i>tàmpūa<sup>+</sup></i>	<i>tàmpōɔs<sup>ε</sup></i>	<i>tàmpò-</i>	"housefly" DK (no <i>ñ</i> )
<i>bōtŋ<sup>a</sup></i>	<i>bōtɪs<sup>ε</sup></i>	<i>bòtŋ-</i>	"cup" <a href="#">2.2</a>

Very irregular in both flexion and phonology is

<i>sāŋá<sup>+</sup></i>	<i>sānsá<sup>+</sup></i> [saŋsa]	<i>sān-</i>	"time"
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These human-reference nouns have alternative plurals with the suffix *-b<sup>a</sup>*:

<i>dàsāŋ</i> <sup>a</sup>	<i>dàsām</i> <sup>ma</sup> or <i>dàsāaŋs</i> <sup>ε</sup>	<i>dàsàŋ-</i>	"young man"
<i>Yàaŋ</i> <sup>a</sup>	<i>Yàam</i> <sup>ma</sup> or <i>Yàamɪs</i> <sup>ε</sup> / <i>Yàaŋs</i> <sup>ε</sup>	<i>Yàaŋ-</i>	"Yanga, Yansi person"
<i>Sà'dàbùa</i> <sup>+</sup>	<i>Sà'dàbùèb</i> <sup>a</sup> or <i>Sà'dàbùè</i> <sup>ε</sup>		clan name <a href="#">32.5</a>

### 9.3.2.1 *g*<sup>ɔ</sup>|*s*<sup>ε</sup> subclass

Several *s*<sup>ε</sup>-plural stems with rounded vowels have sg *g*<sup>ɔ</sup>, by reinterpretation of *g*<sup>a</sup>|*s*<sup>ε</sup> class sg as *g*<sup>ɔ</sup> when the SF forms coincide [2.3.2 9.1](#). WK avoids the change to *-g*<sup>ɔ</sup> with human-reference nouns. No regular deverbal instrument noun takes *-g*<sup>ɔ</sup>. Some of these words also have *d*<sup>ε</sup> plurals, and some may have become *g*<sup>ɔ</sup>|*d*<sup>ε</sup> entirely.

<i>kūug</i> <sup>a/</sup> or <i>kūug</i> <sup>ɔ/</sup>	<i>kūs</i> <sup>ε/</sup>	<i>kū-</i>	"mouse"
<i>sù'ug</i> <sup>a</sup> or <i>sù'ug</i> <sup>ɔ</sup>	<i>sù'us</i> <sup>ε</sup>	<i>sù'-</i>	"knife"
<i>nú'ùg</i> <sup>ɔ</sup>	<i>nú'ùs</i> <sup>ε</sup>	<i>nū'-</i>	"hand"
<i>zùnzòŋ</i> <sup>a</sup> or <i>zùnzòŋ</i> <sup>ɔ</sup>	<i>zùnzòŋs</i> <sup>ε</sup>	<i>zùnzòŋ-</i>	"blind person"
but <i>tèŋ-zùŋ</i> <sup>ɔ</sup>	<i>tèŋ-zùvŋs</i> <sup>ε</sup> <i>pìàŋ'-zùna</i> <sup>+</sup>		"foreign land" "foreign language"
<i>yù'uh</i> <sup>ɔ</sup> <i>zùuŋ</i> <sup>ɔ</sup>	<i>yù'umɪs</i> <sup>ε</sup> <i>zùuŋs</i> <sup>ε</sup> or <i>zùuŋd</i> <sup>ε</sup>	<i>yù'uh-</i> <i>zùŋ-</i>	"night" "vulture"

Compare Mampruli *nuuwa* pl *nuusi* "hand", *suuwa* pl *suusi* "knife", *kuuwa* pl *kuusi* "mouse", *zuuwa* pl *zuusi* "vulture" (but *yuhŋu* pl *yunsi* "night.")

In *yàmmug* "slave" the epenthetic vowel before the flexion has been rounded by the *-m-* and the resulting SF reinterpreted as ending in *g*<sup>ɔ</sup>:

<i>yàmmug</i> <sup>a</sup> WK or <i>yàmmug</i> <sup>ɔ</sup>	<i>yàmmɪs</i> <sup>ε</sup>	<i>yàm-</i>	"slave"
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Some *g*<sup>ɔ</sup>|*s*<sup>ε</sup> *m*-stems were probably originally *g*<sup>ɔ</sup>|*d*<sup>ε</sup>, but have disambiguated the plural by substituting pl *-s*<sup>ε</sup> for *-d*<sup>ε</sup> instead of the usual *-a*<sup>+</sup> [9.3.3.1](#):

<i>à-dàalúŋ</i> <sup>ɔ</sup>	<i>à-dàalɪs</i> <sup>ε</sup> WK <i>à-dàalɪmɪs</i> <sup>ε</sup>	<i>à-dàalúŋ-</i>	"stork"
<i>sī'úŋ</i> <sup>ɔ</sup>	<i>sī'imɪs</i> <sup>ε</sup>	<i>sī'uh-</i>	a kind of big dish

cf	<i>dìsúŋ</i> <sup>ɔ</sup>	<i>dìsís</i> <sup>ɛ</sup> <i>dìsímà</i> <sup>+</sup>	<i>dìsúŋ-</i>	"spoon"
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Two words of this type drop *-s-* from the stem in the plural:

<i>wīlsúŋ</i> <sup>ɔ</sup>	<i>wīlmís</i> <sup>ɛ</sup>	<i>wīlsúŋ-</i>	a kind of snail
<i>yālsúŋ</i> <sup>ɔ</sup>	<i>yālmís</i> <sup>ɛ</sup>	<i>yālsúŋ-</i>	"quail"

### 9.3.3 *g*<sup>ɔ</sup>|*d*<sup>ɛ</sup> class

Before the sg *-g*<sup>ɔ</sup> *-k*<sup>ɔ</sup> *-ŋ*<sup>ɔ</sup> stem-final vowels are rounded, changing epenthetic vowels to *u* and creating rounding diphthongs from root vowels [6.3.2](#) [4.3](#).

All stems in *m n* following a short vowel belong to the *g*<sup>ɔ</sup>|*a*<sup>+</sup> subclass instead, along with all stems which include a derivational suffix [9.3.3.1](#).

<i>dàvug</i> <sup>ɔ</sup>	<i>dàad</i> <sup>ɛ</sup>	<i>dà-</i>	"piece of wood"
<i>fěň'og</i> <sup>ɔ</sup> /	<i>fěň'ɛd</i> <sup>ɛ</sup> /	<i>fěň'-</i>	"ulcer"
<i>vīug</i> <sup>ɔ</sup> /	<i>vīid</i> <sup>ɛ</sup> /	<i>vī-</i>	"owl"
<i>vāvňg</i> <sup>ɔ</sup> /	<i>vāañd</i> <sup>ɛ</sup> /	<i>vāň-</i>	"leaf"
<i>mōɔg</i> <sup>ɔ</sup>	<i>mōɔd</i> <sup>ɛ</sup>	<i>mò-</i>	"grass, bush"
<i>dòndùug</i> <sup>ɔ</sup>	<i>dòndùud</i> <sup>ɛ</sup>	<i>dòndù-</i>	"cobra"
<i>dàbīog</i> <sup>ɔ</sup>	<i>dàbīəd</i> <sup>ɛ</sup>	<i>dàbjà-</i>	"coward"
	<i>zùød</i> <sup>ɛ</sup>		"friendship"
<i>wābug</i> <sup>ɔ</sup> /	<i>wābɪd</i> <sup>ɛ</sup> /	<i>wāb-</i>	"elephant"
<i>zūəbúg</i> <sup>ɔ</sup>	<i>zūəbíd</i> <sup>ɛ</sup>	<i>zūəb-</i>	"(human head) hair"
<i>bālērvg</i> <sup>ɔ</sup> /	<i>bālērɪd</i> <sup>ɛ</sup> /	<i>bālér-</i>	"ugly person"
	or <i>bālērɪs</i> <sup>ɛ</sup> /		
<i>bēsug</i> <sup>ɔ</sup>	<i>bēsɪd</i> <sup>ɛ</sup>	<i>bès-</i>	kind of pot
<i>Dènnug</i> <sup>ɔ</sup>			Denugu (place name)

Some stems ending in root vowels have plurals of the form *CVt*<sup>ɛ</sup> [6.1.1.1](#):

<i>dòɔg</i> <sup>ɔ</sup>	<i>dòɔd</i> <sup>ɛ</sup> or <i>dòt</i> <sup>ɛ</sup>	<i>dò-</i>	"hut, room; clan"
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So too *pōɔg*<sup>ɔ</sup> "farm, field", *fūug*<sup>ɔ</sup> "clothing, shirt"; exceptionally, the *singular* also shows a short vowel in the following word, probably a true 1-mora stem:

<i>zūg</i> <sup>ɔ</sup> /	<i>zūt</i> <sup>ɛ</sup> /	<i>zū-</i> or <i>zūg-</i>	"head"
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\**Cag-* \**Cjag-* \**Cɔg-* stems [6.3.1](#) show sg *-k*<sup>ɔ</sup>, and *ɔa* becomes *ɔ* before *-k*<sup>ɔ</sup> [6.3.2](#):

<i>bòk</i> <sup>ɔ</sup>	<i>bù'ad</i> <sup>ɛ</sup>	<i>bɸ'à-</i>	"hole, pit"
<i>lòk</i> <sup>ɔ</sup>	<i>lù'ad</i> <sup>ɛ</sup>	<i>lɸ'à-</i>	"quiver (for arrows)"
<i>lāɸk</i> <sup>ɔ</sup>	<i>lā'ad</i> <sup>ɛ</sup>	<i>là-</i>	"(item of) goods"
<i>bɸāɸñk</i> <sup>ɔ</sup>	<i>bɸāñ'ad</i> <sup>ɛ</sup>	WK <i>bɸāñ'-</i>	"shoulder"
	<i>bɸāñ'ada</i> <sup>+</sup>	SB	

Stems in *CVd* show *-t-* in the pl [6.2.1](#) via *\*dd* → *tt*:

<i>ùdɸg</i> <sup>ɔ</sup>	<i>ùt</i> <sup>ɛ</sup>	<i>ùd-</i>	"(piece of) chaff"
<i>gādɸg</i> <sup>ɔ</sup> /	<i>gāt</i> <sup>ɛ</sup> /	<i>gād-</i>	"bed" (Hausa <i>gadoo</i> )

Stems in *CVg* develop *kk* in the singular via *\*gg* → *kk*:

<i>dōk</i> <sup>ɔ</sup> /	<i>dōgɸd</i> <sup>ɛ</sup> /	<i>dōg-</i>	"cooking pot"
	<i>dōgɸb dút</i> <sup>ɛ</sup>		"cooking pots" SB

Stems in *l* develop the cluster *nn* in the pl via *\*ld* → *nn*:

<i>yōlɸg</i> <sup>ɔ</sup> /	<i>yōn</i> <sup>nɛ</sup> /	<i>yōl-</i>	"sack; 200 cedis"
<i>zōlɸg</i> <sup>ɔ</sup> /	<i>zōn</i> <sup>nɛ</sup> /	<i>zōl-</i>	"fool"
<i>sìlɸg</i> <sup>ɔ</sup>	<i>sìn</i> <sup>nɛ</sup> or <i>sìls</i> <sup>ɛ</sup>	<i>sìl-</i>	"hawk"

The only *m n* stems making plurals with *-d*<sup>ɛ</sup> are *CVVC* root-stems [6.1.1.2](#):

<i>làngáɸɸ</i> <sup>ɔ</sup>	<i>làngāamá</i> <sup>+</sup>	<i>làngāɸɸ-</i>	"crab"
	or <i>làngám</i> <sup>mɛ</sup>		

So too *màngāúɸ*<sup>ɔ</sup> "crab", the plural-only *sūñ-péén*<sup>nɛ</sup> "anger" and perhaps the placename *Tèmpáan*<sup>nɛ</sup> "Tempane" [32.3](#).

### 9.3.3.1 *g*<sup>ɔ</sup>|*a*<sup>+</sup> subclass

All stems in *n m* following a short vowel use the plural suffix *a*<sup>+</sup> instead of *d*<sup>ɛ</sup>.

They show *-ɸ-* in the sg, via *\*ng* → *ɸɸ* and *\*mg* → *ɸɸ*, and normally use the sg segmental (but not tonal) form as cb [9.2.2](#).

<i>gbàɸɸ</i> <sup>ɔ</sup>	<i>gbàna</i> <sup>+</sup>	<i>gbàn-</i> or <i>gbàɸɸ-</i>	"letter, book"
<i>zīnzāɸɸ</i> <sup>ɔ</sup> /	<i>zīnzāná</i> <sup>+</sup>	<i>zīnzáɸɸ-</i>	"bat"
<i>àñrɸɸ</i> <sup>ɔ</sup>	<i>àñrɸma</i> <sup>+</sup>	<i>àñrɸɸ-</i>	"boat"
<i>mālɸɸ</i> <sup>ɔ</sup>	<i>mālɸma</i> <sup>+</sup>	<i>màlɸɸ-</i>	"sacrifice"

The expected *ɥ*-glide is absent in the sg and cb of

*nìn-gbīŋ*<sup>ɔ/</sup>      *nìn-gbīná*<sup>+</sup>      *nìn-gbīŋ-*      "body"

This may represent the influence of the alternate sg form *nìn-gbīn*<sup>nɛ/</sup>. The formal plural *nìn-gbīná*<sup>+</sup> is often used for singular "body."

All regular gerunds of 3-mora- and 4-mora-stem variable verbs belong to the *g<sup>ɔ</sup>|a<sup>+</sup>* subclass except for those with stems ending in velars and fusion verbs [11.1](#), which have the singular suffix *r<sup>ɛ</sup>* [12.1.1.1](#).

<i>gàadvug<sup>ɔ</sup></i>	←	<i>gàad<sup>ɛ</sup></i>	"(sur)pass"
<i>lìəbvug<sup>ɔ</sup></i>	←	<i>lìəb<sup>ɛ</sup></i>	"become"
<i>dīgı́lúg<sup>ɔ</sup></i>	←	<i>dīgı́l<sup>ɛ/</sup></i>	"lay down"
<i>yāarúg<sup>ɔ</sup></i>	←	<i>yāar<sup>ɛ/</sup></i>	"scatter"
<i>sīgı́súg<sup>ɔ</sup></i>	←	<i>sīgı́s<sup>ɛ/</sup></i>	"lower"

Only stems in *-s-* and *-sim-* have plurals, always with *-a<sup>+</sup>*:

<i>bū'əsúg<sup>ɔ</sup></i>		<i>bū'əsá</i> <sup>+</sup>	<i>bū'əs-</i>	"question"
<i>zàańsúg<sup>ɔ</sup></i>		<i>zàańsímà</i> <sup>+</sup>	<i>zàańsúg-</i>	"dream"

Gerunds of 3-mora *n*-stem verbs, uniquely, never assimilate *\*ng* → *ŋŋ* (just as they never assimilate *\*nd* in their imperfectives [11.1 6.2.1.1](#))

<i>dìgı́nvug<sup>ɔ</sup></i>	←	<i>dìgı́n<sup>ɛ</sup></i>	"lie down"
<i>zìń'invug<sup>ɔ</sup></i>	←	<i>zìń'in<sup>ɛ</sup></i>	"sit down"

Gerunds of 3-mora *m*-stems may optionally not assimilate *\*mg* → *ŋŋ*:

<i>tóvŋ<sup>ɔ</sup></i>	←	<i>tōvm<sup>m/</sup></i>	"depart, disappear"
or <i>tōvmúg<sup>ɔ</sup></i>			
<i>sàń'vŋ<sup>ɔ</sup></i>	←	<i>sàń'am<sup>m</sup></i>	"destroy"
or <i>sàń'amvug<sup>ɔ</sup></i>			
<i>kàrvŋ<sup>ɔ</sup></i>	←	<i>kàrm<sup>m</sup></i>	"read"
or <i>kàrmvug<sup>ɔ</sup></i>			

Gerunds of 4-mora *m*-stems always assimilate:

<i>zàańsúg<sup>ɔ</sup></i>	←	<i>zàańsim<sup>m</sup></i>	"dream"
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### 9.3.4 $r^\epsilon|a^+$ class

Straightforward examples include:

<i>kūgur<sup>ε/</sup></i>	<i>kūgá<sup>+</sup></i>	<i>kūg-</i>	"stone"
<i>dìgur<sup>ε</sup></i>	<i>dìga<sup>+</sup></i>	<i>dìg-</i>	"dwarf"
<i>būgur<sup>ε</sup></i>	<i>būga<sup>+</sup></i>	<i>bùg-</i>	"abode of a <i>wīn<sup>nε</sup></i> (spirit, god)"
<i>bàlàḡur<sup>ε</sup></i>	<i>bàlàḡa<sup>+</sup></i>	<i>bàlàḡ-</i>	"hat"
<i>yūgvdir<sup>ε</sup></i>	<i>yūgvda<sup>+</sup></i>	<i>yùgvd-</i>	"hedgehog"
<i>ṗu'à-sādir<sup>ε/</sup></i>	<i>ṗu'à-sādá<sup>+</sup></i>	<i>ṗu'à-sād-</i>	"young woman"
<i>nóbir<sup>ε</sup></i>	<i>nōbá<sup>+</sup></i>	<i>nōb-</i>	"leg"
<i>lībir<sup>ε</sup></i>	<i>lība<sup>+</sup></i>	<i>līb-</i>	"twin"
<i>sōnnur<sup>ε</sup></i>	<i>sōnna<sup>+</sup></i>	<i>sòn-</i>	"inner compound wall"
<i>sāngúnnir<sup>ε</sup></i>	<i>sāngúnnà<sup>+</sup></i>	<i>sāngún-</i>	"millipede"
<i>bì'isir<sup>ε</sup></i>	<i>bì'isa<sup>+</sup></i>	<i>bì'is-</i>	"woman's breast"
<i>sūmmur<sup>ε</sup></i>	<i>sūmma<sup>+</sup></i>	<i>sùm-</i>	"groundnut"
<i>yīmmír<sup>ε</sup></i>	<i>yīmmá<sup>+</sup></i>	<i>yīm-</i>	"solitary" (adjective)

All gerunds of 3-mora stem verbs in  $-k^\epsilon -g^\epsilon -ḡ^\epsilon$  belong to this class:

<i>yùugur<sup>ε</sup></i>		"delay"
<i>nōkír<sup>ε</sup></i>		"taking"
<i>nìḡur<sup>ε</sup></i>		"doing"

For the allomorphy in CVV root-stems before the plural  $-a^+$  see [6.1.1.1](#).

Unglottalised vowel stems:

<i>zūr<sup>ε</sup></i>	<i>zōya<sup>+</sup></i>	<i>zù-</i>	"tail"
<i>bīar<sup>ε/</sup></i>	<i>bjēyá<sup>+</sup></i>	<i>bjā-</i>	"elder same-sex sib"
<i>zūr<sup>ε</sup></i>	<i>zūyá<sup>+</sup></i>	<i>zùà-</i>	"hill"
<i>nōr<sup>ε/</sup></i>	<i>nōyá<sup>+</sup></i>	<i>nō-</i>	"mouth"
<i>yòr<sup>ε</sup></i>	<i>yòya<sup>+</sup></i>	<i>yò-</i>	"soldier ant"

Glottalised vowel stems:

<i>yūr<sup>ε/</sup></i>	<i>yūdá<sup>+</sup></i>	<i>yūr-</i>	"name"
<i>tītā'ar<sup>ε</sup></i>	<i>tītāda<sup>+</sup></i>	<i>tītá'-</i>	"big" (adjective)
<i>ṗòñ'or<sup>ε</sup></i>	<i>ṗòñda<sup>+</sup></i>	<i>ṗòñ'-</i>	"cripple"
<i>ñyē'er<sup>ε/</sup></i>	<i>ñyēdá<sup>+</sup></i>	<i>ñyē'-</i>	"next-younger sibling"



<i>pù-těń'ər<sup>ε</sup></i>	<i>pù-těńda<sup>+</sup></i>	<i>pù-těń'-</i>	"mind"
<i>yū'ər<sup>ε</sup></i>	<i>yūāda<sup>+</sup></i>	<i>yù'ər- 9.2.2</i>	"penis"

Stems in \*CVg [6.3.1](#) may have forms made by analogy with these original glottalised-vowel stems, instead of or alongside forms with vowel fusion:

<i>bà'ar<sup>ε</sup></i>	<i>bà'a<sup>+</sup></i> or <i>bàda<sup>+</sup></i>	<i>bà'-</i>	"idol" (Farefare <i>bàgrè</i> )
<i>ńyā'ar<sup>ε</sup></i>	<i>ńyā'a<sup>+</sup></i>	<i>ńyà'-</i>	"root" (← * <i>ɲεg-</i> )
<i>sjà'ar<sup>ε</sup></i>	<i>sjà'a<sup>+</sup></i>	<i>sjà'-</i>	"forest"
<i>bǎāń'ar<sup>ε/</sup></i>	<i>bǎāń'a<sup>+</sup></i>	<i>bǎāń'-</i>	"wet mud, riverbed"
<i>mù'ar<sup>ε</sup></i>	<i>mụ'àa<sup>+</sup></i>	<i>mụ'à-</i>	"reservoir, dam"
	or <i>mù'ada<sup>+</sup></i>		
<i>zànkù'ar<sup>ε</sup></i>	<i>zànkụ'àa<sup>+</sup></i>	<i>zànkụ'à-</i>	"jackal"
	or <i>zànkù'ada<sup>+</sup></i>		
<i>kùndù'ar<sup>ε</sup></i>	<i>kùndụ'àa<sup>+</sup></i>	<i>kùndụ'à-</i>	"barren woman"
	or <i>kùndù'ada<sup>+</sup></i>		

So too, despite the derivation from *dà<sup>+</sup>* "buy", where the glottalisation is not derived from \**g*:

<i>kì-dà'ar<sup>ε</sup></i>	<i>kì-dà'ada<sup>+</sup></i> WK	"bought-in millet"
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Stems in deleted \**g* after a long vowel include

<i>vúər<sup>ε</sup></i>	<i>vūáa<sup>=</sup></i>	<i>vūə-</i>	"fruit of <i>vúəŋ<sup>a</sup></i> tree"
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and all fusion verb gerunds [11.1](#) like

<i>gbāń'ar<sup>ε</sup></i>	←	<i>gbāń'e<sup>+/</sup></i>	"grab"
<i>dí'ər<sup>ε</sup></i>	←	<i>dī'e<sup>+/</sup></i>	"get"
<i>dúər<sup>ε</sup></i>	←	<i>dūe<sup>+/</sup></i>	"rise"

Some root-stems show CV with a short vowel before the *r<sup>ε</sup>|a<sup>+</sup>* sg [9.2.1](#). They regularly use the segmental form of the sg for cb.

<i>gbēr<sup>ε/</sup></i>	<i>gbēyá<sup>+</sup></i>	<i>gbēr-</i>	"thigh"
<i>kùkōr<sup>ε/</sup></i>	<i>kùkōyá<sup>+</sup></i>	<i>kùkōr-</i>	"voice"

Similarly *kpàkūr<sup>ε/</sup>* "tortoise" *gāńr<sup>ε/</sup>* "ebony fruit" *gūmpūzēr<sup>ε/</sup>* "duck" *ńyò-vūr<sup>ε/</sup>* "life".

2-mora stem verbs make gerunds in *-r<sup>ε</sup>* instead of *-b<sup>ɔ</sup>* after a noun cb:

<i>nō-lòr<sup>ε</sup></i>	"fasting" ("mouth-tying")
<i>fū-yéèr<sup>ε</sup></i>	"shirt-wearing"

These set expressions show shortening of the vowel, but this is not productive:

<i>nā'-lór<sup>ε</sup></i>	"place in the compound for tying up cows"
<i>wìd-lōr<sup>ε/</sup></i>	"place in the compound for tying up horses"

Stems in *m n l r* undergo consonant assimilation in the sg:

\**rr* → *r* \**lr* → *ll* \**nr* → *nn* \**mr* → *mn*; on the instability of the cluster *mn* see [3.2](#).

<i>kùkpàr<sup>ε</sup></i>	<i>kùkpàra<sup>+</sup></i>	<i>kùkpàr-</i>	"palm fruit"
<i>ñwād-dár<sup>ε</sup></i>			"Venus"
<i>tān<sup>nε</sup></i>	<i>tāna<sup>+</sup></i>	<i>tàn-</i>	"earth"
<i>kpān<sup>nε</sup></i>	<i>kpāna<sup>+</sup></i>	<i>kpàn-</i>	"spear"
<i>má'an<sup>nε</sup></i>	<i>mā'aná<sup>+</sup></i>	<i>mā'an-</i>	"okra"
<i>pībun<sup>nε</sup></i>	<i>pībuna<sup>+</sup></i>	<i>pìbun-</i>	"covering"
<i>dūm<sup>nε</sup></i>	<i>dūma<sup>+</sup></i>	<i>dùm-</i>	"knee"
<i>zōom<sup>nε</sup></i>	<i>zōoma<sup>+</sup></i>	<i>zòom-</i>	"fugitive"
<i>yòum<sup>nε</sup></i>	<i>yòma<sup>+</sup></i>	<i>yòum-</i>	"year" <a href="#">6.1.1.2</a>
<i>gbīgim<sup>nε</sup></i>	<i>gbīgima<sup>+</sup></i>	<i>gbìgim-</i>	"lion"
<i>yōgúm<sup>nε</sup></i>	<i>yōguma<sup>+</sup></i>	<i>yōgum-</i>	"camel"
<i>gél<sup>lε</sup></i>	<i>gēlá<sup>+</sup></i>	<i>gēl-</i>	"egg"
<i>íl<sup>lε</sup></i>	<i>īlá<sup>+</sup></i>	<i>īl-</i>	"horn"

With unusual sandhi in the sg, and presumably analogical levelling

<i>ñwān<sup>nε</sup></i> SB	<i>ñwāna<sup>+</sup></i> NT	<i>ñwàn-/ñwàm-</i>	"calabash"
<i>ñwām<sup>mε</sup></i> WK	<i>ñwāma<sup>+</sup></i> SB WK NT		

An exceptional suppletive plural, segmentally and tonally, is seen in

<i>dāar<sup>ε</sup></i>	<i>dābá<sup>+</sup></i>	<i>dà-</i>	"day"
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These two *r<sup>ε</sup>|a<sup>+</sup>* class words probably have 1-mora stems:

[Mampruli <i>zari</i> ]	<i>zā<sup>+/</sup></i>	<i>zā-</i>	"millet"
<i>yīr<sup>ε/</sup></i>	<i>yā<sup>+/</sup></i>	<i>yī-</i>	"house"

*Yīr<sup>ε/</sup>* also has the irregular locative forms sg *yín<sup>nε</sup>* pl *yáan<sup>ε</sup>* [17.3](#).

### 9.3.4.1 /<sup>ε</sup> subclass

**Language names** [32.5](#) all belong to a  $r^\epsilon|a^+$  subclass partly formed with the suffix  $-/^\epsilon$ . The suffix is always  $-/^\epsilon$  after stems ending in a root vowel:

<u>Language</u>		<u>Speakers</u>	
<i>Kūsáàl</i> <sup>ε</sup>	Kusaal	<i>Kūsáàs</i> <sup>ε</sup>	Kusaasi
<i>Bùsáàñl</i> <sup>ε</sup>	Bisa	<i>Bùsáàñs</i> <sup>ε</sup>	Bisa
<i>Mòɔl</i> <sup>ε</sup>	Mooré	<i>Mòɔs</i> <sup>ε</sup>	Mossi
<i>Sìmīil</i> <sup>ε</sup>	Fulfulde	<i>Sìmīis</i> <sup>ε</sup>	Fulbe
<i>Zàngbèèl</i> <sup>ε</sup>	Hausa	<i>Zàngbèèd</i> <sup>ε</sup>	Hausa
<i>Nàsāal</i> <sup>ε</sup>	English/French	<i>Nàsàa-nàm</i> <sup>a</sup>	Europeans

After stems ending in a consonant other than  $-r-$  the suffix is either replaced by  $r^\epsilon$ , or assimilates to the stem final in a way which is indistinguishable from  $r^\epsilon$ :

<i>Nàbir</i> <sup>ε</sup>	Nabit	<i>Nàbir</i> <sup>a</sup>	Nabdema
<i>Tùənnir</i> <sup>ε</sup>	Toende Kusaal	<i>Tùən</i> <sup>nε</sup>	Toende area
<i>Dàgbān</i> <sup>nε/</sup>	Dagbani	<i>Dàgbām</i> <sup>ma/</sup>	Dagomba
<i>Bìn</i> <sup>nε</sup>	Moba	<i>Bim</i> <sup>ma</sup>	Moba
<i>Yàan</i> <sup>nε</sup>	Yansi	<i>Yàañs</i> <sup>ε</sup>	Yansi
<i>Gūrín</i> <sup>nε</sup>	Farefare	<i>Gūrís</i> <sup>ε</sup>	Farefare
<i>Tàlɔn</i> <sup>nε</sup>	Talni	<i>Tàlɔs</i> <sup>ε</sup>	Tallensi
<i>Bùl</i> <sup>lε</sup>	Buli	<i>Bùlɔs</i> <sup>ε</sup>	Bulsa
<i>Àgòl</i> <sup>lε</sup>	Agolle Kusaal	<i>Àgòl</i> <sup>lε</sup>	Agolle area

However, stems in  $-r-$  show the distinctive assimilation  $*r/ \rightarrow tt$  [6.2.1](#):

<i>Yāt</i> <sup>ε/</sup>	Yarsi	<i>Yārls</i> <sup>ε/</sup>	Yarsi
<i>Bāt</i> <sup>ε/</sup>	Bisa	<i>Bārls</i> <sup>ε/</sup>	Bisa

Unexpected epenthesis [6.2.1](#) occurs in:

<i>Kàmbònr</i> <sup>ε</sup>	Twi	<i>Kàmbòmɔs</i> <sup>ε</sup>	Ashanti
<i>Ñwāmpūr</i> <sup>lε/</sup>	Mampruli	<i>Ñwāmpūrls</i> <sup>ε/</sup>	Mamprussi

### 9.3.5 $\mathcal{P}|\iota^+$ class

The plural  $-\iota^+$  causes the stem vowels *aa iə εε* to undergo "umlaut" to *ii*.  
Straightforward examples for the  $\mathcal{P}|\iota^+$  class are

<i>mòlɪɸ</i>	<i>mòlɪ<sup>+</sup></i>	<i>mòl-</i>	"gazelle"
<i>bīlɪɸ</i>	<i>bīlɪ<sup>+</sup></i>	<i>bīl-</i>	"seed"
<i>ñyīrɪɸ</i>	<i>ñyīrɪ<sup>+</sup></i>	<i>ñyīr-</i>	"egusi"
<i>zūrɪɸ</i>	<i>zūrɪ<sup>+</sup></i>	<i>zūr-</i>	"dawadawa seed"
<i>bōn-búvdɪɸ</i>			"plant"

Two 1-mora stem  $\mathcal{P}|\iota^+$  nouns are

no sg	<i>kī<sup>+/</sup></i>	<i>kī-</i> or <i>kā-</i>	"cereal, millet"
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cf Mampruli sg *kaafu* pl *kyi id*.

no sg	<i>mùj<sup>+</sup></i>	<i>mùj-</i>	"rice"
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cf Mooré sg *muiifu* pl *mùí id*.

Two words have stems in \*Caag- with deletion of \*g [6.3.1](#) and also show root vowel length allomorphy [6.1.1.2](#):

<i>náafɸ</i>	<i>nīgɪ<sup>+</sup></i>	<i>nā'-</i>	"cow"
<i>wáafɸ</i>	<i>wīgɪ<sup>+</sup></i>	<i>wā'-</i>	"snake"

Stems in *-n-* show consonant assimilation in the sg with \**nf* → *ʔf* [6.2.1](#):

<i>nīɸ</i>	<i>nīnɪ<sup>+</sup></i>	<i>nīn-</i> or <i>nīf-</i>	"eye"
<i>píɪñɸ</i>	<i>pīɪnɪ<sup>+</sup></i>	<i>pīɪn-</i>	"genet"
<i>kíiñɸ</i>	<i>kīinɪ<sup>+</sup></i>		"millet seed"
<i>zúvñɸ</i>	<i>zōvɪnɪ<sup>+</sup></i>		"dawadawa seed"

The sg is probably remodelled after an umlauted pl (cf *má'an*<sup>nɛ</sup> "okra") in

<i>míɪɸ</i>	<i>mīinɪ<sup>+</sup></i>		"okra seed"
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In two words stem *-d-* is lost in the sg:

<i>wìəɸ</i>	<i>wìdɪ<sup>+</sup></i>	<i>wìd-</i>	"horse"
<i>lā'aɸ</i>	<i>līgɪdɪ<sup>+</sup></i>	<i>là'-</i> or <i>lìg-</i>	"cowrie" pl "money"

Some words only have  $f|l^+$  class suffixes in one number. This may reflect the obsolescence of the class as a whole (which has few members and many stem irregularities), but some cases may be relics of an older, more complex class system.

<i>zíŋ<sup>a</sup></i>	<i>zīmí<sup>+</sup></i>	<i>zīm-</i>	"fish"
<i>wāltg<sup>a</sup></i>	<i>wālt<sup>ε</sup></i>	<i>wàl-</i>	a kind of gazelle
	or <i>wālí<sup>+</sup></i> tones <i>sic</i> WK		
<i>sībŋ<sup>a/</sup></i>	<i>sībí<sup>+</sup></i>	<i>sīb-</i>	a kind of termite
<i>sīñ<sup>p/</sup></i>	<i>sīñs<sup>ε/</sup></i>	<i>sīñ-</i>	"bee"
or <i>sīñg<sup>a/</sup></i>			
<i>sūñ<sup>p/</sup></i>	<i>sūñyá<sup>+</sup></i>	<i>sūñ-</i>	"heart"
or <i>sūuñ<sup>ε/</sup></i>			

One such word also irregularly deletes the final stem consonant of the cb:

<i>kpā'úŋ<sup>ɔ</sup></i>	<i>kp'íní<sup>+</sup></i>	<i>kpā'-</i>	"guinea fowl"
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### 9.3.6 $b^ɔ$ class

In my materials there are only two  $b^ɔ$  class nouns which are not gerunds:

<i>sā'ab<sup>ɔ</sup></i>	<i>sà'-</i>	"millet porridge, TZ"
<i>tāñp<sup>ɔ</sup></i>	<i>tāñp-</i>	"war" <a href="#">6.1.1.1</a>

Written sources also have *ki'ib<sup>ɔ</sup>*, probably *kī'ib<sup>ɔ/</sup>* "soap", cf Toende *kí'ip*. WK has instead *kīibú<sup>+</sup>*, borrowed from Mampruli [15.1](#).

However, all regular gerund forms of 2-mora-stem variable verbs belong here:

<i>kōvb<sup>ɔ/</sup></i>	←	<i>kō<sup>+</sup></i>	"kill"
<i>dōgvb<sup>ɔ/</sup></i>	←	<i>dōg<sup>ε</sup></i>	"cook"
<i>dū'ab<sup>ɔ</sup></i>	←	<i>dū'à<sup>a</sup></i>	"bear, beget"
<i>kādŋb<sup>ɔ</sup></i>	←	<i>kàd<sup>ε</sup></i>	"drive away"
<i>pīlŋb<sup>ɔ</sup></i>	←	<i>pīl<sup>ε</sup></i>	"cover"
<i>kpārŋb<sup>ɔ</sup></i>	←	<i>kpàr<sup>ε</sup></i>	"lock"
<i>bāsŋb<sup>ɔ</sup></i>	←	<i>bàs<sup>ε</sup></i>	"abandon, go away"

Stems in  $b$  show  $-p-$  via  $*bb \rightarrow pp$

<i>sōp<sup>ɔ/</sup></i>	←	<i>sōb<sup>ε</sup></i>	"write"
<i>lōp<sup>ɔ/</sup></i>	←	<i>lōb<sup>ε</sup></i>	"throw stones at"

Stems in *m* show the consonant assimilation \**mb* → *mm*

<i>kīm<sup>mɔ</sup></i>	←	<i>kìmm<sup>m</sup></i>	"tend a flock/herd"
<i>wūmm<sup>mɔ</sup></i>	←	<i>wùmm<sup>m</sup></i>	"hear"

Stems in *n* do not assimilate, however (cf 3-mora *n*-stem gerunds [9.3.3.1](#))

<i>būnɪb<sup>ɔ</sup></i>	←	<i>bùn<sup>ɛ</sup></i>	"reap"
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The verb *yīs<sup>ɛ</sup>* "make go/come out" has the expected gerund *yīsɪb<sup>ɔ</sup>*;  
 exceptionally the alternate form *yīs<sup>ɛ/</sup>* also makes its gerund in the *b<sup>ɔ</sup>* class: *yīsɪb<sup>ɔ</sup>*,  
 the only noun in the *b<sup>ɔ</sup>* class which does not have a 2-mora stem.

### 9.3.7 *m<sup>m</sup>* class

Countable nouns in *m<sup>m</sup>* class form plurals with *-a<sup>+</sup>* or *-s<sup>ɛ</sup>*, or use *nàm<sup>a</sup>* [9.4](#).  
 Straightforward forms include:

<i>dāam<sup>m/</sup></i>	<i>dā-</i>	"millet beer, pito"
<i>zīim<sup>m/</sup></i>	<i>zī-</i>	"blood"
<i>kù'əm<sup>m</sup></i>	<i>kɥ'à-</i>	"water"
<i>mèlɪgim<sup>m</sup></i>		"dew"
<i>kōdum<sup>m</sup></i>		"olden days"
<i>dū'uním<sup>m</sup></i>	<i>dū'un-</i>	"urine"
<i>zàam<sup>m</sup></i>	<i>zà-</i>	"evening"
<i>dàalum<sup>m</sup></i>		"masculinity"
<i>pò'alum<sup>m</sup></i>		"femininity"
<i>yàarim<sup>m</sup></i>	<i>yàar-</i>	"salt"
<i>zāańsím<sup>m</sup></i>	<i>zāańs-</i>	"soup"

The few words with short stem vowels all use the segmental form of the sg for the cb, and are probably *m*-stems:

<i>vōm<sup>m/</sup></i>	<i>vōm-</i>	"life"
<i>kūm<sup>m</sup></i>	<i>kùm-</i>	"death"
<i>zōm<sup>m/</sup></i>	<i>zōm-</i>	"flour"
<i>yām<sup>m/</sup></i>	<i>yām-</i>	"gall; gall bladder"

*m<sup>m</sup>* class stems in *-m-* can be securely identified when the cb ends in *m* after at least two stem morae, or when there is a plural form with another class suffix, or when there is a Pattern L four-mora stem toneme allocation [7.2.2](#).

<i>bùgúm<sup>m</sup></i>		<i>bùgúm-</i> or <i>bùgūm-</i>	"fire"
<i>pūum<sup>m/</sup></i>		<i>pūum-</i>	"flowers, flora"
<i>bìilím<sup>m</sup></i>			"childhood"
<i>bì'isím<sup>m</sup></i>			"milk"
<i>dàalím<sup>m</sup></i>	<i>dàalímìs<sup>ε</sup></i>	<i>dàalím-</i>	"male sex organs"
<i>pò'alím<sup>m</sup></i>	<i>pò'alímìs<sup>ε</sup></i>	<i>pò'alím-</i>	"female sex organs"
<i>pīim<sup>m/</sup></i>	<i>pīimá<sup>+</sup></i>	<i>pīim-</i>	"arrow" <a href="#">6.1.1.2</a>

*Pīim<sup>m/</sup>* "arrow" is a remnant of an old ɔ|<sup>ε</sup> class, preserved in e.g. the Gurma languages and Nawdm: cf Nawdm *fí:mú* "arrow", plural *fí:mí*.

#### 9.4 *Nàm<sup>a</sup>* plurals

There is an alternative way of making plural nouns, with the word *nàm<sup>a</sup>*, used to pluralise any word which does not make a plural through the class system.

The word is not a suffix. It is construed as the NP head with the preceding noun as a premodifier; the modifier appears as *cb* if it is a count noun and as a formal *sg/pl* if it is a mass noun [16.2.1](#) [16.10](#). Plurals with *nàm<sup>a</sup>* are made for:

(a) human-reference nouns where the pl stem differs from the sg, or the regular pl would be ambiguous [9.3.1](#), or *-b<sup>a</sup>* is used as sg [9.3.1.2](#), or which have a sg consisting of a bare stem:

<i>mà<sup>+</sup></i>	<i>mà nám<sup>a</sup></i>	<i>mà-</i>	"mother"
	(tone <i>sic</i> , behaving as uncompounded)		
<i>bā<sup>+/</sup></i>	<i>bā'-nám<sup>a</sup></i>	<i>bā'-</i>	"father"
<i>zụà<sup>+</sup></i>	<i>zụà-nàm<sup>a</sup></i>	<i>zụà-</i>	"friend"

(b) loanwords, human-reference or otherwise:

<i>bùrkìn<sup>a</sup></i>	<i>bùrkìn-nàm<sup>a</sup></i>	<i>bùrkìn-</i>	"honourable person"
<i>kèèkè<sup>+</sup></i>	<i>kèèkè-nàm<sup>a</sup></i>	<i>kèèkè-</i>	"bicycle"

(c) pronouns without distinctive pl forms, like *àńó'òń<sup>ε</sup>* "who" when asking for a plural answer "what people?", *nē<sup>+/</sup>* inanimate "this" in older materials [16.2.1](#) or e.g.

<i>dāan<sup>a</sup></i>	<i>dāan-nàm<sup>a</sup></i>	<i>dāan-</i>	"owner of.." <a href="#">16.10.3.1</a>
<i>tīrààn<sup>a</sup></i>	<i>tīrààn-nàm<sup>a</sup></i>	<i>tīrààn-</i>	"neighbour, peer"

(d) quantifiers used as noun-phrase heads [16.4.1](#).

(e) plural forms with singular meaning:

<i>dà-pūvdá nám<sup>a</sup></i>	"crosses"
<i>kūt nám<sup>a</sup></i>	"nails"; sg also "iron"
<i>bē'ed nám<sup>a</sup></i>	"evils"

(f) mass nouns used with count meanings [16.2.1](#).

<i>bùgúm nám<sup>a</sup></i>	"fires, lights"
<i>sā'ab nám<sup>a</sup></i>	"portions of millet porridge"
<i>dāam nám<sup>a</sup></i>	"beers"

(g) forms with the personifier clitic *à-* [16.6](#).

### 9.5 Plurals used as singulars

For *-b<sup>a</sup>* as sg see [9.3.1.2](#); for nouns in *-l<sup>+</sup>* and *-v<sup>+</sup>* see [9.6](#).

A number of words referring to uncountables or abstracts are plural in form:

<i>bāñ'as<sup>ε</sup></i>	<i>bāñ'-</i>	"disease"
<i>ñyō'ɔs<sup>ε/</sup></i>	<i>ñyō'-</i>	"smoke"
<i>tàdımís<sup>ε</sup></i>		"weakness"
<i>zōlımís<sup>ε</sup></i>		"foolishness"
<i>mēt<sup>ε/</sup></i>	<i>mēt-</i> <a href="#">9.2.2</a>	"pus"
<i>kūt<sup>ε</sup></i>	<i>kūt-</i> <a href="#">9.2.2</a>	"iron"
<i>zùød<sup>ε</sup></i>		"friendship"
<i>bōvd<sup>ε</sup></i>		"innocence"
<i>sīñd<sup>ε/</sup></i>		"honey"
<i>nīn-púùd<sup>ε</sup></i>		"pus"
<i>wāad<sup>ε/</sup></i>		"cold weather"
<i>sūñ-péèn<sup>nε</sup></i>		"anger"
<i>kɥ'à-nūud<sup>ε/</sup></i>		"thirst"
<i>sālma<sup>+</sup></i>	<i>sàlɥm-</i>	"gold"
<i>sìda<sup>+</sup></i>	<i>sìd-</i>	"truth"

*Kūt<sup>ε</sup>* is also "nail"; the original sg *kūdug<sup>ɔ</sup>* appears in the name *À-Kūdug<sup>ɔ</sup>* [32.2](#).  
So too with a number of irregularly formed abstract nouns from verbs:

<i>gēñmís<sup>ε</sup></i>	"madness"	← <i>gēñm<sup>m/</sup></i>	"madden, go mad"
<i>bùdımís<sup>ε</sup></i>	"confusion"	← <i>bùdım<sup>m</sup></i>	"confuse"
<i>tìtōmıs<sup>ε</sup></i>	"sending"	← <i>tòm<sup>m</sup></i>	"send"
<i>zīd<sup>ε/</sup></i>	"carrying on head"	← <i>zī<sup>+</sup></i>	"carry on head"



	<i>vūud</i> <sup>ε/</sup>	"noise"	← <i>vū</i> <sup>+</sup>	"make a noise"
	<i>kēn</i> <sup>nε/</sup>	"arrival"	← <i>kēñ</i> <sup>+</sup>	"come"
	<i>pjāñ'ad</i> <sup>ε</sup>	"speech"	← <i>pjāñ</i> <sup>a</sup>	"speak" (irreg. tones)
[sg	<i>pjāyñk</i> <sup>ɔ</sup>	"word"]		
	<i>tēñ'esá</i> <sup>+</sup>	"thought"	cf <i>tēñ'esá yīnní</i>	"one thought" <a href="#">16.2.1</a>
	<i>dì'əma</i> <sup>+</sup>	"festival"	← <i>dì'əm</i> <sup>m</sup>	"play, not be serious"
	<i>tūuma</i> <sup>+</sup>	"work"	← <i>tùm</i> <sup>m</sup>	"work"
[sg	<i>tūum</i> <sup>mε</sup>	"deed"]		

A single object may be referred to by the name of its parts:

	<i>dà-pūvdá</i> <sup>+</sup>	"cross"
pl	<i>dà-pūvdá nàm</i> <sup>a</sup>	
cf	<i>dà-pūvdír</i> <sup>ε</sup>	"cross-piece"

A Kusaal plural may just happen to correspond to an English mass noun:

	<i>lāyuk</i> <sup>ɔ</sup>	"piece of goods"
pl	<i>lā'ad</i> <sup>ε</sup>	"goods"
	<i>lā'af</i> <sup>ɔ</sup>	"cowrie"
pl	<i>līgidi</i> <sup>+</sup>	"money"

## 9.6 Nouns with apocope-blocking

A number of nouns ending in *-i*<sup>+</sup> or *-v*<sup>+</sup> display apocope-blocking [6.4](#):

<i>būudi</i> <sup>+</sup>	<i>būud-</i>	"tribe"
<i>nà'asi</i> <sup>+</sup>		"honour"
<i>kābirí</i> <sup>+</sup>		"entry permission"
<i>sūgvrú</i> <sup>+</sup>		"forbearance"
<i>pīini</i> <sup>+</sup>	<i>pīin-</i>	"gift"

Nouns in *-i*<sup>+</sup> or *-v*<sup>+</sup> include loanwords from languages without apocope, like the Mampruli loan *kīibú*<sup>+</sup> "soap" [15.1](#). Cognates of *būudi*<sup>+</sup> show that *-di* represents the equivalent of the *g*<sup>ɔ</sup>|*d*<sup>ε</sup> class plural: Mooré *búudu* "famille, espèce" sg *búugu*. *Nà'asi*<sup>+</sup> may represent a *g*<sup>a</sup>|*s*<sup>ε</sup> class pl. *Kābirí*<sup>+</sup> and *sūgvrú*<sup>+</sup> probably have the equivalent of *r*<sup>ε</sup> sg suffix, in which case *kābir*<sup>ε/</sup> "ask for admission" and *sūgvr*<sup>ε/</sup> "forbear" are back-formations [13.2.1.4](#). With *pīini*<sup>+</sup> cf Mampruli *piini id*; Mampruli also has *r*<sup>ε</sup>|*a*<sup>+</sup> type sg *piinni* pl *piina*, but Dagbani *pini* shows that single *n* is original, because Dagbani preserves long vowels in originally closed syllables. The form may be a remnant of a

noun class obsolete in Western Oti-Volta; Nawdm has a *gu|(n)i* class which includes some concrete deverbal nouns (cf [12.1.2](#)).

## 9.7 Loanwords

Loanwords [15.1](#) adopt noun classes by analogy [9.1](#) or make *nàm<sup>a</sup>* plurals [9.4](#):

<i>àrazà<sup>a</sup></i>	<i>àrazà'as<sup>ε</sup></i>	<i>àrazà'-</i>	"riches" Hausa <i>arzìkii</i>
<i>màljā<sup>a/</sup></i>	<i>màljā'as<sup>ε/</sup></i>	<i>màljā'-</i>	"angel" DK (Arabic)
<i>gādvu<sup>ɔ/</sup></i>	<i>gāt<sup>ε/</sup></i>	<i>gād-</i>	"bed" Hausa <i>gadoo</i>
<i>lòmbò'ɔg<sup>ɔ</sup></i>	<i>lòmbò'ɔd<sup>ε</sup></i>	<i>lòmbò'-</i>	"garden" Hausa <i>làmbuu</i>
<i>lór<sup>ε</sup></i>	<i>lòyà<sup>+</sup> tones sic</i> or <i>lóm<sup>ma</sup></i>	<i>lór-</i>	"car, lorry" cf <i>Mōr<sup>ε</sup></i> <a href="#">9.3.1.1</a>
<i>àlòpìr<sup>ε</sup></i>	<i>àlòpìyá<sup>+</sup></i>		"aeroplane" SB
<i>wādir<sup>ε/</sup></i>	<i>wādá<sup>+</sup></i>	<i>wād-</i>	pl "customs, law" (English "order")
<i>gādv<sup>+</sup></i>	<i>gādv-nám<sup>a</sup></i>	<i>gādv-</i>	"bed" WK
<i>kèékè<sup>+</sup></i>	<i>kèékè-nàm<sup>a</sup></i>	<i>kèékè-</i>	"bicycle" Hausa <i>kèekè</i>
<i>dāká<sup>+</sup></i>	<i>dāká-nàm<sup>a</sup></i>	<i>dāká-</i>	"box" Hausa <i>àdakàa</i>
<i>téébùl<sup>ε</sup></i>	<i>téébùl-nàm<sup>a</sup></i>	<i>téébùl-</i>	"table"
<i>Nàsāara<sup>+</sup></i>	<i>Nàsàar-nàm<sup>a</sup></i> or <i>Nàsàa-nàm<sup>a</sup></i>	<i>Nàsàar-</i> <i>Nàsàa-</i>	"white person, European" <a href="#">32.5</a> ; cf Hausa <i>Nàsaara</i>

Loanwords ending in L or H toneme distinguish sg from cb by the fact that M spreading only follows the sg, conforming to the usual rule [8.3](#):

<i>dù'átà ná'àb</i>	"a doctor's chief"
<i>dù'átà-nà'ab</i>	"a doctor-chief, doctor who is a chief"

Some all-M loanwords change final M to H in the cb on the analogy of Kusaal nouns with M toneme noun prefixes [7.2.4](#):

<i>dūnɣa<sup>+</sup></i>	"world" (Arabic دنيا <i>dunya</i> :)
<i>dūnɣá-kàṅā</i>	"this world"

## 10 Adjective flexion

Primary adjectives are **stative**; many, though by no means all, have corresponding adjectival verbs which in principle have the same stem [11.2.2.2](#). Deverbal adjectives are **dynamic** [13.1.1.2.1](#) or **resultative** [13.1.1.2.2](#).

### 10.1 Primary adjectives

Kusaal primary adjectives differ from nouns in having a marked tendency to occur with suffixes from more than one noun class. This reflects the prehistory of the language, in which the noun classes triggered agreement and adjectives took the suffix of the head noun, which preceded as a combining form (effectively, the adjective stem was infixes between the noun stem and its suffix.) Kusaal, like most of its close relations, has lost the agreement system, but adjectives commonly remain extant with suffixes from more than one class, now usually in free variation:

From *būug*<sup>a</sup> "goat"

<i>bù-pìəlīg</i> <sup>a</sup>	<i>bù-pìəlis</i> <sup>ε</sup>	<i>bù-pìəl-</i> ( <i>g</i> <sup>a</sup>   <i>s</i> <sup>ε</sup> )	"white goat"
<i>bù-pìəl</i> <sup>ε</sup>	<i>bù-pìəla</i> <sup>+</sup>	<i>bù-pìəl-</i> ( <i>r</i> <sup>ε</sup>   <i>a</i> <sup>+</sup> )	<i>id</i>

WK claims a meaning difference in intensity in gradable adjectives with suffixes of different classes, consistently ranking the singular suffixes *g*<sup>a</sup> *r*<sup>ε</sup> *g*<sup>ɔ</sup> in decreasing order, so that for example *fū-pìəlīg* "white shirt" is whiter than *fū-pìəl id*. However, DK specifically denied any difference of meaning.

A few traces of the agreement system remain [16.11.1.1](#). Some speakers still require the *m*<sup>m</sup> suffix for agreement with mass or abstract nouns. This is probably driven by the strong association of the *m*<sup>m</sup> class with meaning; there is similarly a notable preference for plural *s*<sup>ε</sup> over *a*<sup>+</sup> for human reference:

<i>nīn-sábilis</i> <sup>ε</sup>	"Africans"
<i>nīn-sábilà</i> <sup>+</sup>	accepted by informants but much less common
<i>Zyà-wiis</i> <sup>ε</sup>	"Red Zoose Clan"
	though <i>wiug</i> <sup>ɔ</sup> "red" is usually <i>r</i> <sup>ε</sup>   <i>a</i> <sup>+</sup> ~ <i>g</i> <sup>ɔ</sup>   <i>d</i> <sup>ε</sup> type

The <sup>a</sup>|*b*<sup>a</sup> and <sup>f</sup>|*l*<sup>+</sup> suffixes are found only in set expressions and *b*<sup>ɔ</sup> never occurs. Most often, *r*<sup>ε</sup>|*a*<sup>+</sup> class suffixes occur along with either *g*<sup>a</sup>|*s*<sup>ε</sup> or *g*<sup>ɔ</sup>|*d*<sup>ε</sup> but not both; this perhaps reflects an intermediate stage in the collapse of the historical agreement system in which *g*<sup>a</sup>|*s*<sup>ε</sup> and *g*<sup>ɔ</sup>|*d*<sup>ε</sup> had fallen together.

There are constraints on the occurrence of particular suffixes with particular stem finals, explicable by the tendency to avoid forms which would give rise to

unclear or ambiguous SFs; compare Noun Flexion [9.1](#). Just as with nouns, plural  $d^\epsilon$  is not used with  $m n$  stems or with stems over two morae long; in addition, neither  $s$ -stems nor 2-mora  $m n$  stems use the plural suffix  $s^\epsilon$ , and deverbal adjective stems in  $g k \eta$  do not use the sg suffixes  $g^a g^\gamma$  [10.2](#).

Examples of adjectives with suffixes from more than one noun class:

$zìñ'a^+$	$zèñ'ɛs^\epsilon$	$zèñ'-$	"red"
$zèñ'og^\gamma$	$zèñ'ɛd^\epsilon$		
	$zèñda^+$		

$bī'a^+$	$bī'əs^\epsilon$	$bīà'-$	"bad"
$bē'og^\gamma$	$bē'ɛd^\epsilon$	$bē'-$	
$bē'ɛd^\epsilon$ is often used as sg, with a $nəm^a$ plural			

Other primary adjectives use either  $g^a|s^\epsilon$  or  $g^\gamma|d^\epsilon$  suffixes but not both:

$wàbɪg^a$	$wàbɪs^\epsilon$	$wàb-$	"lame"
$wàbɪr^\epsilon$	$wàba^+$		
$vèñllɪg^a$	$vèñllɪs^\epsilon$		"beautiful"
	$vèñlla^+$		
$vènnɪg^a$	$vènnɪs^\epsilon$	$vèn-$	"beautiful"
$vènnɪr^\epsilon$ rare	$vènnna^+$		

and similarly  $wènnɪr^\epsilon$  "resembling."

$sābɪlɪg^a$	$sābɪlɪs^\epsilon$	$sābɪl-$	"black"
$sābɪlɪ^\epsilon$	$sābɪlá^+$		

and similarly  $pāalɪg^a$  "new"  $záalɪ^\epsilon$  "empty"  $bàañlɪg^a$  "slim"  $pìəlɪg^a$  "white"

$tītā'ug^\gamma$ rare	$tītāda^+$	$tītá'-$	"big"
$tītā'ar^\epsilon$			
$nèog^\gamma$	$nèɛd^\epsilon$	$nè-$	"empty"
$nèɛr^\epsilon$	$nèya^+$		
$wìug^\gamma$	$wìid^\epsilon$	$wì-$	"red"
$wìir^\epsilon$	$wìya^+$		

<i>wōk</i> <sup>ɔ/</sup>	<i>wā'ad</i> <sup>ε/</sup>	<i>wā'</i> - or <i>wōk</i> -	"long, tall"
<i>wā'ar</i> <sup>ε/</sup> rare	<i>wā'á</i> <sup>+</sup>		

<i>bèdvug</i> <sup>ɔ</sup>		<i>bèd</i> -	"great"
<i>bèdir</i> <sup>ε</sup> rare	<i>bèda</i> <sup>+</sup>		

<i>kōdvug</i> <sup>ɔ</sup>	<i>kōt</i> <sup>ε</sup> rare	<i>kòd</i> -	"old"
<i>kōdir</i> <sup>ε</sup>	<i>kōda</i> <sup>+</sup>		

S-stems do not use pl *s*<sup>ε</sup>:

<i>bōvusig</i> <sup>a</sup>		<i>bōvus</i> -	"soft"
<i>bōvusír</i> <sup>ε</sup>	<i>bōvusá</i> <sup>+</sup>		

Similarly *mā'asír*<sup>ε</sup> "cold, wet" *mālsír*<sup>ε</sup> "sweet" *tēbísír*<sup>ε</sup> "heavy" *lābísír*<sup>ε</sup> "wide", and also

<i>ρòɔdig</i> <sup>a</sup>		<i>ρòɔd</i> -	"few, small"
<i>ρòɔdir</i> <sup>ε</sup>	<i>ρòɔda</i> <sup>+</sup>		

Stems in *m n* do not use sg *r*<sup>ε</sup>, except for

<i>sùŋ</i> <sup>ɔ</sup>		<i>sùŋ</i> -	"good"
<i>sùm</i> <sup>mε</sup>	<i>sùma</i> <sup>+</sup>		

As usual with adjectives, the singular may show either *g*<sup>a</sup> or *g*<sup>ɔ</sup> but not both.

<i>gīŋ</i> <sup>a</sup>	<i>gīma</i> <sup>+</sup>	<i>gīŋ</i> -	"short"
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<i>dēεŋ</i> <sup>a</sup>	<i>dēεñs</i> <sup>ε</sup>		"first"
	<i>dēεmıs</i> <sup>ε</sup>	<i>dēεŋ</i> -	
	<i>dēεna</i> <sup>+</sup>		

Because (as with nouns) stems in *m n*, and all 3-mora stems, use pl *-a*<sup>+</sup> instead of *-d*<sup>ε</sup>, most adjectives in *m n* simply belong to the *g*<sup>ɔ</sup>|*a*<sup>+</sup> subclass [9.3.3.1](#):

<i>dà-zēmmúg</i> <sup>ɔ</sup>	<i>dà-zēmmá</i> <sup>+</sup>	<i>dà-zēm</i> -	"equal piece of wood"
<i>tūvlúg</i> <sup>ɔ</sup>	<i>tūvlá</i> <sup>+</sup>	<i>tūvl</i> -	"hot"
<i>lāllúg</i> <sup>ɔ</sup>	<i>lāllá</i> <sup>+</sup>	<i>lāl</i> -	"distant"
<i>mì'isug</i> <sup>ɔ</sup>	<i>mì'isa</i> <sup>+</sup>	<i>mì'is</i> -	"sour"
<i>wàuŋ</i> <sup>ɔ</sup>	<i>wàna</i> <sup>+</sup>	<i>wàuŋ</i> -	"wasted, thin"

<i>kpī'orŋ</i> <sup>ɔ</sup>	<i>kpī'əma</i> <sup>+</sup>	<i>kpī'orŋ-</i>	"hard, strong"
<i>zùlvŋ</i> <sup>ɔ</sup>	<i>zùlvma</i> <sup>+</sup>	<i>zùlvŋ-</i>	"deep"

and so also *yàlvŋ*<sup>ɔ</sup> "wide" *ñyālúŋ*<sup>ɔ</sup> "wonderful" *yēl-nárùŋ*<sup>ɔ</sup> "necessary thing", along with the probably originally 3-mora stems (via \**rr* → *r*, \**ss* → *s* 6.2.1):

<i>yī-póñrùŋ</i> <sup>ɔ</sup>	<i>yī-póñrà</i> <sup>+</sup>		"nearby house"
<i>kísùŋ</i> <sup>ɔ</sup>	<i>kīsá</i> <sup>+</sup>	<i>kīs-</i>	"hateful, taboo"

Other single-class adjectives are:

<i>puāk</i> <sup>a</sup>	<i>pū'as</i> <sup>ε</sup>	<i>pu'à-</i>	"female" (human)
<i>ñyá'anŋ</i> <sup>a</sup>	<i>ñyá'as</i> <sup>ε</sup>	<i>ñyā'anŋ-</i>	"female" (animal)
	or <i>ñyā'amís</i> <sup>ε</sup>		
<i>ñyèesíŋ</i> <sup>a</sup>	<i>ñyèensís</i> <sup>ε</sup>	<i>ñyèesíŋ-</i>	"self-confident"
<i>vōr</i> <sup>ε/</sup>	<i>vōyá</i> <sup>+</sup>	<i>vōr-</i>	"alive"
<i>dāvŋ</i> <sup>ɔ</sup>	<i>dāad</i> <sup>ε</sup>	<i>dà-</i>	"male"
<i>tōvŋ</i> <sup>ɔ</sup>	<i>tōvd</i> <sup>ε</sup>	<i>tò-</i>	"bitter"

and other derivatives in *-m-*: *vèñllíŋ*<sup>a</sup> "beautiful" *mālvísŋ*<sup>a</sup> "pleasant" *lāllíŋ*<sup>a</sup> "distant."

Extremely **irregular** is

<i>bīl</i> <sup>a</sup>	<i>bībiv</i> <sup>ε</sup>	<i>bìl-</i> or <i>bì-</i>	"little"
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The sg flexion *-la* is found more widely in other Western Oti-Volta languages, where it has a diminutive sense: thus Farefare (Niggli) *níllá* "chick", *pìllà* "lamb", *bùdíblá* "boy", *púglá* "girl", *kíllá* "young guinea fowl"; Mooré *bíríblá* "boy", *bìpúglá* "girl." The plural stem *bib-* is reduplicated.

## 10.2 Deverbal adjectives

**Dynamic adjectives** are derived from dynamic variable or invariable verbs using *d*, the same formant as with agent nouns, but as the *d* is often assimilated or dropped 13.1.1.2.1, not all dynamic adjectives are *d*-stems. Dynamic adjectives always take *r<sup>ε</sup>|a*<sup>+</sup> class sg and pl suffixes, but may also take another sg suffix; this is *g<sup>a</sup>* for WK, but *g<sup>ɔ</sup>* for KT:

<i>kōvdír</i> <sup>ε</sup>	<i>kōvdá</i> <sup>+</sup>	<i>kōvd-</i>	"murderous;
<i>kōvdíg</i> <sup>a</sup> WK			liable to be killed"
<i>kōvdúg</i> <sup>ɔ</sup> KT			

<i>tōmmur</i> <sup>ε</sup>	<i>tōmma</i> <sup>+</sup> WK <i>tōmna</i> <sup>+</sup> KT	<i>tòm-</i>	"working, helpful"
<i>sīnnír</i> <sup>ε</sup> rare	<i>sīnná</i> <sup>+</sup>	<i>sīn-</i>	"silent"
<i>sīnníg</i> <sup>a</sup>			
<i>dēl</i> <sup> ε/</sup>	<i>dēllá</i> <sup>+</sup>	<i>dēl-</i>	"leaning"
<i>mōr</i> <sup>ε/</sup>	<i>mōrá</i> <sup>+</sup>	<i>mōr-</i>	"having"
<i>nō-záñ</i> <sup> ε</sup>	<i>nō-záñlla</i> <sup>+</sup>		"hen for holding"
<i>kùg-dēl</i> <sup> ε/</sup>	<i>kùg-dēllá</i> <sup>+</sup>		"chair for leaning on"
<i>bōn-gúl</i> <sup> ε</sup>	<i>bōn-gúlla</i> <sup>+</sup>		"thing for suspending"

Stems in *g k ŋ* do not use the sg suffixes *g<sup>a</sup> g<sup>ɔ</sup>*:

<i>bōn-túlgir</i> <sup>ε</sup>	<i>bōn-túlgá</i> <sup>+</sup>		"heating thing"
<i>ñwī-tékir</i> <sup>ε</sup>	<i>ñwī-téká</i> <sup>+</sup>	<i>ñwī-ték-</i>	"pulling-rope"
<i>bōn-súgír</i> <sup>ε</sup>	<i>bōn-súgá</i> <sup>+</sup>		"helpful thing"
<i>bì-nòŋir</i> <sup>ε</sup>	<i>bì-nòŋá</i> <sup>+</sup>		"beloved child"

Adjectives derived from 4-mora stem verbs in *-m* in KT's speech take *g<sup>a</sup>* or *g<sup>ɔ</sup>* sg and *-a<sup>+</sup>* pl; they may drop the *-m-* in the plural:

<i>nīn-pú'alīg<sup>a</sup></i>	<i>nīn-pú'alíma</i> <sup>+</sup>	"harmful person"
<i>nīn-záaňsùg<sup>ɔ</sup></i>	<i>nīn-záaňsà</i> <sup>+</sup>	"dreamy person"

**Resultative adjectives** are derived from variable verbs with the suffix *\*-lum-*. They inflect regularly as *g<sup>ɔ</sup>|a<sup>+</sup>* subclass *m*-stems. KT (not WK) also has forms without *-m-* in both sg and pl:

<i>kpiilúg<sup>ɔ</sup></i>	<i>kpiilímá</i> <sup>+</sup>	<i>kpiilúg-</i>	"dead"	WK
<i>nīn-kpíilùg<sup>ɔ</sup></i>	<i>nīn-kpíilíma</i> <sup>+</sup>		"dead person"	KT
<i>gēēñlúg<sup>ɔ</sup></i>	<i>gēēñlíma</i> <sup>+</sup>	<i>gēēñlúg-</i>	"tired"	WK
<i>nīn-gēēñlùg<sup>ɔ</sup></i>	<i>nīn-gēēñlíma</i> <sup>+</sup>		"tired person"	KT
<i>pè'elúg<sup>ɔ</sup></i>	<i>pè'elímá</i> <sup>+</sup>	<i>pè'elúg-</i>	"full"	WK KT
	<i>dūg-pé'elá</i> <sup>+</sup>		"full pots"	KT

## 11 Verb flexion

Though written solid with the verb in traditional orthography, discontinuous-past  $n^{\epsilon}$  [27.1.1](#) and the 2pl subject  $y^a$  [19.7.3](#) are not flexions but liaison enclitics.

Some 90% of verbs are "variable verbs", distinguishing perfective and imperfective aspects morphologically. With few exceptions, they are prototypical dynamic verbs expressing activities, accomplishments and achievements. The remaining 10% are "invariable verbs" with just one finite form, which is always imperfective. They divide into dynamic and stative types, and stative verbs further divide into agentive "relational" verbs, which can be used in direct commands and form deverbal agent nouns, and non-agentive "adjectival" verbs.

Tone patterns show that the imperfective forms of both variable verbs and dynamic-invariable verbs were historically created by the addition of a *derivational* suffix of the Pattern-L-deriving type [7.5](#) to the verb stem prior to adding the imperfective flexion  $*-a$  [7.3](#). In variable verbs this suffix was  $*d$ , and in dynamic-invariable verbs it was  $*y$  [6.2.1.1](#). In variable verbs, however, extensive levelling has produced a system which is synchronically flexional and strikingly regular [11.1](#). With dynamic-invariable verbs, forms without  $*y$  appear in perfective gerunds, agent nouns and dynamic adjectives; some stative verbs also show a formant  $*y$ , but in such cases it is also present in the cognate adjectives; in principle, stative verbs simply add the imperfective flexion  $*-a$  to the stem. (The  $-y-$  in the LFs of  $\grave{a}\grave{e}\grave{n}^a$  "be something/somehow",  $v\bar{u}\grave{e}^a$  "be alive" and  $t\bar{5}\grave{e}^a$  "be bitter" is root-final [6.1.1.1](#).)

Segmental levelling has partly obscured the morphological difference between dynamic-invariable verbs and stative verbs. Dynamic-invariable verbs with roots ending in  $n / r$  have generalised the form with gemination due to  $*y$  to all related stems, and for some speakers, like WK, stative verbs with roots in  $m$  have acquired a secondary gemination of the  $m$ ; this is not seen in written sources or found with all informants, and even for WK, Tone Pattern H 3-mora-stem verbs have the tonemes which would be expected *without* gemination:

$kp\bar{r}\grave{a}m^{ma/}$	not	$*kp\bar{r}'\grave{a}m^{ma}$	"be strong, hard"
$w\bar{a}'am^{ma/}$	not	$*w\bar{a}'am^{ma}$	"be long, tall" KT

The Dagbani cognate of  $kp\bar{r}\grave{a}m^{ma/}$  "be hard" is  $kpema$ , confirming an original single  $-m-$ : Dagbani preserves long vowels always and only in originally closed syllables. (Dagbani *maani* sg *mana* pl = Kusaal  $m\acute{a}'an^{n\epsilon}$  sg  $m\bar{a}'an\acute{a}^+$  pl "okra.")

Four stative verbs consist of bare roots with no suffix:

$m\bar{r}^+$	"know"	$z\bar{r}'^+$	"not know"
$b\grave{e}^+$	"be somewhere, exist"	$k\bar{a}'\grave{e}^+$	"not be" ( $\leftarrow *kag\grave{t}$ )



The irregular variable verb *nòŋ*<sup>ε</sup> "love" similarly has a base form which is not perfective but stative [11.1.1](#). Though they resemble variable-verb perfectives, the particle *yā*<sup>+</sup> does not occur after these words [19.6.2.1](#), and Tone Pattern LO *bè*<sup>+</sup> with its intrinsic tonemes is followed by M spreading like other imperfectives [8.3](#).

### 11.1 Variable verbs

The unmarked stem form is used for perfective aspect, and the imperfective adds a flexional suffix *-d*<sup>a</sup>. The suffix *-m*<sup>a</sup> marks imperative mood when and only when the verb word itself carries independency-marking tone overlay [19.6.2.2](#).

Perfective, imperfective and *-m*<sup>a</sup> imperative are cited in order.

Straightforward examples include:

<i>kū</i> <sup>+</sup>	<i>kūvd</i> <sup>a/</sup>	<i>kùvm</i> <sup>a</sup>	"kill"
<i>kpèñ</i> <sup>+</sup>	<i>kpèñ'ed</i> <sup>a</sup>	<i>kpèñ'em</i> <sup>a</sup>	"enter"
<i>kjà</i> <sup>+</sup>	<i>kjàd</i> <sup>a</sup>	<i>kjàm</i> <sup>a</sup>	"cut"
<i>kyā</i> <sup>+</sup>	<i>kūød</i> <sup>a/</sup>	<i>kùøm</i> <sup>a</sup>	"hoe"
<i>gòñ</i> <sup>+</sup>	<i>gòñd</i> <sup>a</sup>	<i>gòñm</i> <sup>a</sup>	"hunt"
<i>dōg</i> <sup>ε</sup>	<i>dōgvd</i> <sup>a/</sup>	<i>dùgvm</i> <sup>a</sup>	"cook"
<i>yùug</i> <sup>ε</sup>	<i>yùugd</i> <sup>a</sup>	<i>yùugvm</i> <sup>a</sup>	"delay, get late"
<i>yādıg</i> <sup>ε/</sup>	<i>yādıgd</i> <sup>a</sup>	<i>yādıgvm</i> <sup>a</sup>	"scatter"
<i>pjāñ</i> <sup>a</sup>	<i>pjāñ'ad</i> <sup>a/</sup>	<i>pjāñ'am</i> <sup>a</sup>	"speak; praise"
<i>dı'à</i> <sup>a</sup>	<i>dı'ad</i> <sup>a</sup>	<i>dı'am</i> <sup>a</sup>	"bear, beget"
<i>nōk</i> <sup>ε/</sup>	<i>nōkd</i> <sup>a</sup>	<i>nōkvm</i> <sup>a</sup>	"take"
<i>sjàk</i> <sup>ε</sup>	<i>sjàkd</i> <sup>a</sup>	<i>sjàkvm</i> <sup>a</sup>	"believe, agree"
<i>gāŋ</i> <sup>ε/</sup>	<i>gāŋd</i> <sup>a</sup>	<i>gāŋvm</i> <sup>a</sup>	"choose"
<i>kpè'ŋ</i> <sup>ε</sup>	<i>kpè'ŋd</i> <sup>a</sup>	<i>kpè'ŋvm</i> <sup>a</sup>	"strengthen"
<i>kpàr</i> <sup>ε</sup>	<i>kpàrd</i> <sup>a</sup>	<i>kpàrvm</i> <sup>a</sup>	"lock"
<i>sūgvr</i> <sup>ε/</sup>	<i>sūgvrđ</i> <sup>a</sup>	<i>sùgvrvm</i> <sup>a</sup>	"forgive"
<i>bàs</i> <sup>ε</sup>	<i>bàsđ</i> <sup>a</sup>	<i>bàsvm</i> <sup>a</sup>	"go/send away"
<i>sīgı</i> <sup>ε/</sup>	<i>sīgıđ</i> <sup>a</sup>	<i>sīgıvm</i> <sup>a</sup>	"lower"
<i>nā'mı</i> <sup>ε/</sup>	<i>nā'mıđ</i> <sup>a</sup>	<i>nā'mıvm</i> <sup>a</sup>	"(make) suffer"

Some root-stems ending in a vowel show a CV- allomorph in both imperfective and imperative, with *-t*- for *-d*- [6.1.1.1](#):

<i>dı</i> <sup>+</sup>	<i>dıt</i> <sup>a</sup>	<i>dım</i> <sup>a</sup>	"eat"
<i>ñyē</i> <sup>+</sup>	<i>ñyēt</i> <sup>a/</sup>	<i>ñyèm</i> <sup>a</sup>	"see"

and so also *lı*<sup>+</sup>, *lù*<sup>+</sup> "fall" *dū*<sup>+</sup> "go up" *yı*<sup>+</sup> "go/come out" *zò*<sup>+</sup> "run, fear."

Stems in *-d-* show *-t-* in the ipfv via *\*dd* → *tt*:

<i>bùd<sup>ε</sup></i>	<i>bùt<sup>a</sup></i>	<i>bùdım<sup>a</sup></i>	"plant"
<i>gàad<sup>ε</sup></i>	<i>gàt<sup>a</sup></i> <a href="#">6.3.3</a>	<i>gàadım<sup>a</sup></i>	"pass, surpass"

Stems in *l* generate a cluster in the ipfv via *\*ld* → *nn* [6.2.1](#):

<i>vūl<sup>ε</sup></i>	<i>vūn<sup>na/</sup></i>	<i>vùlım<sup>a</sup></i>	"swallow"
<i>màal<sup>ε</sup></i>	<i>màan<sup>na</sup></i>	<i>màalım<sup>a</sup></i>	"make; sacrifice"
<i>dīgıı<sup>ε/</sup></i>	<i>dīgín<sup>na</sup></i>	<i>dīgıılım<sup>a</sup></i>	"lay down"

Only 2-mora stems assimilate *\*bm* → *mm*:

<i>lèb<sup>ε</sup></i>	<i>lèbıd<sup>a</sup></i>	<i>lèm<sup>ma</sup></i>	"return"
<i>sōb<sup>ε</sup></i>	<i>sōbıd<sup>a/</sup></i>	<i>sòm<sup>ma</sup></i>	"write"
<i>liəb<sup>ε</sup></i>	<i>liəbıd<sup>a</sup></i>	<i>liəbım<sup>a</sup></i>	"become"
<i>ēēñb<sup>ε/</sup></i>	<i>ēēñbıd<sup>a</sup></i>	<i>ēēñbım<sup>a</sup></i>	"lay a foundation"

Only 2-mora *n*-stems show *\*nd* → *nn*; only *kēŋ<sup>ε/</sup>* (below) shows *\*nm* → *mm*:

<i>bùn<sup>ε</sup></i>	<i>bùn<sup>na</sup></i>	<i>bùnım<sup>a</sup></i>	"reap"
<i>mōn<sup>ε</sup></i>	<i>mōn<sup>na/</sup></i>	<i>mònım<sup>a</sup></i>	"make porridge"
<i>gò'ɔn<sup>ε</sup></i>	<i>gò'ɔnıd<sup>a</sup></i>	<i>gò'ɔnım<sup>a</sup></i>	"extend neck"
<i>dìgıı<sup>ε</sup></i>	<i>dìgıııd<sup>a</sup></i>	<i>dìgııım<sup>a</sup></i>	"lie down"

The *nn*-stem *sùn<sup>ε</sup>* does not assimilate at all:

<i>sùn<sup>ne</sup></i>	<i>sùnnıd<sup>a</sup></i>	<i>sùnnım<sup>a</sup></i>	"bow head"
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4-mora *m*-stems always assimilate *\*md* → *mn*, *mm*:

<i>sıilım<sup>m</sup></i>	<i>sıilım<sup>ma</sup></i>	<i>sıilım<sup>ma</sup></i>	"quote proverbs"
<i>lāŋım<sup>m</sup></i>	<i>lāŋım<sup>ma</sup></i>	<i>lāŋım<sup>ma</sup></i>	"wander searching"

3-mora *m*-stems assimilate optionally:

<i>kàrım<sup>m</sup></i>	<i>kàrım<sup>m</sup></i>	<i>kàrım<sup>ma</sup></i>	"read"
	or <i>kàrımıd<sup>a</sup></i>		
<i>tōɔm<sup>m/</sup></i>	<i>tōɔm<sup>ma</sup></i>	<i>tōɔm<sup>ma</sup></i>	"depart"
	or <i>tōɔmıd<sup>a</sup></i>		

Stems in *-mm-* (probably ← *\*mb*) never assimilate in the imperfective, but simplify *\*mmm* → *mm* in the imperative:

<i>tàm<sup>m</sup></i>	<i>tàmmɪd<sup>a</sup></i>	<i>tàm<sup>ma</sup></i>	"forget"
<i>zàm<sup>m</sup></i>	<i>zàmmɪd<sup>a</sup></i>	<i>zàm<sup>ma</sup></i>	"cheat, betray"
<i>dàm<sup>m</sup></i>	<i>dàmmɪd<sup>a</sup></i>	<i>dàm<sup>ma</sup></i>	"shake"
<i>lèm<sup>m</sup></i>	<i>lèmmɪd<sup>a</sup></i>	<i>lèm<sup>ma</sup></i>	"sip, taste"

2-mora stems normally assimilate:

<i>tùm<sup>m</sup></i>	<i>tùm<sup>ma</sup></i>	<i>tùm<sup>ma</sup></i>	"work"
<i>wùm<sup>m</sup></i>	<i>wùm<sup>ma</sup></i>	<i>wùm<sup>ma</sup></i>	"hear"
<i>kìm<sup>m</sup></i>	<i>kìm<sup>ma</sup></i>	<i>kìm<sup>ma</sup></i>	"tend flock/herd"
<i>dùm<sup>m</sup></i>	<i>dùm<sup>ma</sup></i>	<i>dùm<sup>ma</sup></i>	"bite"

but the NT/KB sometimes have unassimilated forms to avoid ambiguity [6.2.1](#).

**Fusion verbs** are 3-mora stems with deleted *\*g* after *aa iə uə aañ eñ ɔñ* [6.3.1](#). They show the stem with *\*g* only in the perfective and gerund, with all other forms dropping the *\*g* by *morphological* rule; this has implications for the toneme distribution of Pattern H stems [7.3.1](#). Perfectives before liaison likewise drop the *\*g*.

<i>fāeñ<sup>+/</sup></i>	<i>fāañd<sup>a/</sup></i>	<i>fàañm<sup>a</sup></i>	"save"
<i>dī'e<sup>+/</sup></i>	<i>dī'əd<sup>a/</sup></i>	<i>dì'əm<sup>a</sup></i>	"get, receive"
<i>dūe<sup>+/</sup></i>	<i>dūəd<sup>a/</sup></i>	<i>dùəm<sup>a</sup></i>	"rise, raise"
<i>pūñ'e<sup>+/</sup></i>	<i>pūñ'əd<sup>a/</sup></i>	<i>pùñ'əm<sup>a</sup></i>	"rot" WK

Contrast the tonemes of the Gerunds *fāañr<sup>ε</sup> dī'ər<sup>ε</sup> dú'ər<sup>ε</sup> pūñ'ər<sup>ε</sup>*.

For the forms taken by fusion verb perfectives before liaison see [8.2.1](#).

### 11.1.1 Irregularities

Most irregularities involve the stem showing a derivational suffix in the perfective which is dropped in the imperfective. A preceding derivational suffix is often dropped before derivational *d*, so this may represent an older pattern which has been levelled out elsewhere. In some cases two distinct verbs may be involved, each associated by its precise meaning with particular aspects.

Kusaal has few irregular verbs; I list all that I have encountered below.

<i>gɔ̄s</i> <sup>ε</sup>	<i>gɔ̄sɪd</i> <sup>a/</sup> or <i>gɔ̄t</i> <sup>a/</sup>	<i>gòsɪm</i> <sup>a</sup> <i>gòm</i> <sup>a</sup>	"look"
<i>tìs</i> <sup>ε</sup>	<i>tìsɪd</i> <sup>a</sup> or <i>tìt</i> <sup>a</sup>	<i>tìsɪm</i> <sup>a</sup>	"give"

Before liaison-word objects the perfective may also be *tì-*, e.g. *tì f* "give you."

<i>yèl</i> <sup>ε</sup>	<i>yèt</i> <sup>a</sup>	<i>yèlɪm</i> <sup>a</sup>	"say"
<i>wìk</i> <sup>ε</sup>	<i>wìid</i> <sup>a</sup> <a href="#">6.1.1.1</a>	<i>wìkɪm</i> <sup>a</sup>	"fetch water"
<i>jāñk</i> <sup>ε/</sup>	<i>jāñ'ad</i> <sup>a/</sup>	<i>jāñkɪm</i> <sup>a</sup>	"leap, fly"
<i>gìlɪg</i> <sup>ε/</sup>	<i>gīn</i> <sup>na/</sup>	<i>gìlɪgɪm</i> <sup>a</sup>	"go around"
<i>kēŋ</i> <sup>ε/</sup>	<i>kēn</i> <sup>na/</sup>	<i>kēm</i> <sup>a</sup>	"go"

The verb

<i>dèlɪm</i> <sup>m</sup>	[ <i>dēl</i> <sup>la/</sup> ]	<i>dèlɪm</i> <sup>ma</sup>
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is used as inchoative to *dēl*<sup>la/</sup> "be leaning (of a person)"; compare *gùl*<sup>ε</sup> ipfv *gùn*<sup>na</sup> "suspend" beside the stance verb *gùl*<sup>la</sup> "be hanging."

Only two variable verbs are irregular in the actual flexional suffixes taken:

<i>kē</i> <sup>+</sup>	<i>kēt</i> <sup>a/</sup>	<i>kèl</i> <sup>a</sup>	"let, allow"
<i>kēñ</i> <sup>+</sup>	<i>kēn</i> <sup>a/</sup>	<i>kēm</i> <sup>a</sup>	"come"

*Kēñ*<sup>+</sup> is always immediately followed by *nā*<sup>+/</sup> "hither" [20.7](#), disambiguating the forms which are homophonous with those of *kēŋ*<sup>ε/</sup> "go":

<i>Kèm nā!</i>	"Come!"
<i>Kèm sá!</i>	"Go!"

The verb *nəŋ*<sup>ε</sup> "love" has the regular *-m*<sup>a</sup> imperative *nəŋim*<sup>a</sup>, but the stem form has *stative* aspect [11.2.2.1](#):

	<i>Ṁ nónj̄ f.</i>	"I love you."	(Family, spiritual.)
cf	<i>Ṁ bɔ́ɔdī f.</i>	"I love you."	(Romantic, sexual.)

Like other imperfective forms, *nəŋ*<sup>ε</sup> is *not* followed by the particle *yā*<sup>+</sup> when it is phrase-final and affected by the independency-marking tone overlay [19.6.2.1](#).

*Ṁ nónj̄.* "I love him." (e.g. in reply to a question) WK

WK specifically stated that *\*Ṁ nónj̄ yā* was an impossible form.

The agent noun *nəŋid*<sup>a</sup> has Pattern L instead of the expected O. It is the only Pattern L 4-mora stem which is not a *m*-stem and does not show H on the 3rd mora.

*Ò nəŋid kā'e.* "Nobody loves him." WK  
("His lover does not exist.")

## 11.2 Invariable verbs

### 11.2.1 Dynamic

Dynamic-invariable verbs make gerunds capable of expressing events, which can be used in the immediate-future construction with *bɔ́ɔd*<sup>a</sup> "want" + gerund [19.3.3](#). They make deverbal nouns and adjectives by adding *-d-* to the stem, like variable verbs. Unlike stative verbs, they form not only agent nouns [13.1.1.1](#) but also dynamic adjectives [13.1.1.2.1](#), and instrument nouns [13.1.1.3](#). Stems in *ll nn r(r)* drop the *-d-* formant in derivation, including in agent nouns, with the exception of *tēñrid*<sup>a</sup> "remember-er" and the variant *gūrīd*<sup>a/</sup> "guard" beside *gū'ud*<sup>a/</sup> and *-gúr*<sup>a</sup>.

Most dynamic-invariable verbs are **stance verbs**:

<i>īgi</i> <sup>ya/</sup>	"be kneeling"	<i>dīgi</i> <sup>ya/</sup>	"be lying down"
<i>vābi</i> <sup>ya/</sup>	"be prone"	<i>làbi</i> <sup>ya</sup>	"crouch in hiding"
<i>tàbi</i> <sup>ya</sup>	"be stuck to"	<i>zì'e</i> <sup>ya</sup>	"be standing still"
<i>zìñ'i</i> <sup>ya</sup>	"be sitting"	<i>tī'ya/</i>	"be leaning (object)"
<i>dēl</i> <sup>la/</sup>	"be leaning (person)"	<i>sùr</i> <sup>a</sup>	"have head bowed"
<i>gō'e</i> <sup>ya/</sup> WK	"have neck extended"	<i>gùl</i> <sup>la</sup>	"be hanging"
<i>gōr</i> <sup>a/</sup> DK	"have neck extended"	<i>gōl</i> <sup>la/</sup> KT	"have neck extended"

Stance verbs are dynamic. They distinguish continuous/progressive from habitual/propensity with focus-*nē*<sup>+/</sup> like dynamic imperfectives of variable verbs

[19.2.2.1](#); derived assume-stance verbs [13.2.1.1](#) cannot use the perfective as a resultative, unlike verbs expressing a change of state in the subject; and it is not possible to form a resultative adjective [13.1.1.2.2](#) from a stance verb.

For some informants, stance verb stems also occur with the variable-verb ipfv suffix *-d<sup>a</sup>*, here confined to the habitual/propensity meaning; other informants use the ipfv of the derived assume-stance variable verb instead:

	<i>Ò zìǎ'i nē.</i>	"She's sitting down." WK KT
	<i>Ò p̄ zìǎ'idā.</i>	"She doesn't sit down" WK
but	<i>Ò p̄ zìǎ'inìdā.</i>	"She doesn't sit down." KT
	<i>Ò zìǎ'i nē.</i>	"She's sitting down."
	<i>Ò p̄ zìǎ'idā.</i>	"She doesn't sit down" WK
but	<i>Ò p̄ zìǎ'inìdā.</i>	"She doesn't sit down." KT
	<i>Ò vābɪ nē.</i>	"He's lying prone."
	<i>Ò p̄ vābɪdā.</i>	"He doesn't lie prone." WK
but	<i>Ò p̄ vābɪnìdā.</i>	"He doesn't lie prone." KT
	<i>Ò dīgɪ nē.</i>	"She's lying down."
	<i>Ò p̄ dīgɪdā.</i>	"She doesn't lie down" WK
	<i>Lì zì'ə nē.</i>	"It's standing up."
	<i>Lì p̄ zì'idā.</i>	"It (a defective tripod) doesn't stand up." WK
	<i>Lì tì'i nē.</i>	"It's leaning against something."
	<i>Lì tì'id.</i>	"It can be leant against something." WK
	<i>Lì p̄ tì'iyá.</i>	"It's not leaning against something."
	<i>Lì p̄ tì'idá.</i>	"It's not for leaning against something." WK

Non-stance dynamic-invariable verbs include

<i>wà'e<sup>ya</sup></i>	"travel to"	<i>sīn<sup>na/</sup></i>	"be silent"
<i>d̄ɔl<sup>la/</sup></i>	"accompany"	<i>zāñ<sup>la/</sup></i>	"carry in one's hands"
<i>gūr<sup>a/</sup></i>	"guard"	<i>tèñ<sup>a</sup></i>	"remember"

They do not have distinct continuous and habitual forms:

<i>Ò sìn.</i>	"She's silent."
<i>Ò sìn nē.</i>	"She's keeping silent."

<i>Ò zàñl nē kólùg.</i>	"He's holding a bag."
<i>Ò zàñl kólùg.</i>	"He holds a bag."
<i>Ò pō zāñllá.</i>	"He isn't holding/doesn't hold it."

Nor do they form separate derived inchoative variable verbs; instead, the same verb form is also used in inchoative senses:

<i>Sin!</i>	"Be quiet!"
<i>Dòllī m.</i>	"Follow me!"
<i>Kà bà sīn.</i>	"And they fell silent."
And 3PL be.silent.	

## 11.2.2 Stative

### 11.2.2.1 Relational

Apart from the negative verbs [29.1.1](#) *kā'ε*<sup>+</sup> and *zī'*<sup>+</sup>, relational verbs can be used in direct commands, and most have derived agent nouns [13.1.1.1](#). Relational verbs are all obligatory transitives [20.1](#) apart from *bε*<sup>+</sup> and *kā'ε*<sup>+</sup> when used in the meanings "exist" and "not exist."

<i>àεñ<sup>a</sup></i>	"be something/somehow" <a href="#">6.1.1.1</a>		
<i>bε<sup>+</sup></i>	"be somewhere/exist" (no agent noun)		
<i>kā'ε<sup>+</sup></i>	"not be" (← * <i>kagɪ</i> ); negative to both <i>àεñ<sup>a</sup></i> and <i>bε<sup>+</sup></i>		
<i>mōr<sup>a/</sup></i>	"have"	<i>tār<sup>a/</sup></i>	"have"
<i>sō'e<sup>ya/</sup></i>	"own"	<i>sōñ'e<sup>ya/</sup></i>	"be better than"
<i>mī<sup>+</sup></i>	"know"	<i>zī<sup>+</sup></i>	"not know"
<i>nēn<sup>na/</sup></i>	"envy"	<i>kīs<sup>a/</sup></i>	"hate"
<i>zēm<sup>ma/</sup></i>	"be equal to"	<i>kpēēñm<sup>ma/</sup></i>	"be older than"
<i>wēn<sup>na/</sup></i>	"resemble" <a href="#">20.4</a>		

Some variable-verb imperfectives have given rise to independent relational verbs: *bòcɔ<sup>a</sup>* "want, like" is formally the ipfv of *bò<sup>+</sup>* "seek"; *zòt<sup>a</sup>* "fear; experience emotion" [20.1](#) is derived from the ipfv of *zò<sup>+</sup>* "run."

The variable verb *nòŋ<sup>ε</sup>* "love" has a relational *base* form [11.1.1](#).

### 11.2.2.2 Adjectival

Adjectival verbs express predicative adjectival meanings. They are intransitive, cannot be used in direct commands, and do not form agent nouns or gerunds. Any cognate adjectives are normally primary and not deverbal.

<u>Adjectival Verb</u>		<u>Adjective</u>	
<i>vūḗ<sup>a/</sup></i>	"be alive"	<i>vūr<sup>ε/</sup></i>	"alive"
<i>tōḗ<sup>a/</sup></i>	"be bitter"	<i>tōḡ<sup>ᶑ</sup></i>	"bitter"
<i>mā'as<sup>a/</sup></i>	"be cool"	<i>mā'asír<sup>ε</sup></i>	"cool"
<i>bōḡus<sup>a/</sup></i>	"be soft"	<i>bōḡusír<sup>ε</sup></i>	"soft"
<i>tēbīs<sup>a/</sup></i>	"be heavy"	<i>tēbīsír<sup>ε</sup></i>	"heavy"
<i>mālis<sup>a/</sup></i>	"be sweet"	<i>mālisír<sup>ε</sup></i>	"sweet"
<i>lābīs<sup>a/</sup></i>	"be wide"	<i>lābīsír<sup>ε</sup></i>	"wide"
<i>mì'is<sup>a</sup></i>	"be sour"	<i>mì'isug<sup>ᶑ</sup></i>	"sour"
<i>vèn<sup>na</sup></i>	"be beautiful"	<i>vènnig<sup>a</sup></i>	"beautiful"
<i>vèñl<sup>a</sup></i>	"be beautiful"	<i>vèñllig<sup>a</sup></i>	"beautiful"
<i>lāl<sup>a/</sup></i>	"be far"	<i>lāllug<sup>ᶑ</sup></i>	"far"
<i>pòḡd<sup>a</sup></i>	"be few"	<i>pòḡdig<sup>a</sup></i>	"few"
<i>sùm<sup>ma</sup></i>	"be good"	<i>sùḡ<sup>ᶑ</sup></i>	"good"
<i>kpī'am<sup>ma/</sup></i>	"be strong"	<i>kpī'og<sup>ᶑ</sup></i>	"strong"
<i>yàlum<sup>ma</sup></i>	"be wide"	<i>yàluḡ<sup>ᶑ</sup></i>	"wide"
<i>zùlum<sup>ma</sup></i>	"be deep"	<i>zùluḡ<sup>ᶑ</sup></i>	"deep"
<i>tàdum<sup>ma</sup></i>	"be weak"	<i>tādum<sup>m/</sup></i>	"weak person"
<i>gīm<sup>ma/</sup></i>	"be short"	<i>gīḡ<sup>a</sup></i>	"short"

With stem changes between adjective and verb:

<i>tūl<sup>a/</sup></i>	"be hot"	<i>tūlúḡ<sup>ᶑ</sup></i>	"hot"
<i>ñyēs<sup>a</sup></i>	"be self-confident"	<i>ñyēsíḡ<sup>a</sup></i>	"self-confident"
<i>wā'am<sup>ma/</sup></i>	"be long"	<i>wōk<sup>ᶑ/</sup></i>	"long"

The verb *nār<sup>a/</sup>* "be necessary" has a related adjective *nàrvḡ<sup>ᶑ</sup>* "necessary" (?? tone) but the verb is probably primary; it is much commoner than the adjective. The verb *pōñr<sup>a</sup>* "be near (to)" has an adjectival form seen in WK's *yī-pōñrà<sup>+</sup>* "nearby houses" but makes the perfective gerund *pōñrīb<sup>ᶑ</sup>*.

*Dūr<sup>a</sup>* "be many" and *kār<sup>a</sup>* "be few" have no associated adjectives.

The verb *tūñ'e* "be able" occurs almost exclusively as a stative auxiliary verb in VP-chaining constructions [23.3.1](#); it has no extant Long Form in my materials, and no cognate nominal forms.





Gerunds differ in flexion from other substantives in frequently resisting the assimilations  $*mg \rightarrow \eta\eta$   $*ng \rightarrow \eta\eta$  [6.2.1](#). They rarely shorten a CVV- stem before  $-r^\epsilon$ . 4-mora stems in  $-sim -lum$  follow the rule and use  $-g^\jmath$ :

<i>siilum</i> <sup>m</sup>	"cite proverbs"	→	<i>siilúg</i> <sup>ϑ</sup>
<i>zàaṅsim</i> <sup>m</sup>	"dream"	→	<i>zàaṅsúg</i> <sup>ϑ</sup>

but stems in  $*-gim$  drop the  $-m-$  and use  $-r^\epsilon$ :

<i>wàṅim</i> <sup>m</sup>	"waste away"	→	<i>wàṅir</i> <sup>ε</sup>
<i>lāṅím</i> <sup>m</sup>	"wander"	→	<i>lāṅír</i> <sup>ε</sup>
<i>zàkím</i> <sup>m</sup>	"itch"	→	<i>zàkír</i> <sup>ε</sup>

For examples of regular gerunds see [9.3](#) under Noun Flexion.

2-mora stems regularly use  $-r^\epsilon$  not  $b^\jmath$  in compounds; see [16.10.1](#).

<i>pu'à-dīr</i> <sup>ε</sup>	"marriage"
<i>nīn-kúùr</i> <sup>ε</sup>	"murder"
<i>dā-núùr</i> <sup>ε</sup>	"beer-drinking"
<i>mò-pīl</i> <sup>lε</sup>	"grass roof"
<i>fū-yéér</i> <sup>ε</sup>	"shirt-wearing" WK

### 12.1.1.1.1 Irregularities

All of these have been verified as occurring in the *bòɔd* "want" + gerund construction above.

Irregular 2-mora stem verbs [11.1.1](#) may have regular gerunds:

<i>tìs</i> <sup>ε</sup>	"give"	→	<i>tīstb</i> <sup>ϑ</sup>
<i>kē</i> <sup>+</sup>	"let"	→	<i>kēɛb</i> <sup>ϑ/</sup>
<i>gùl</i> <sup>ε</sup>	"suspend"	→	<i>gūlb</i> <sup>ϑ</sup>

However, with 2-mora stems almost 20% of the regular verbs in KED use suffixes other than  $b^\jmath$ . A smaller number of these are also tonally irregular. No segmentally regular gerund in  $-b^\jmath$  shows tonal irregularity. Forms with the suffix  $-g^\jmath$  are Pattern L from Pattern LO verbs unless there are variant forms with  $g^a$  or  $s^\epsilon$  and the formation is thus shown to belong in fact to the  $g^\jmath|s^\epsilon$  subclass [9.3.2.1](#).

A high proportion of these verbs have stems in  $m$  or  $b$ ; the regular formation with  $-b^\jmath$  has probably been avoided because it would create ambiguous SFs [9.1](#).

Examples:

<i>li</i> <sup>+</sup>	"fall"	→	<i>liig</i> <sup>a</sup>	
<i>zi</i> <sup>+</sup>	"carry on head"	→	<i>ziid</i> <sup>ε/</sup>	
<i>bèñ</i> <sup>+</sup>	"fall ill"	→	<i>bèñ'εs</i> <sup>ε</sup>	
<i>kēñ</i> <sup>+</sup>	"come"	→	<i>kēn</i> <sup>nε/</sup>	
<i>zò</i> <sup>+</sup>	"run"	→	<i>zūa</i> <sup>+</sup>	also <i>zɔɔg</i> <sup>ɔ</sup>
<i>vū</i> <sup>+</sup>	"make noise"	→	<i>vūug</i> <sup>ɔ/</sup>	
<i>pjāñ</i> <sup>1a</sup>	"speak"	→	<i>pjàuñk</i> <sup>ɔ</sup>	
<i>bòd</i> <sup>ε</sup>	"plant"	→	<i>būdɪg</i> <sup>a</sup>	also <i>būdug</i> <sup>ɔ</sup>
<i>yèl</i> <sup>ε</sup>	"say, tell"	→	<i>yèlvug</i> <sup>ɔ</sup>	cf Mooré <i>yèele</i> ; ?? * <i>yjə</i> → <i>yε</i>
<i>kūl</i> <sup>ε</sup>	"go home"	→	<i>kūlɪg</i> <sup>a/</sup>	also <i>kūlvug</i> <sup>ɔ/</sup>
<i>tàñs</i> <sup>ε</sup>	"shout"	→	<i>tàñsug</i> <sup>ɔ</sup>	
<i>sōñs</i> <sup>ε</sup>	"converse"	→	<i>sóñsìg</i> <sup>a</sup>	
<i>gōs</i> <sup>ε</sup>	"look"	→	<i>gósìg</i> <sup>a</sup>	
<i>sòs</i> <sup>ε</sup>	"pray, beg"	→	<i>sósɪg</i> <sup>a</sup>	
<i>kīr</i> <sup>ε</sup>	"hurry"	→	<i>kìkírùg</i> <sup>ɔ</sup>	or <i>kīrɪb</i> <sup>ɔ/</sup>
<i>lèb</i> <sup>ε</sup>	"return"	→	<i>lēbɪg</i> <sup>a</sup>	
<i>tèb</i> <sup>ε</sup>	"carry in both hands"	→	<i>tēbɪg</i> <sup>a</sup>	
<i>kàñb</i> <sup>ε</sup>	"scorch"	→	<i>kāñbɪr</i> <sup>ε</sup>	
<i>òñb</i> <sup>ε</sup>	"chew"	→	<i>ōñbɪr</i> <sup>ε</sup>	
<i>lūb</i> <sup>ε</sup>	"buck"	→	<i>lūbɪr</i> <sup>ε/</sup>	
<i>zàb</i> <sup>ε</sup>	"fight"	→	<i>zàbɪr</i> <sup>ε</sup>	
<i>tèñb</i> <sup>ε</sup>	"tremble"	→	<i>tèñbug</i> <sup>ɔ</sup>	
<i>tùm</i> <sup>m</sup>	"work"	→	<i>tūuma</i> <sup>+</sup>	
<i>tùm</i> <sup>m</sup>	"send"	→	<i>tìtōmɪs</i> <sup>ε</sup>	
<i>wòm</i> <sup>m</sup>	"hear"	→	<i>wōm</i> <sup>mɔ</sup>	or <i>wòm mug</i> <sup>ɔ</sup> <a href="#">13.1.1.4</a>

With 3-mora and 4-mora stem verbs there are very few irregularities in gerund formation. A few have plural-as-singular forms [9.5](#). The verb *yīis*<sup>ε/</sup> "make go/come out" has *yīisɪb*<sup>ɔ</sup>, like the alternate form *yīs*<sup>ε</sup> with regular *yīsɪb*<sup>ɔ/</sup>.

There are a number of abstract verbal nouns in the *m*<sup>m</sup> class formed from 3-mora verb stems in *-s-* which resemble gerunds in tone. They may owe their *m*<sup>m</sup> class membership to being imperfective forms: for the dropping of the *-d-* formant compare agent nouns and deverbal adjectives [13.1.1.1](#) [13.1.1.2.1](#):

<i>pù'us</i> <sup>ε</sup>	"greet, thank"	→	<i>pù'usɪm</i> <sup>m</sup>	"worship"
			or <i>pù'usug</i> <sup>ɔ</sup>	
<i>kō</i> <sup>+</sup>	"kill"	→	<i>nīn-kúvsìm</i> <sup>m</sup>	"murderousness"
<i>yōlɪs</i> <sup>ε/</sup>	"untie"	→	<i>yōlɪsɪm</i> <sup>m</sup>	"freedom"

### 12.1.1.2 From dynamic-invariable verbs

Dynamic-invariable verbs mostly form perfective gerunds, adding class suffixes to the stem in a similar way to variable verbs and following the same tone pattern allocation rules [7.5](#). They are idiosyncratic with regard to the class suffix selected, however.

<i>zìñ'iy<sup>a</sup></i>	"be sitting"	→	<i>zīñ'ig<sup>a</sup></i>	also "place", regular <i>g<sup>a</sup> s<sup>ε</sup></i> class
<i>zì'e<sup>ya</sup></i>	"be standing"	→	<i>zī'a<sup>+</sup></i> KED	<i>zī'əg<sup>a</sup></i> DK KT
				(wholly exceptional undeleted <i>g</i> <a href="#">6.3.1</a> )
<i>dīgi<sup>ya/</sup></i>	"be lying"	→	<i>dīk<sup>a/</sup></i> KT	<i>dīgir<sup>ε/</sup></i> WK
<i>īgi<sup>ya/</sup></i>	"be kneeling"	→	<i>īk<sup>a/</sup></i> KT	<i>īgir<sup>ε/</sup></i> WK
<i>vābi<sup>ya/</sup></i>	"be lying prone"	→	<i>vāp<sup>ɔ/</sup></i> KT	<i>vābir<sup>ε/</sup></i> WK
<i>tī'iy<sup>a/</sup></i>	"be leaning"	→	<i>tī'ib<sup>ɔ/</sup></i>	
	(of an object)			
<i>gùl<sup>la</sup></i>	"be hanging"	→	<i>gūlb<sup>ɔ</sup></i>	

The adjectival verb *pòñr<sup>a</sup>* also makes a perfective gerund:

<i>pòñr<sup>a</sup></i>	"be near"	→	<i>pōñrīb<sup>ɔ</sup></i>
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However, most invariable verbs with stems in *ll nn r(r)* form imperfective gerunds, including dynamic-invariable verbs [13.1.1.4](#).

### 12.1.2 Concrete nouns

Verb stems with noun class suffixes which deviate from the usual allocation rules are often not abstract gerunds but have **concrete** senses, such as the product of the action, the instrument used, or the place at which the action occurs.

<i>ēēñbír<sup>ε</sup></i>	"(physical) foundation"	<i>ēēñbúg<sup>ɔ</sup></i>	"laying a foundation"
<i>dūk<sup>ɔ/</sup></i>	"cooking pot"	<i>dūgub<sup>ɔ/</sup></i>	"cooking"
<i>dà'a<sup>=</sup></i>	"market"	<i>dā'ab<sup>ɔ</sup></i>	"buying"
<i>kūk<sup>a</sup></i>	"chair"	<i>kūgub<sup>ɔ</sup></i>	"resting on something"
<i>zūg-kūgur<sup>ε</sup></i>	"pillow"		
<i>sūāk<sup>a/</sup></i>	"hiding place"	<i>sū'ab<sup>ɔ/</sup></i>	"hiding"
<i>sōbir<sup>ε/</sup></i>	"piece of writing"	<i>sōp<sup>ɔ/</sup></i>	"writing, orthography"
<i>kūt<sup>ε</sup></i>	"iron, nail" <a href="#">9.5</a>	<i>kūdub<sup>ɔ</sup></i>	"working iron"
<i>kùəsim<sup>m</sup></i>	"merchandise"	<i>kùəsv<sup>ɔ</sup></i>	"selling"
<i>pèbɪsim<sup>m</sup></i>	"wind"	<i>pèbɪsv<sup>ɔ</sup></i>	"blowing of the wind; wind"

See also on *pù'alím<sup>m</sup>* *dàalím<sup>m</sup>* [13.1.2](#).

The forms *vābir*<sup>ε/</sup> *lābir*<sup>ε/</sup> *dīgir*<sup>ε/</sup> *īgir*<sup>ε/</sup> used by WK as gerunds of stance verbs [12.1.1.2](#) are used by KT as concrete nouns meaning "place for lying prone" etc, contrasting for him with gerunds *vāp*<sup>ɔ/</sup> etc.

Three concrete deverbal nouns, from *pìbir*<sup>ε</sup> "cover", *zāñbir*<sup>ε</sup> "tattoo", *màal*<sup>ε</sup> "sacrifice" show single *-n-* in place of *-l-*:

<i>pībir</i> <sup>nε</sup>	<i>pībirna</i> <sup>+</sup>	<i>pìbir-</i>	"covering"
<i>zāñbir</i> <sup>nε</sup>	<i>zāñbirna</i> <sup>+</sup>	<i>zāñbir-</i>	"tattoo" (NT "sign")
<i>māan</i> <sup>nε</sup>	<i>māana</i> <sup>+</sup>	<i>màan-</i>	"sacrifice"

Although my informants definitely had single *-n-* in these words, it is possible that this represents a secondary simplification of *\*nn*; compare Mooré *pìbíndgà* "couvercle" [6.2.1.1](#). Toende, like Mooré, has Pattern L for these words: *zābín*, *màan*. As *nn* is the regular reflex of *\*ld*, these forms may be derivatives with *\*d* in a sense related to its appearance in instrument nouns [13.1.1.3](#); compare *tūodir*<sup>ε</sup> "mortar", from *tyà*<sup>+</sup> "grind in a mortar." The Tone Pattern O is consistent with this.

It is exceptional for regularly formed gerunds to acquire concrete meaning, but a clearcut example is

<i>dīlb</i> <sup>ɔ</sup>	"food"
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Gerund forms may be abstract *count* nouns describing particular instances of the activity of the verb, and may then have plurals:

<i>zōɔg</i> <sup>ɔ</sup>	<i>zōɔs</i> <sup>ε</sup>	"race"	
<i>bū'əsúg</i> <sup>ɔ</sup>	<i>bū'əsá</i> <sup>+</sup>	<i>bū'əs-</i>	"question"
<i>zàańsúg</i> <sup>ɔ</sup>	<i>zàańsíma</i> <sup>+</sup>	<i>zàańsúg-</i>	"dream"

Such words may be formally plural but construed as singular [9.5](#)

<i>dì'əma</i> <sup>+</sup>	"festival"
<i>pjàń'ad</i> <sup>ε</sup>	"word, language"
<i>tēń'əsá</i> <sup>+</sup>	"thought"

Thus *tēń'əsá yinní* "one thought" (Acts 4:32).



<i>vūē<sup>a/</sup></i>	"be alive"	<i>vūm<sup>m/</sup></i>	"life"
<i>sù<sup>m</sup>ma</i>	"be good"	<i>sù<sup>m</sup>m</i>	"goodness"
<i>pòɔd<sup>a</sup></i>	"be few"	<i>pòɔdɪm<sup>m</sup></i>	"scarcity"
<i>vèn<sup>na</sup></i>	"be beautiful"	<i>vènnɪm<sup>m</sup></i>	"beauty"
<i>vèñ<sup>la</sup></i>	"be beautiful"	<i>vèñllɪm<sup>m</sup></i>	"beauty"
<i>būgvs<sup>a/</sup></i>	"be soft"	<i>būgvsím<sup>m</sup></i>	"softness"
<i>tēbɪs<sup>a/</sup></i>	"be heavy"	<i>tēbɪsím<sup>m</sup></i>	"weight"
<i>mā'as<sup>a/</sup></i>	"be cool, wet"	<i>mā'asím<sup>m</sup></i>	"coolness, damp"
<i>māɪs<sup>a/</sup></i>	"be sweet"	<i>māɪsím<sup>m</sup></i>	"sweetness"
<i>lābɪs<sup>a/</sup></i>	"be wide"	<i>lābɪsím<sup>m</sup></i>	"width"
<i>ñyēs<sup>a</sup></i>	"be confident"	<i>ñyēsɪm<sup>m</sup></i>	"self-confidence"
<i>lāl<sup>la/</sup></i>	"be far"	<i>lāllóg<sup>ɔ</sup></i>	"distance"
<i>kpīə<sup>m</sup>a/</i>	"be strong, hard"	<i>kpīoŋ<sup>ɔ</sup></i>	"hardness, strength"
<i>yàɪ<sup>m</sup>ma</i>	"be wide"	<i>yàɪvŋ<sup>ɔ</sup></i>	"width"
<i>mì'is<sup>a</sup></i>	"be sour"	<i>mì'isvŋ<sup>ɔ</sup></i>	"sourness"
<i>tōē<sup>a/</sup></i>	"be bitter"	<i>tōvŋ<sup>ɔ</sup></i>	"bitterness"
<i>zùɪ<sup>m</sup>ma</i>	"be deep"	<i>zùɪvŋ<sup>ɔ</sup></i>	"depth"
<i>tōl<sup>la/</sup></i>	"be hot"	<i>tōvlóg<sup>ɔ</sup></i> or <i>tōllím<sup>m</sup></i>	"heat"

Abstract nouns derived from other adjectives (often used as adverbs) include

<i>pìəɪg<sup>a</sup></i>	"white"	→	<i>pìəɪm<sup>m</sup></i>	"brightness"
<i>tītā'ar<sup>ɛ</sup></i>	"big"	→	<i>tītā'am<sup>m</sup></i>	"multitude"
<i>kōdvŋ<sup>ɔ</sup></i>	"old"	→	<i>kōdɪm<sup>m</sup></i>	"old times"
<i>zēmmúg<sup>ɔ</sup></i>	"equal"	→	<i>zēmmúg<sup>ɔ</sup></i>	"equality"

Some nouns referring to people form similarly derived abstract nouns:

<i>sāan<sup>a/</sup></i>	"guest"	→	<i>sāúŋ<sup>ɔ</sup></i>	"hospitality"
<i>kpēēñ<sup>m</sup></i>	"elder"	→	<i>kpēoñŋ<sup>ɔ</sup></i>	"eldership"
<i>sōēñ<sup>a</sup></i>	"witch"	→	<i>sōvŋŋ<sup>ɔ</sup></i>	"witchcraft"
<i>zụà<sup>+</sup></i>	"friend"	→	<i>zùəð<sup>ɛ</sup></i>	"friendship"
<i>gbáñyà'a<sup>=</sup></i>	"lazy person"	→	<i>gbáñyà'am<sup>m</sup></i>	"laziness"
<i>dàmà'a<sup>=</sup></i>	"liar"	→	<i>dàmà'am<sup>m</sup></i>	"lying"

Human-reference noun stems also form abstract *m<sup>m</sup>* class derivatives with the derivational suffix *-ɪm* [13.1.2](#).

### 12.3 Adverbs from adjectives

The *m*<sup>m</sup> class suffix with adjective stems often creates manner adverbs:

<i>pāalíg</i> <sup>a</sup>	"new"	→	<i>pāalím</i> <sup>m</sup>	"recently"
<i>bāañlíg</i> <sup>a</sup>	"quiet"	→	<i>bāañlím</i> <sup>m</sup>	"quietly"
<i>záal</i> <sup>l</sup> <sup>ε</sup>	"empty"	→	<i>zāalím</i> <sup>m</sup>	"emptily"
<i>nèεr</i> <sup>ε</sup>	"empty"	→	<i>nèεm</i> <sup>m</sup>	"for free"

Several adjective stems form manner-adverbs with an ending *-ga*<sup>+</sup>, i.e. *g*<sup>a</sup>|*s*<sup>ε</sup> class sg along with apocope-blocking [6.4](#):

<i>sùḡā</i> <sup>+/</sup>	"well; very much"
<i>mā'asígā</i> <sup>+/</sup>	"coolly"
<i>tūlígā</i> <sup>+/</sup>	"hotly"
<i>gīḡa</i> <sup>+</sup>	"shortly"
<i>būḡusígā</i> <sup>+/</sup>	"softly"
<i>sàalígā</i> <sup>+/</sup>	"smoothly"
<i>ñyèεsígā</i> <sup>+/</sup>	"self-confidently"

Cf also *yīgá*<sup>+</sup> "firstly" see [16.4.2.3](#).



## 13 Derivational suffixes

The statement of underlying full word structure made in [6](#) implies that roots are only of the shapes  $CV(V)(C)$ , so that any stem consonant which does not immediately follow the root vowel is not part of the root; neither is any consonant following a *long* root vowel unless the root shows  $CVC\sim CVVC$  allomorphy.

For simplicity, all such consonants will be called "derivational suffixes", though there may not always be parallel stems lacking the suffix or with different suffixes. Nevertheless, many such consonants are clearly identifiable as derivational. Regular highly productive suffixing processes derive agent nouns, deverbal adjectives and instrument nouns from verbs, and there are several less systematic processes deriving nominals from other nominals. Cognate stems make it possible to recognise many suffixes involved in verb derivation from roots; there are clear patterns, but no completely consistent correlations of suffix and meaning.

The derivational suffixes are *-g -s -n -l -d -m*, along with *-b* and *-r* in just a handful of words. The suffix *-n* may represent historical *\*ld* [6.2.1.1](#).

*-g -s -n -b -r* never follow another derivational suffix. *-g* and *-s* cause a preceding  $CVVC$  to become  $CVC$ , and a preceding oral  $\text{ɔɔ}$  to become glottalised.

*-l* follows another suffix only as part of the combination *-lm*.

*-d* is very productive in the formation of deverbal nouns and adjectives; it often deletes a preceding suffix or is itself deleted. It does not derive verb stems.

No stem has more than three derivational suffixes, or more than five morae apart from prefixes. All four-mora verb stems have *-m* as the second suffix, and all five-mora stems are formed with *-lm*.

The rules for consonant assimilation differ slightly from the rules operative in flexion, probably because they are less subject to analogical remodelling.

For Tone Patterns in derivation see [7.5](#).

### 13.1 Nouns and adjectives

#### 13.1.1 From verbs

The derivational processes described below are very productive; agent noun formation in particular is almost flexional in its regularity and generality, though this is less true of deverbal adjective formation. Deverbal noun and adjective formation generally shows more analogical levelling than derivational processes elsewhere, in keeping with the strong Kusaal tendency to regularity and transparency in verb morphology.

The Tone Patterns of deverbal nouns and adjectives are predictable [7.5](#).

### 13.1.1.1 Agent nouns

Agent nouns can be freely made from almost all verbs apart from adjectival verbs. Informants readily supply isolated forms on demand, but in conversation and texts they usually occur as second elements of compounds. All belong to the  $^a|b^a$  class, although those derived from *ll-* or *r(r)-*stem invariable verbs may also show  $r^\epsilon|a^+$  class forms [9.3.1.1](#). Despite their regularity of formation, agent nouns often develop specialised meanings, as will be seen in the examples. The name "agent noun" is not altogether felicitous; as with English derivatives in "-er", the formation may be found with verbs whose subject is not an agent. Agent nouns can be created from stative verbs usable in direct commands, i.e. from relational but not adjectival verbs [11.2.2](#).

The formant of agent nouns and dynamic adjectives is the derivational suffix *-d*. It is probably historically related to the *-d-* of the dynamic imperfective flexion *-d<sup>a</sup>*, but the tonal effects differ, and derivational *-d* shows much less regularity in its mode of attachment; agent nouns show more levelling and regularisation than dynamic adjectives. These variations arise from a tendency to limit stem length, resulting in deletion of either *-d* itself or the suffix preceding it. The absence or presence of the suffix affects the Tone Pattern in forms derived from Pattern LO verbs [7.5](#).

Most **variable verbs** have an agent noun with a singular form segmentally identical with the imperfective. For tones see [7.5](#). If there are alternate forms, the less "regular" form appears as the agent noun.

<i>kū<sup>+</sup></i>	"kill"	→	<i>kūvd<sup>a</sup>/</i>	"killer"
<i>mè<sup>+</sup></i>	"build"	→	<i>mēɛd<sup>a</sup></i>	"builder"
<i>dì<sup>+</sup></i>	"eat"	→	<i>dīt<sup>a</sup></i>	"eater"
<i>gōs<sup>ɛ</sup></i>	"look"	→	<i>gōt<sup>a</sup>/</i>	"seer, prophet"
<i>dūg<sup>ɛ</sup></i>	"cook"	→	<i>dūgvd<sup>a</sup>/</i>	"cook"
<i>dɥ'à<sup>a</sup></i>	"bear, beget"	→	<i>dū'ad<sup>a</sup></i>	"elder relation"
<i>kàd<sup>ɛ</sup></i>	"drive away"	→	<i>saríyà-kāt<sup>a</sup></i>	"judge" <a href="#">20.1</a>
<i>sōb<sup>ɛ</sup></i>	"write"	→	<i>sōbɪd<sup>a</sup>/</i>	"writer"
<i>bùn<sup>ɛ</sup></i>	"reap"	→	<i>būn<sup>na</sup></i>	"reaper"
<i>tùm<sup>m</sup></i>	"work"	→	<i>tùm-tūm<sup>na</sup></i>	"worker"
<i>kìm<sup>m</sup></i>	"tend flock"	→	<i>kòñb-kīm<sup>na</sup></i>	"herdsman, shepherd"
<i>kpàr<sup>ɛ</sup></i>	"lock"	→	<i>kpārɪd<sup>a</sup></i>	"lock-er"
<i>gbīs<sup>ɛ</sup></i>	"sleep"	→	<i>gbīsɪd<sup>a</sup>/</i>	"sleeper"
<i>sjàk<sup>ɛ</sup></i>	"believe"	→	<i>sjàkɪd<sup>a</sup></i>	"believer"
<i>jāñk<sup>ɛ</sup>/</i>	"jump, fly"	→	<i>jāñ'ad<sup>a</sup>/</i>	"flier" <a href="#">11.1.1</a>
<i>sùŋ<sup>ɛ</sup></i>	"help"	→	<i>sūŋɪd<sup>a</sup></i>	"helper"
<i>bàŋ<sup>ɛ</sup></i>	"understand"	→	<i>bāŋɪd<sup>a</sup></i>	"wise man"
<i>kēŋ<sup>ɛ</sup>/</i>	"go"	→	<i>kēn<sup>na</sup>/</i>	"traveller" <a href="#">11.1.1</a>

<i>gàad</i> <sup>É</sup>	"pass"	→	<i>tùen-gāt</i> <sup>a</sup>	"leader"
<i>mɔ̀ɔl</i> <sup>É/</sup>	"proclaim"	→	<i>mɔ̀ɔl-mɔ̀ɔ̀n</i> <sup>na</sup>	"proclaimer"
<i>màal</i> <sup>É</sup>	"sacrifice"	→	<i>màal-māan</i> <sup>na</sup>	"sacrificer"
<i>pà'al</i> <sup>É</sup>	"teach"	→	<i>pā'an</i> <sup>na</sup>	"teacher"
<i>sūgvr</i> <sup>É/</sup>	"forbear"	→	<i>sūgvríd</i> <sup>a</sup>	"forgiver"
<i>yū'um</i> <sup>m/</sup>	"sing"	→	<i>yūum-yú'ùm</i> <sup>na</sup>	"singer"
			pl <i>yūum-yú'ùmnlb</i> <sup>a</sup>	
<i>sàñ'am</i> <sup>m</sup>	"spoil"	→	<i>pɔ̀'à-sāñ'am</i> <sup>na</sup>	"adulterer"
			pl <i>pɔ̀'à-sāñ'amɪdlb</i> <sup>a</sup>	

Pattern H fusion verbs [7.3.1 11.1](#), which delete the H toneme of the stem in the imperfective, show the same form for the agent noun:

<i>nāe</i> <sup>+/</sup>	"finish"	→	<i>nāad</i> <sup>a/</sup>	"someone who doesn't give up easily" WK
<i>dīe</i> <sup>+/</sup>	"receive"	→	<i>dīəd</i> <sup>a/</sup>	"receiver"
<i>ñwà'e</i> <sup>+</sup>	"cut wood"	→	<i>ñwā'ad</i> <sup>a</sup>	"woodcutter"
<i>gbāñ'e</i> <sup>+/</sup>	"catch"	→	<i>zīm-gbāñ'àd</i> <sup>a</sup>	"fisherman"
<i>pīe</i> <sup>+/</sup>	"wash"	→	<i>pīəd</i> <sup>a/</sup>	"washer"
<i>fāeñ</i> <sup>+/</sup>	"save"	→	<i>fāañd</i> <sup>a/</sup>	"saviour" WK
			<i>faangid</i>	NT/KB <a href="#">15</a>

3-mora stems in *-s* consistently drop the *-d* in the sg and cb:

<i>sīgɪs</i> <sup>É/</sup>	"lower"	→	<i>sīgɪs</i> <sup>a/</sup>	"lowerer"
			pl <i>sīgɪsɪdlb</i> <sup>a</sup>	
<i>kùø</i> <sup>É</sup>	"sell"	→	<i>kùø</i> <sup>a</sup>	"seller"
			pl <i>kùøɪdlb</i> <sup>a</sup>	
<i>pù'us</i> <sup>É</sup>	"worship"	→	<i>pù'us</i> <sup>a</sup>	"worshipper"
			pl <i>pù'usɪdlb</i> <sup>a</sup>	
<i>tù'as</i> <sup>É</sup>	"talk"	→	<i>tù'as-tù'as</i> <sup>a</sup>	"talker"
			pl <i>tù'as-tù'asɪdlb</i> <sup>a</sup>	
<i>dīəs</i> <sup>É/</sup>	"receive"	→	<i>nɔ̀-dí'əs</i> <sup>a</sup>	"chief's spokesman"
			pl <i>nɔ̀-dí'əsɪdlb</i> <sup>a</sup>	("linguist", see <a href="#">33</a> )

Some 2-mora stems also irregularly drop the *-d* in the sg and cb:

<i>zàb</i> <sup>É</sup>	"fight"	→	<i>zàb-zàb</i> <sup>a</sup>	"warrior"
			<i>gbān-záb</i> <sup>a</sup>	"leather-worker"
<i>tìs</i> <sup>É</sup>	"give"	→	<i>tìs</i> <sup>a</sup>	"giver"
<i>sòs</i> <sup>É</sup>	"beg"	→	<i>sòs</i> <sup>a</sup>	"beggar"

Stems in *-mm-* (← \**mb* 6.2.1) form reduplicated agent nouns with *nàm<sup>a</sup>* plurals:

*dàm<sup>m</sup>* "shake" → *dàm-dàm<sup>ma</sup>* "shaker"

The *nn-*stem *sùn<sup>ne</sup>* "bow the head" 6.2.1 has an agent noun stem in *-nn-*, but the tonemes show retention of the *-d-* formant:

*sùn<sup>ne</sup>* "bow head" → *sūn<sup>na</sup>* "deep thinker, close  
pl *sūnnɪb<sup>a</sup>* observer" WK 33  
cb *sùn-* (cf ipfv *sūnnɪd<sup>a</sup>*)

Agent nouns can only be formed from 3-mora verb stems in *-\*g-* if the *\*g* is either deleted or assimilated with the root final consonant as *-k-* or *-ŋ-*:

*yādɪg<sup>ε/</sup>* "scatter" → *yāt<sup>a/</sup>* technical term for one  
participant in a  
housebuilding ritual

Various irregular formations in my materials include:

*tēk<sup>ε/</sup>* "pull" → *ñwī-ték<sup>a</sup>* "rope-puller"  
pl *ñwī-tékɪdɪb<sup>a</sup>*  
*nòŋ<sup>ε</sup>* "love" → *nòŋɪd<sup>a</sup>* "lover"; tones irreg  
*tì'əb<sup>ε</sup>* "heal" → *tī'əb<sup>a</sup>* "healer"; tones irreg;  
?noun primary 33

For 4-mora stems: KT has no agent nouns; WK drops the final *-m-* and proceeds as for 3-mora stems:

*siilum<sup>m</sup>* "cite proverbs" → *sīin<sup>na</sup>* "speaker of proverbs"  
pl *sīinnɪb<sup>a</sup>*  
*pò'alum<sup>m</sup>* "harm" → *pō'an<sup>na</sup>* "harmer"  
*zàańsım<sup>m</sup>* "dream" → *zàańs<sup>a</sup>* "dreamer"  
pl *zāańsɪdɪb<sup>a</sup>*

**Invariable verbs** with stems ending in vowels or plosives add *-d-*:

*ziñ'ɪ<sup>ya</sup>* "be sitting down" → *zīñ'id<sup>a</sup>* "sitter"  
*zi'e<sup>ya</sup>* "be standing still" → *zī'əd<sup>a</sup>* "stander"

<i>mī</i> <sup>+</sup>	"know"	→	<i>mī</i> <sup>a</sup> <i>id</i> <sup>a</sup> <i>gbàn-mī</i> <sup>a</sup> <i>id</i> <sup>a</sup>	"knower" "scribe" NT ("book-knower")
<i>zī</i> <sup>+</sup>	"not know"	→	<i>zī</i> <sup>a</sup> <i>id</i> <sup>a</sup>	"ignorant person"
<i>sū</i> <sup>e</sup> <i>ya</i>	"own"	→	<i>sū</i> <sup>ud</sup> <i>a</i>	"owner"
<i>sāñ</i> <sup>e</sup> <i>ya</i>	"be better than"	→	<i>sāñ</i> <sup>ɔd</sup> <i>a</i> pl <i>sāñ</i> <sup>ɔb</sup> <i>a</i>	<a href="#">9.3.1</a>
<i>dīg</i> <sup>ya</sup>	"be lying down"	→	<i>dīg</i> <sup>id</sup> <i>a</i>	"lier-down"
<i>īg</i> <sup>ya</sup>	"be kneeling"	→	<i>īg</i> <sup>id</sup> <i>a</i>	"kneeler"
<i>vāb</i> <sup>ya</sup>	"be lying prone"	→	<i>vāb</i> <sup>id</sup> <i>a</i>	"lier prone"
<i>làb</i> <sup>ya</sup>	"be crouching"	→	<i>làb</i> <sup>id</sup> <i>a</i>	"croucher in hiding"
<i>àḡ</i> <sup>ñ</sup> <i>a</i>	"be something"	→	<i>āāḡ</i> <sup>a</sup>	"someone who continually <i>is</i> something" <i>sic</i> WK

Stems in *nn ll r(r)* drop *-d* throughout, showing the same stem as the finite verb, with gemination as in the verb. Those in *ll r(r)* may use *r<sup>ε</sup>|a<sup>+</sup>* class suffixes, coinciding in form with dynamic adjectives [9.3.1.1](#).

<i>sīn</i> <sup>na</sup>	"be silent"	→	<i>nīn-sīn</i> <sup>na</sup>	"silent person"
<i>nēn</i> <sup>na</sup>	"envy"	→	<i>nīn-nēn</i> <sup>na</sup>	"envious person"
<i>dō</i> <sup>la</sup>	"be with"	→	<i>ñyà'an-dò</i> <sup>la</sup> or <i>ñyà'an-dò</i> <sup>lε</sup>	"disciple" (irreg. tone)
<i>zāñ</i> <sup>la</sup>	"be holding"	→	<i>nō-zāñ</i> <sup>la</sup> or <i>nō-zāñ</i> <sup>lε</sup>	"holder of hens"
<i>dē</i> <sup>la</sup>	"be leaning"	→	<i>nīn-dē</i> <sup>la</sup>	"person prone to lean"
<i>mōr</i> <sup>a</sup>	"have"	→	<i>bù-mōr</i> <sup>a</sup> or <i>bù-mōr</i> <sup>ε</sup>	"owner of goats"
<i>tār</i> <sup>a</sup>	"have"	→	<i>bù-tār</i> <sup>a</sup> or <i>bù-tār</i> <sup>ε</sup>	"owner of goats"

Variant formations occur in

<i>kīs</i> <sup>a</sup>	"hate"	→	<i>kīs</i> <sup>a</sup> or <i>kīs</i> <sup>id</sup> <i>a</i>	"hater"
<i>tēñr</i> <sup>a</sup>	"remember"	→	<i>tēñr</i> <sup>id</sup> <i>a</i>	"rememberer"
<i>gūr</i> <sup>a</sup>	"be on guard"	→	<i>gūr</i> <sup>id</sup> <i>a</i> <i>gūr</i> <sup>ud</sup> <i>a</i> <i>zà-nō-gúr</i> <sup>a</sup>	"guard" "guard" "gatekeeper"

### 13.1.1.2 Deverbal adjectives

#### 13.1.1.2.1 Dynamic

In principle these adjectives have the same stem as the agent noun but with different class suffixes; however, dynamic adjectives drop the *-d* formant more readily, probably because they are not made as freely as agent nouns and are correspondingly not as far along the axis from derivational to flexional.

The sense may be active or passive, essentially "habitually connected with the verbal action", like the range of meaning of an English gerund as a noun premodifier. It is not usual for a dynamic adjective to have a past passive sense like an English past participle, though examples occur, e.g. *sūm-dúgvdà*<sup>+</sup> "cooked groundnuts" WK, *ziṅdvugida* = *zīṅ-dúgvdà*<sup>+</sup> "cooked fish" (Lk 24:42), beside the more usual sense in *ni'im dvugida* = *nīm-dúgvdà*<sup>+</sup> "meat for cooking" (1 Samuel 2:15.)

When used without a preceding noun cb, dynamic adjective forms have the meaning of agent nouns:

*kōvdír*<sup>ε</sup> pl *kōvdá*<sup>+</sup> "killer" = *kōvd*<sup>a/</sup> pl *kōvdíb*<sup>a</sup>

With a preceding cb the meanings differ:

*pu'à-kōvd*<sup>a/</sup> "woman-killer, killer of women"  
*pu'à-kōvdír*<sup>ε</sup> "woman killer, murderous woman"

Accordingly, deverbal adjectives will be cited with a preceding cb.

With **variable verbs**:

2-mora stems all retain the \**d*.

<i>gòñ</i> <sup>+</sup>	"hunt"	→	<i>pu'à-gōwñdir</i> <sup>ε</sup>	"prostitute" ("wandering woman")
<i>là</i> <sup>+</sup>	"laugh"	→	<i>pu'à-lā'adir</i> <sup>ε</sup>	"woman prone to laughter/ woman to be laughed at"
<i>ñyē</i> <sup>+</sup>	"see"	→	<i>būn-ñyétir</i> <sup>ε</sup>	"visible object"
<i>kyā</i> <sup>+</sup>	"hoe"	→	<i>nā'-dá-kūədír</i> <sup>ε</sup>	"ox for ploughing"
<i>yè</i> <sup>+</sup>	"don clothes"	→	<i>fū-yéédír</i> <sup>ε</sup> <i>fū-yéédùg</i> <sup>ɔ</sup>	"shirt for wearing" WK KT
<i>kū</i> <sup>+</sup>	"kill"	→	<i>tì-kōvdím</i> <sup>m</sup>	"poison" ("killing medicine")
<i>du'à</i> <sup>a</sup>	"bear/beget"	→	<i>tèṅ-dū'adig</i> <sup>a</sup>	"native land"
<i>dōg</i> <sup>ε</sup>	"cook"	→	<i>sūm-dúgvdà</i> <sup>+</sup>	"cooked groundnuts" WK
<i>sīg</i> <sup>ε</sup>	"descend"	→	<i>yī-sígídír</i> <sup>ε</sup>	"lodging-house"
<i>su'ā</i> <sup>a</sup>	"hide"	→	<i>yēl-sū'adir</i> <sup>ε</sup>	"confidential matter"

<i>ǎnb<sup>ε</sup></i>	"chew"	→	<i>būn-ǎnbɪdà<sup>+</sup></i>	"solid food"
<i>bùn<sup>ε</sup></i>	"reap"	→	<i>būn-búnnìr<sup>ε</sup></i>	"thing for reaping"
<i>tòm<sup>m</sup></i>	"work"	→	<i>būn-túmmìr<sup>ε</sup></i>	"useful thing"
<i>vōl<sup>ε</sup></i>	"swallow"	→	<i>tì-vōnním<sup>m</sup></i>	"oral medication"
<i>gbīs<sup>ε</sup></i>	"sleep"	→	<i>pu'à-gbīsídír<sup>ε</sup></i>	"woman always sleeping"

3-mora stems in \**g* drop *-d* in all cases except where the \**g* derivational suffix is deleted in the imperfective, whether by regular rule [6.3.1](#) or otherwise [11.1.1](#). The dropping of *-d* is thus much more consistent than in agent nouns.

<i>gīlg<sup>ε/</sup></i>	"go around"	→	<i>pu'à-gīnníg<sup>a</sup></i>	"prostitute"
<i>sūñ<sup>+/</sup></i>	"anoint"	→	<i>kpā-sóǎñdìm<sup>m</sup></i>	"anointing oil"
<i>tōlg<sup>ε/</sup></i>	"heat up"	→	<i>būn-túlgìr<sup>ε</sup></i>	"heater, thing for heating"
<i>pèlg<sup>ε</sup></i>	"whiten"	→	<i>būn-pélgìr<sup>ε</sup></i>	"whitening thing, whitener"
<i>yādīg<sup>ε/</sup></i>	"scatter"	→	<i>būn-yátìr<sup>ε</sup></i>	"scattering thing, scatterer" (cf the agent noun <i>yāt<sup>a/</sup></i> )
<i>ǎñk<sup>ε/</sup></i>	"fly, jump"	→	<i>būn-ǎñ'adìr<sup>ε</sup></i>	"flying creature"
<i>pàk<sup>ε</sup></i>	"surprise"	→	<i>yēl-pákìr<sup>ε</sup></i>	"disaster"
<i>tēk<sup>ε/</sup></i>	"pull"	→	<i>ñwī-tékìr<sup>ε</sup></i>	"rope for pulling with"
<i>kēj<sup>ε/</sup></i>	"go"	→	<i>būn-kēnnír<sup>ε</sup></i>	"donkey that doesn't sit still"
<i>sùj<sup>ε</sup></i>	"help"	→	<i>būn-sújìr<sup>ε</sup></i>	"helpful thing"
<i>nòj<sup>ε</sup></i>	"love"	→	<i>bì-nòjìr<sup>ε</sup></i>	"beloved child"

3-mora stems in *-m* retain the *-d*, forming the consonant cluster *-mm-*:

<i>sàñ'am<sup>m</sup></i>	"destroy"	→	<i>bù-sāñ'ammìr<sup>ε</sup></i>	"scapegoat" WK
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3-mora stems in *-s* all drop the *-d*:

<i>pèls<sup>ε</sup></i>	"sharpen"	→	<i>būn-pélsìr<sup>ε</sup></i>	"sharpening thing"
<i>kùø<sup>ε</sup></i>	"sell"	→	<i>būn-kúøìr<sup>ε</sup></i>	"item for sale"

4-mora stems (all from KT) drop *-d* (whereas agent nouns drop stem-final *-m*):

<i>siilm<sup>m</sup></i>	"cite proverbs"	→	<i>būn-síílúj<sup>ɔ</sup></i>	"thing relating to proverbs"
<i>pù'alum<sup>m</sup></i>	"harm"	→	<i>nīn-pù'alíj<sup>a</sup></i>	"harmful person"
			<i>pu'à-pù'alíj<sup>a</sup></i>	"harmful woman"
<i>zàañsım<sup>m</sup></i>	"dream"	→	<i>nīn-záañsùj<sup>ɔ</sup></i>	"dreamy person"
			<i>pu'à-zàañsúj<sup>ɔ</sup></i>	"dreamy woman"

The adjectives associated with adjectival verbs are not deverbal but primary stative adjectives; dynamic adjectives from **dynamic-invariable verbs** show the same stem as the agent noun [13.1.1.1](#):

<i>dīg</i> <sup>ya/</sup>	"be lying"	→	<i>bùŋ-dīgídír</i> <sup>ε</sup>	"donkey that lies down a lot"	
<i>vābi</i> <sup>ya/</sup>	"be prone"	→	<i>bùŋ-vābídír</i> <sup>ε</sup>	"donkey always lying prone"	
<i>zìñ'</i> <sup>ya</sup>	"be sitting"	→	<i>kūg-zìñ'idìr</i> <sup>ε</sup>	"stone for sitting on" (i.e. not a <i>būgvr</i> <sup>ε</sup> WK)	
<i>zāñ'</i> <sup>la/</sup>	"be holding"	→	<i>nō-zāñ'</i> <sup>lε</sup>	"hen for holding"	
<i>dēl</i> <sup>la/</sup>	"be leaning"	→	<i>nīn-dēl'</i> <sup>lε</sup>	"person you can lean on" WK	
			→	<i>kūg-dēl'</i> <sup>lε/</sup>	"chair for leaning on"
<i>gùl</i> <sup>la</sup>	"be hanging"	→	<i>būn-gùl'</i> <sup>lε</sup>	"thing for suspending"	

### 13.1.1.2.2 Resultative

Resultative adjectives are only derived from verbs which can use the perfective form in a resultative sense [19.2.1](#). Almost all such verbs are either intransitive or patientive ambitransitive [20.1](#), and the adjectives are not passive participles, but express resulting states. There are no resultative adjectives from stance-verb roots meaning e.g. "seated", "standing" or from variable verbs used passively e.g. "eaten."

It is not clear how far the formation is productive. The formant is *-lum*-; it either deletes a preceding derivational suffix or is a formation from roots alone; all examples show *-lum* after a CVV root. For the flexion see [10.2](#).

<i>kp</i> <sup>+</sup>	"die"	→	<i>kpīlúŋ</i> <sup>ɔ</sup>	"dead"
<i>gēñ</i> <sup>+</sup>	"get tired"	→	<i>gēñlúŋ</i> <sup>ɔ</sup>	"tired"
<i>pè'el</i> <sup>ε</sup>	"fill"	→	<i>pè'elúŋ</i> <sup>ɔ</sup>	"full"
<i>kò</i> <sup>+</sup>	"break"	→	<i>kòlúŋ</i> <sup>ɔ</sup>	"broken"
<i>yè</i> <sup>+</sup>	"wear"	→	<i>yèlúŋ</i> <sup>ɔ</sup>	"worn" (of a shirt)
<i>yò</i> <sup>+</sup>	"close"	→	<i>yòlúŋ</i> <sup>ɔ</sup>	"closed"
<i>pù'alum</i> <sup>m</sup>	"harm"	→	<i>pù'alúŋ</i> <sup>ɔ</sup>	"damaged"
<i>àeñ</i> <sup>+</sup>	"tear"	→	<i>àeñlúŋ</i> <sup>ɔ</sup>	"torn"

### 13.1.1.3 Instrument nouns

Instrument nouns can be created at will by my informants whenever semantically appropriate from variable and dynamic-invariable verbs, so long as the derived dynamic adjective stem ends in *d t* or *s*; a further *-m* is then added. All these *m*-stems then inflect in the *g<sup>a</sup>|s<sup>ε</sup>* class. In a few cases the meaning overlaps with that of agent nouns.



<i>kō</i> <sup>+</sup>	"kill"	→	<i>kōvdɪŋ</i> <sup>a</sup>	"thing for killing with"
<i>lō</i> <sup>+</sup>	"tie"	→	<i>sjà-lōvdɪŋ</i> <sup>a</sup>	"belt" ("waist-tying thing")
<i>dōg</i> <sup>ε</sup>	"cook"	→	<i>dōgvdɪŋ</i> <sup>a</sup>	"cooking utensil"
<i>sōb</i> <sup>ε</sup>	"write"	→	<i>sōbvɪŋ</i> <sup>a</sup>	"writing implement"
<i>kpàr</i> <sup>ε</sup>	"lock"	→	<i>kpàrvɪŋ</i> <sup>a</sup>	"thing for locking"
<i>ñwà'e</i> <sup>+</sup>	"cut wood"	→	<i>ñwā'advɪŋ</i> <sup>a</sup>	"axe"
<i>pīe</i> <sup>+/</sup>	"wash self"	→	<i>pīadvɪŋ</i> <sup>a</sup>	"thing for washing oneself"
<i>sù</i> <sup>+</sup>	"bathe"	→	<i>sūvdɪŋ</i> <sup>a</sup>	"sponge"
<i>gōs</i> <sup>ε</sup>	"look"	→	<i>nīn-gótɪŋ</i> <sup>a</sup>	"mirror"
			<i>nīn-gótis</i> <sup>ε</sup>	"spectacles" [ <i>nīn</i> - "eye"]
<i>bùd</i> <sup>ε</sup>	"plant"	→	<i>būtɪŋ</i> <sup>a</sup> <a href="#">2.2</a>	"cup" (originally "seed cup")
<i>pīəs</i> <sup>ε/</sup>	"clean"	→	<i>pīəsɪŋ</i> <sup>a</sup>	"cleaning implement"
<i>kùəs</i> <sup>ε</sup>	"sell"	→	<i>kūəsɪŋ</i> <sup>a</sup>	"professional salesperson"
<i>dā'e</i> <sup>+/</sup>	"push"	→	<i>dā'advɪŋ</i> <sup>a</sup>	"pusher (person or thing)"
<i>zīñ'i</i> <sup>ya</sup>	"be sitting"	→	<i>zīñ'idɪŋ</i> <sup>a</sup>	"thing for sitting on"

#### 13.1.1.4 Imperfective gerunds

Relational verbs along with those dynamic-invariable verbs with stems in *-ll -nn -r(r)* [11.2.1](#) make derived abstract nouns by adding the suffix *-m-* to the stem. These forms almost all belong to the *m*<sup>m</sup> class. **Vowel-stems add *-lum-***, where *-l-* may be of the same origin as the *-y-* formant of dynamic-invariable verb stems [6.2.1.1](#).

<i>sō'e</i> <sup>ya/</sup>	"own"	→	<i>sō'vlím</i> <sup>m</sup> cf <i>so'olimkan</i> Mt 12:25, 1996
<i>mī</i> <sup>+</sup>	"know"	→	<i>mī'ilím</i> <sup>m</sup>
<i>zī</i> <sup>+</sup>	"not know"	→	<i>zī'vlím</i> <sup>m</sup>
<i>àəñ</i> <sup>a</sup>	"be something"	→	<i>àañlím</i> <sup>m</sup>
<i>bè</i> <sup>+</sup>	"be somewhere"	→	<i>bèllím</i> <sup>m</sup>
<i>kā'ə</i> <sup>+</sup>	"not be"	→	<i>kā'alím</i> <sup>m</sup>
<i>sōñ'e</i> <sup>ya/</sup>	"be better than"		has no gerund
<i>mōr</i> <sup>a/</sup>	"have"	→	<i>mōrím</i> <sup>m</sup>
<i>tār</i> <sup>a/</sup>	"have"	→	<i>tārím</i> <sup>m</sup>
<i>nār</i> <sup>a/</sup>	"be necessary"	→	<i>nārím</i> <sup>m</sup>
<i>nēn</i> <sup>na/</sup>	"envy"	→	<i>nēnním</i> <sup>m</sup>
<i>wēn</i> <sup>na/</sup>	"resemble"	→	<i>wēnním</i> <sup>m</sup> [?? misheard for <i>wēnním</i> <sup>m</sup> ]
<i>sīn</i> <sup>na/</sup>	"be silent"	→	<i>sīnním</i> <sup>m</sup>
<i>dō</i> <sup>la/</sup>	"accompany"	→	<i>dōllím</i> <sup>m</sup>
<i>zāñ</i> <sup>la/</sup>	"hold in the hand"	→	<i>zāñllím</i> <sup>m</sup>
<i>dē</i> <sup>la/</sup>	"be leaning"	→	<i>dēllúg</i> <sup>ɔ</sup> or <i>dēllím</i> <sup>m</sup>
	(of a person)		

	<i>gūr<sup>a/</sup></i>	"guard"	→	<i>gūrím<sup>m</sup></i>
	<i>těňr<sup>a</sup></i>	"remember"	→	<i>těňrɪb<sup>ɔ</sup></i> or <i>těňrím<sup>m</sup></i> [?? misheard for <i>těňrím<sup>m</sup></i> ]
But	<i>kīs<sup>a/</sup></i>	"hate"	→	<i>kísùg<sup>ɔ</sup></i>

Unlike abstract nouns associated with adjectival verbs, these forms obey the tonal rules for gerund formation, and are Pattern L when derived from Pattern L verbs; the third-mora L tone confirms that these are in fact *m*-stems [7.2.2](#).

Only imperfective gerunds from dynamic verbs can be used in the immediate future construction with *bòɔd<sup>a</sup>* "want" [12.1.1](#).

Variable verbs with an imperfective form which has become an independent relational verb lexeme may also form imperfective gerunds; however, when formed from Pattern L verbs they do not show the third-mora H toneme:

<i>bòɔdɪm<sup>m</sup></i>	"will" (Pattern L, unlike <i>bòɔdɪr<sup>ɛ</sup></i> "desirable") contrast the perfective gerund <i>bòɔb<sup>ɔ</sup></i> "seeking"
<i>gòɔñdɪm<sup>m</sup></i>	"wandering" ( <i>gòñ<sup>+</sup></i> "hunt")
<i>zòtɪm<sup>m</sup></i>	"fear" [ <i>M zót nē</i> "I'm afraid."] contrast <i>zòg<sup>ɔ</sup></i> "running"

This probably simply means that the stems do not contain *-m-* and have only three morae; cf the *dàalɪm<sup>m</sup>* "masculinity", *pù'alɪm<sup>m</sup>* "femininity" alongside *dàalím<sup>m</sup>* "male sex organs", *pù'alím<sup>m</sup>* "female sex organs" and *bìilím<sup>m</sup>* "childhood" [13.1.2](#), and the variant forms of resultative adjectives which lack the *-m-* of the stem [10.2](#).

The gerund *wummug* of *wòm<sup>m</sup>* "hear" (written *wumug* in pre-2016 orthography, but read with *-mm-* in the 1996 audio NT) is perhaps a formation of this kind, representing \**wumdugɔ*.

Unequivocal imperfective gerund forms with *-m-* derived from almost all agentive verbs occur as premodifiers of the bound noun

<i>-tāa<sup>=</sup></i>	<i>-tāas<sup>ɛ</sup></i>	<i>-tā-</i> or <i>-tā-</i>	"companion in ..."
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The forms used for relational verbs and for other invariable verbs with stems in *-ll -nn -r(r)* are identical to their usual imperfective gerunds:

<i>mī<sup>+</sup></i>	"know"	→	<i>mīilím-tāa<sup>=</sup></i>	"partner in knowledge"
<i>zī<sup>+</sup></i>	"not know"	→	<i>zī'ilím-tāa<sup>=</sup></i>	"partner in ignorance"
<i>bè<sup>+</sup></i>	"exist"	→	<i>bèllím-tāa<sup>=</sup></i>	"partner in existence" WK
<i>dɔl<sup>la/</sup></i>	"be with"	→	<i>dɔllím-tāa<sup>=</sup></i>	"fellow-companion"

Forms from variable verbs are made with *-m-* added to the stem seen in the derived dynamic adjective, but have the gerund tone pattern of Pattern L from Pattern L verbs, with H on the last vocalic mora:

<i>mè</i> <sup>+</sup>	"build"	→	<i>mèédím-tāa</i> <sup>=</sup>	"fellow-builder"
<i>dì</i> <sup>+</sup>	"eat"	→	<i>dìtím-tāa</i> <sup>=</sup>	"messmate"
<i>pū</i> <sup>+</sup>	"share"	→	<i>pūvdím-tāa</i> <sup>=</sup>	"fellow-sharer"
<i>kpěñ'</i> <sup>+</sup>	"enter"	→	<i>kpěñ'édím-tāa</i> <sup>=</sup>	"fellow-resident"
<i>zàb</i> <sup>ε</sup>	"fight"	→	<i>zàbídím-tāa</i> <sup>=</sup>	"enemy"
<i>dōg</i> <sup>ε</sup>	"cook"	→	<i>dōgvdím-tāa</i> <sup>=</sup>	"fellow-cook"
<i>fāñ'</i> <sup>+</sup>	"snatch"	→	<i>fāñ'ídím-tāa</i> <sup>=</sup>	"fellow-robber"
<i>tùm</i> <sup>m</sup>	"work"	→	<i>tùmmím-tāa</i> <sup>=</sup>	"co-worker"
<i>pù'us</i> <sup>ε</sup>	"worship"	→	<i>pù'usím-tāa</i> <sup>=</sup>	"fellow-worshipper"
<i>dìis</i> <sup>ε</sup>	"feed"	→	<i>dìisím-tāa</i> <sup>=</sup>	"fellow-feeder"
<i>sùŋ</i> <sup>ε</sup>	"help"	→	<i>sùŋím-tāa</i> <sup>=</sup>	"fellow-helper"
			or <i>sùŋídím-tāa</i> <sup>=</sup>	
<i>sjàk</i> <sup>ε</sup>	"agree"	→	<i>sjàkím-tāa</i> <sup>=</sup>	"fellow in agreement"

Stance verbs may use *-dīm-* or *-līm-* or even *-nīm-*; the forms with *-n-* at least probably belong rather to the derived assume-stance variable verbs [13.2.1.1](#) with the usual loss of the formant *-d-* when a preceding derivational suffix is retained.

<i>īgi</i> <sup>ya/</sup>	"be kneeling"	→	<i>īgulím-tāa</i> <sup>=</sup>	"fellow-kneeler"	
			or <i>īgidím-tāa</i> <sup>=</sup>	"fellow-kneeler"	WK
<i>zìñ'i</i> <sup>ya</sup>	"be sitting"	→	<i>zìñ'ilím-tāa</i> <sup>=</sup>	"fellow-sitter"	
			or <i>zìñ'idím-tāa</i> <sup>=</sup>	"fellow-sitter"	WK
<i>vābi</i> <sup>ya/</sup>	"lie prone"	→	<i>vābílím-tāa</i> <sup>=</sup>	"fellow lier-prone"	
			or <i>vābídím-tāa</i> <sup>=</sup>	"fellow lier-prone"	WK
<i>làbi</i> <sup>ya</sup>	"be crouched"	→	<i>làbílím-tāa</i> <sup>=</sup>	"fellow croucher in hiding"	
<i>zì'e</i> <sup>ya</sup>	"be stood"	→	<i>zì'əlím-tāa</i> <sup>=</sup>	"fellow-stander"	
			or <i>zì'ədím-tāa</i> <sup>=</sup>	"fellow-stander"	WK
<i>dīgi</i> <sup>ya/</sup>	"be lying"	→	<i>dīgulím-tāa</i> <sup>=</sup>	"fellow-lier"	
			or <i>dīgínlím-tāa</i> <sup>=</sup>	"fellow-lier"	WK

For the irregular verb *nòŋ*<sup>ε</sup> WK has two forms with different nuances [11.1.1](#)

<i>nòŋ</i> <sup>ε</sup>	"love"	→	<i>nòŋlím-tāa</i> <sup>=</sup>	"fellow liker"
			or <i>nòŋídím-tāa</i> <sup>=</sup>	"fellow lover"

### 13.1.1.5 Other deverbal formations

**-s-** appears in a few concrete nouns derived from verbs:

<i>dīgísá</i> <sup>+</sup>	"lairs"	←	<i>dīgi</i> <sup>ya/</sup>	"be lying down"
<i>dōvsá</i> <sup>+</sup>	"steps"	←	<i>dō</i> <sup>+</sup>	"go up"

**-m-** derives nouns from verbal roots in

<i>zōm</i> <sup>mε</sup>	"refugee"	cf	<i>zò</i> <sup>+</sup>	"run"
<i>kp̄im</i> <sup>m/</sup>	"corpse"	cf	<i>kp̄i</i> <sup>+</sup>	"die"

**-d-** appears as an instrument noun formant instead of the usual *-dum-* in

<i>tūēdir</i> <sup>ε</sup>	"mortar"	←	<i>tūà</i> <sup>+</sup>	"grind in a mortar"
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See also on *pībin*<sup>nε</sup> "covering" etc, where the *n* may represent *\*ld* [12.1.2](#).

**-b-** derives nouns from verbal roots in

<i>kp̄ibig</i> <sup>a</sup>	"orphan"	cf	<i>kp̄i</i> <sup>+</sup>	"die"
<i>dà'abir</i> <sup>ε</sup>	"slave"	cf	<i>dà</i> <sup>+</sup>	"buy"

This *-b* may be connected with the stem of *bīig*<sup>a</sup> "child"; cf Gurmanche *kp̄ēbīgā* "orphan", *kp̄é* "die", *bīgā* "child". The noun *sàl'ibir*<sup>ε</sup> "bridle" is not analysable.

### 13.1.2 From nouns and adjectives

**-s-** forms adjectives and cognate adjectival verbs.

<i>mā'asír</i> <sup>ε</sup>	"cold, wet"	cf	<i>mā'e</i> <sup>+/</sup>	"cool down"
<i>mā'as</i> <sup>a/</sup>	"be cold, wet"			
<i>bōgvsír</i> <sup>ε</sup>	"soft"	cf	<i>bōk</i> <sup>ε/</sup>	"weaken"
<i>bōgvs</i> <sup>a/</sup>	"be soft"			
<i>tēbısír</i> <sup>ε</sup>	"heavy"	cf	<i>tēbig</i> <sup>ε/</sup>	"get heavy"
<i>tēbıs</i> <sup>a/</sup>	"be heavy"			
<i>mì'isug</i> <sup>ɔ</sup>	"sour"	cf	<i>mì'ig</i> <sup>ε</sup>	"get sour"
<i>mì'is</i> <sup>a</sup>	"be sour"			

**-d-** (apart from its use to form deverbal nouns and adjectives) features in a number of nouns where it has no evident derivational meaning:

	<i>yūgvdir</i> <sup>ε</sup>	"hedgehog"
	<i>lā'aʔ</i>	"cowrie"
pl	<i>līgidi</i> <sup>+</sup>	"money" * <i>lagid-</i>
	<i>pùgvɔɓ</i> <sup>a</sup>	"father's sister"

It appears in a number of <sup>a</sup>|<sup>b</sup><sup>a</sup> class words where it is not found throughout the paradigm; so regularly in agent nouns from 3-mora stems in *-s-* [13.1.1.1](#), but irregularly also in some words [9.3.1](#). In derivation compare

<i>Nàɓɔ</i> <sup>a</sup>	"Nabdema"	but	<i>Nàɓir</i> <sup>ε</sup>	"Nabit language"
<i>Dàgáàd</i> <sup>a</sup>	"Dagaaba person"	=	Dagaare <i>Dagao</i>	
<i>nīdɔɓ</i> <sup>a/</sup>	"people"	=	Mooré <i>nébà</i>	

*-m-* appears in both concrete and abstract nouns, with no single common meaning:

<i>bī'am</i> <sup>m</sup>	"enemy"	cf	<i>bī'a</i> <sup>+</sup>	"bad"
<i>tādɔm</i> <sup>m/</sup>	"weak person"	cf	<i>tàdɔ</i> <sup>ε</sup>	"become weak"
<i>āñsɪŋ</i> <sup>a</sup>	"sister's child"	cf	<i>āñsɪb</i> <sup>a</sup>	"mother's brother"
<i>yáaŋ</i> <sup>a</sup>	"grandchild"	cf	<i>yáab</i> <sup>a</sup>	"grandparent"
← * <i>yāámgā</i>			← * <i>yāágbā</i>	
<i>vúeŋ</i> <sup>a</sup>	"red kapok"	cf	<i>vúe</i> <sup>ε</sup>	"red kapok fruit"
← * <i>vūémgā</i>			← * <i>vūégrī</i>	
<i>bì'isim</i> <sup>m</sup>	"milk"	cf	<i>bì'isur</i> <sup>ε</sup>	"breast"
<i>yōgúm</i> <sup>nε</sup>	"camel"		[ultimately ← Berber * <i>a-ləqəm</i> (Souag)]	
<i>gbīgim</i> <sup>nε</sup>	"lion"			
<i>zìlim</i> <sup>mε</sup>	"tongue"			
<i>àñrvɔ</i> <sup>ɔ</sup>	"boat"			
<i>nā'am</i> <sup>m</sup>	"chiefship"	cf	<i>nà'ab</i> <sup>a</sup>	"chief"
<i>zōlimís</i> <sup>ε</sup>	"foolishness"	cf	<i>zōlvɔ</i> <sup>ɔ/</sup>	"fool"

Abstract *-mís*<sup>ε</sup> forms seem always to have H toneme; cf *bùdımís*<sup>ε</sup> "confusion", where, however, the *-m-* is part of the verb stem *bùdım*<sup>m</sup> "get confused"; cf also

<i>tādımís</i> <sup>ε</sup>	"weakness"	cf	<i>tādım</i> <sup>m/</sup>	"weak person"
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*-m-* is seen also in the adjectives

<i>zùlvɔ</i> <sup>ɔ</sup>	"deep"	<i>ñyālúvɔ</i> <sup>ɔ</sup>	"wonderful"
<i>yàlvɔ</i> <sup>ɔ</sup>	"wide"	<i>nàrvɔ</i> <sup>ɔ</sup>	"necessary"

Added to existing adjectival stems, *-m-* produces no change of meaning:

<i>ñyèesíŋ<sup>a</sup></i>	"self-confident"	cf	<i>ñyèes<sup>a</sup></i>	"be self-confident"
<i>vèñllíŋ<sup>a</sup></i>	"beautiful"	cf	<i>vèñllíŋ<sup>a</sup></i>	"beautiful"
<i>mālisíŋ<sup>a</sup></i>	"pleasant"	cf	<i>mālisíŋ<sup>a</sup></i>	"pleasant"
<i>lāllíŋ<sup>a</sup></i>	"distant"	cf	<i>lāllíŋ<sup>ɔ</sup></i>	"distant"

*-lum-* derives abstract nouns from nouns and adjectives. The *-l-* is perhaps the same suffix as in primary adjectives like

<i>sābulíŋ<sup>a</sup></i>	"black"	cf	<i>sōb<sup>ε</sup></i>	"get dark"
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However, there are no adjectives in *-l-* alongside these abstract nouns; this is true even for abstract nouns derived with *-l-* alone, like

<i>dāu<sup>+</sup></i>	"man"	→	<i>dàalim<sup>m</sup></i>	"masculinity"
<i>pu'ā<sup>a</sup></i>	"woman"	→	<i>pù'alim<sup>m</sup></i>	"femininity"

versus *dàalim<sup>m</sup>* "male sex organs", *pù'alim<sup>m</sup>* "female sex organs", where the concrete meaning is presumably a metaphorical development from an original abstract sense, as with *yām<sup>m/</sup>* "gall, common sense" → "gall bladder" [9.1](#); cf the abstract sense of the parallel 4-mora stem formation *biilim<sup>m</sup>* "childhood"; WK did not accept *\*biilum*.

*-lum-* is the only derivational suffix before which CVVC roots do not become CVC [6.1.1.2](#), and can even follow a preceding derivational suffix, creating five-mora stems.

<i>tītā'al<sup>ε</sup></i>	"proud person"	→	<i>tītā'alim<sup>m</sup></i>	"pride"
<i>gīŋ<sup>a</sup></i>	"short"	→	<i>gīñlím<sup>m</sup></i>	"shortness"
<i>wōk<sup>ɔ/</sup></i>	"long, tall"	→	<i>wā'alím<sup>m</sup></i>	"tallness"
<i>sāan<sup>a/</sup></i>	"guest, stranger"	→	<i>sáannim<sup>m</sup></i>	"strangerhood"
<i>tīrààn<sup>a</sup></i>	"neighbour"	→	<i>tīràannim<sup>m</sup></i>	"neighbourliness"
<i>gīŋ<sup>a</sup></i>	"short"	→	<i>gīŋlím<sup>m</sup></i>	"shortness"

## 13.2 Verbs

Verbs have no derivational prefixes. All verb derivation is by suffixes, probably always added to roots rather than word stems. Clear meanings can often be recognised in suffixes, but there is no straightforward match of form and meaning.

Possible verb shapes are very constrained. Only two, three and four-mora stems occur. All four-mora stems end in *m*, and CVVC*m* only occurs as CVV root + *sim* or *lum*, never CVVC root + *m*. Some adjectival verbs have stems which include the a derivational suffix seen in the corresponding adjective.

### 13.2.1 From verbs

#### 13.2.1.1 From stance verbs

Stance verbs have derived variable verbs in  $-n^{\epsilon}$  [6.2.1.1](#) signifying "assume the stance" and in  $-l^{\epsilon}$  "make assume the stance"; all the  $-n^{\epsilon}$  verbs are Pattern LO regardless, but the  $-l^{\epsilon}$  verbs have the same Pattern as the base stance verb.

	<u>Stance verb</u>		<u>Assume-stance</u>		<u>Make-assume-stance</u>
	<i>dīgi</i> <sup>ya/</sup>	be lying	<i>digin</i> <sup>ε</sup>		<i>dīgil</i> <sup>ε/</sup>
	<i>vābi</i> <sup>ya/</sup>	be lying prone	<i>vābin</i> <sup>ε</sup>		<i>vābil</i> <sup>ε/</sup>
	<i>īgi</i> <sup>ya/</sup>	be kneeling	<i>igin</i> <sup>ε</sup>		<i>īgil</i> <sup>ε/</sup>
	<i>làbi</i> <sup>ya</sup>	be crouching hidden	<i>làbin</i> <sup>ε</sup>		<i>làbil</i> <sup>ε</sup>
	<i>zìñ'</i> <sup>ya</sup>	be sitting	<i>zìñ'in</i> <sup>ε</sup>		<i>zìñ'il</i> <sup>ε</sup>
	<i>zì'e</i> <sup>ya</sup>	be standing	<i>zì'an</i> <sup>ε</sup>		<i>zì'al</i> <sup>ε</sup>
	<i>tī'i</i> <sup>ya/</sup>	be leaning (of thing)	<i>tī'in</i> <sup>ε</sup>		<i>tī'il</i> <sup>ε/</sup>
WK	<i>gō'e</i> <sup>ya/</sup>	be looking up	<i>gò'ɔn</i> <sup>ε</sup>		
	<i>sùr</i> <sup>a</sup>	have bowed head	<i>sùn</i> <sup>nε</sup>		<i>sùn</i> <sup>nε</sup> [sic]
	-	cover oneself	<i>ligin</i> <sup>ε</sup>		<i>ligil</i> <sup>ε</sup>
	-	perch (of bird)	<i>zùen</i> <sup>ε</sup>		<i>zùel</i> <sup>ε</sup>
	-	perch (of bird)	<i>yà'an</i> <sup>ε</sup>		<i>yà'al</i> <sup>ε</sup>

The resultative perfective [19.2.1](#) of *zùe+* is used for "be perching":

*Níiŋ lā zúe nē.*

"The bird is perching." KT

Bird:SG ART perch FOC.

Other derivational relationships involving stance verbs are seen in

<i>gù</i> <sup>la</sup>	be suspended	<i>gù</i> <sup>ε</sup>	<i>gù</i> <sup>ε</sup>
<i>tàbi</i> <sup>ya</sup>	be stuck to	<i>tàb</i> <sup>ε</sup>	<i>tàbil</i> <sup>ε</sup>
<i>dē</i> <sup>la/</sup>	"be leaning" (person)	<i>dèlm</i> <sup>m</sup>	

#### 13.2.1.2 Causatives

Several derivational suffixes are found with a causative sense.

Patientive ambitransitive verbs [20.1](#) frequently describe entry into a state. Such verbs most often have no separate causative derivative.

*-l-* has been seen above as the causative suffix for stance verb roots; verbs derived with *-g-* from nominal roots are usually patientive ambitransitives but may have separate causatives in *-l-* (see below [13.2.2](#).) Other roots forming causatives in *-l-* are

<i>gūr<sup>a/</sup></i>	"guard"	<i>gū'ul<sup>ε/</sup></i>	"put someone on guard"
<i>bāñ<sup>+</sup></i>	"ride"	<i>bāñ'al<sup>ε/</sup></i>	"put on a horse/bicycle etc"
<i>zàb<sup>ε</sup></i>	"fight"	<i>zàb<sup>l</sup>ε</i>	"cause to fight"
<i>dū'à<sup>a</sup></i>	"bear, beget"	<i>dù'al<sup>ε</sup></i>	"make interest (of a loan)"
<i>yè<sup>+</sup></i>	"dress oneself"	<i>yè<sup>ε</sup>l<sup>ε</sup></i>	"dress another person"
<i>pid<sup>ε</sup></i>	"don hat/shoes/rings"	<i>pi<sup>l</sup>ε</i>	"put hat/shoes/rings on another person"

**-g-** can form causatives or inchoatives from invariable or intransitive variable verbs:

<i>d̄ɔ̄l<sup>la/</sup></i>	"accompany"	<i>d̄ɔ̄lɔ̄g<sup>ε/</sup></i>	"make accompany"
<i>ḡɔ̄r<sup>a/</sup></i>	"look up" DK	<i>ḡɔ̄dɔ̄g<sup>ε/</sup></i>	"make look up" DK
<i>zāñ<sup>la/</sup></i>	"be holding"	<i>zàŋ<sup>ε</sup></i>	"pick up"
<i>tèñ<sup>a</sup></i>	"remember"	<i>tèñ<sup>+</sup></i>	"bring to mind, remind"
<i>yùul<sup>ε</sup></i>	"swing" intransitive	<i>yùlɔ̄g<sup>ε</sup></i>	"swing" transitive
<i>kò<sup>+</sup></i>	"break" intransitive	<i>kò'ɔ̄g<sup>ε</sup></i>	"break" ambitransitive

**-s-** is the commonest causative suffix for variable verbs:

<i>kpèñ<sup>+</sup></i>	"enter"	<i>kpèñ'εs<sup>ε</sup></i>	"make enter"
<i>nìè<sup>+</sup></i>	"appear"	<i>nèεs<sup>ε</sup></i>	"reveal"
<i>yī<sup>+</sup></i>	"go/come out"	<i>yīs<sup>ε/</sup></i> or <i>yīs<sup>ε</sup></i>	"make go/come out"
<i>dì<sup>+</sup></i>	"eat"	<i>dìs<sup>ε</sup></i>	"feed"
<i>nū<sup>+</sup></i>	"drink"	<i>nūs<sup>ε/</sup></i>	"make drink"; also <i>nūlɔ̄g<sup>ε/</sup></i>
<i>sīg<sup>ε</sup></i>	"go down"	<i>sīg<sup>ε/</sup></i>	"lower"
<i>lèb<sup>ε</sup></i>	"return"	<i>lèbs<sup>ε</sup></i>	"make return; answer"
<i>mū'à<sup>a</sup></i>	"suck" (of a baby)	<i>mù'as<sup>ε</sup></i>	"give to suck"
[Mooré <i>tá</i>	"arrive"]	<i>tā'as<sup>ε/</sup></i>	"help to travel, walk"

It is also seen in

<i>zēm<sup>ma/</sup></i>	"be equal"	<i>zē'mis<sup>ε/</sup></i>	"make equal"
<i>kpiig<sup>ε</sup></i>	"go out (fire)"	<i>kpiis<sup>ε</sup></i>	"quench"

*gūr<sup>a/</sup>* "guard" has the causative *gū'ul<sup>ε/</sup>* (cf *gū'ud<sup>a/</sup>*, agent noun) but also has the derivative *gū'us<sup>ε/</sup>* "take care, watch out"



### 13.2.1.3 Reverse action

**-g-** attached to dynamic verbal roots implies reversal:

<i>yè<sup>+</sup></i>	"dress oneself"	<i>yèεg<sup>ε</sup></i>	"undress oneself"
<i>pìd<sup>ε</sup></i>	"put (hat etc) on"	<i>pìdɪg<sup>ε</sup></i>	"take (hat etc) off"
<i>pìl<sup>ε</sup></i>	"put (hat etc) on s'one"	<i>pìlɪg<sup>ε</sup></i>	"take (hat etc) off someone"
<i>l̄<sup>+</sup></i>	"tie up"	<i>l̄dɪg<sup>ε/</sup></i>	"untie"
<i>yò<sup>+</sup></i>	"close"	<i>yò'ɔg<sup>ε</sup></i>	"open"
<i>èñd<sup>ε</sup></i>	"block up"	<i>èñdɪg<sup>ε</sup></i>	"unblock"
<i>yà'al<sup>ε</sup></i>	"hang up"	<i>yàk<sup>ε</sup></i>	"unhang"
<i>pà'al<sup>ε</sup></i>	"put on top"	<i>pàk<sup>ε</sup></i>	"take off top"
<i>pìbɪl<sup>ε</sup></i>	"cover up"	<i>pìbɪg<sup>ε</sup></i>	"uncover"
<i>tàbɪ<sup>ya</sup></i>	"be stuck to"	<i>tàbɪg<sup>ε</sup></i>	"unstick, get unstuck"
<i>là'as<sup>ε</sup></i>	"gather together"	<i>lāk<sup>ε/</sup></i>	"open" (eye, book)
		<i>lákè</i>	(Mooré) "un-stick together"
		<i>làkè</i>	(Farefare) " <i>enlever, ouvrir</i> "

Reversible **-g-** is a peculiarity of the Western group within Oti-Volta; the others show alveolars in reversible suffixes: Konkomba *pì:<sup>n</sup>* "close" *pì:rì* "open", Moba *lwo* "close" *lwot* "open", Byali *byá* "close" *byērá* "open", Nawdm *rów* "has closed" *ɾɔd* "open." Proto-Bantu had **-ɔl-** and **-ɔk-**, perhaps respectively transitive and intransitive. An alveolar variant might have been disfavoured in Western Oti-Volta because of the adoption of **-da** as the regular dynamic imperfective flexion.

### 13.2.1.4 Other deverbal formations

**-s-** may have a plural action sense:

<i>kò<sup>+</sup></i>	"break"	<i>kò'ɔs<sup>ε</sup></i>	"break several times"
<i>tòñ<sup>+</sup></i>	"shoot"	<i>tòñ'ɔs<sup>ε</sup></i>	"hunt"
<i>pìəb<sup>ε</sup></i>	"blow (flute etc)"	<i>pìəbɪs<sup>ε</sup></i>	"blow (wind)"
<i>làbɪ<sup>ya</sup></i>	"crouch in hiding"	<i>làbɪs<sup>ε</sup></i>	"walk stealthily"
<i>vūɛ<sup>a/</sup></i>	"be alive"	<i>vū'ʊs<sup>ε/</sup></i>	"breathe, rest"
<i>jàñk<sup>ε/</sup></i>	"fly, jump"	<i>jàñ'as<sup>ε/</sup></i>	"leap, jump repeatedly"
<i>yā'e<sup>+/</sup></i>	"open mouth"	<i>yā'as<sup>ε/</sup></i>	"open repeatedly" WK
<i>dī'e<sup>+/</sup></i>	"receive"	<i>dī'əs<sup>ε/</sup></i>	"receive (many things)"

**-g-** probably occurs with an inchoative meaning in the perfectives of several irregular verbs [11.1.1](#), and also in

<i>sōñ'e<sup>ya/</sup></i>	"be better than"	<i>sūñ'e<sup>+/</sup></i>	"become better than" WK
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**-m-** derives some preverbs from variable verbs [19.7.2](#):

<i>lèm</i>	"again"	cf	<i>lèb<sup>ε</sup></i>	"return"
<i>là'am</i>	"together"	cf	<i>là'as<sup>ε</sup></i>	"gather together"
		also	<i>là'am<sup>m</sup></i>	"associate with", main verb
<i>dèŋum</i>	"first"	cf	<i>dèŋ<sup>ε</sup></i>	"go first"
<i>màlɔm</i>	"again"	cf	<i>malig</i>	(Toende) "do again"

**-g-** and **-m-** occur with no clear meaning in

<i>fāñ<sup>+</sup></i>	"rob, snatch"	<i>fāeñ<sup>+/</sup></i>	"save" (? "snatch back")
<i>liəb<sup>ε</sup></i>	"become"	<i>lèbig<sup>ε</sup></i>	"turn over"
		<i>lèbge</i>	(Mooré) "become"
<i>sōñ<sup>+</sup></i>	"rub"	<i>sūeñ<sup>+/</sup></i>	"anoint"
<i>nōb<sup>ε</sup></i>	"get fat"	<i>nōbig<sup>ε/</sup></i>	"grow" (child, plant)
<i>nā<sup>+</sup></i>	"join"	<i>nāe<sup>+/</sup></i>	"finish"; compare Hausa <i>gamàa</i> "join, finish"
<i>kòñs<sup>ε</sup></i>	"cough"	<i>kòñsɔm<sup>m</sup></i>	"cough"

**-b-** appears in *tàm<sup>m</sup>* "forget", *zàm<sup>m</sup>* "cheat, betray", *dàm<sup>m</sup>* "shake" and *lèm<sup>m</sup>* "sip, taste", where *mm* ← \**mb* [6.2.1](#), but I have found no cognate simplex forms.

**-r-** appears in

<i>kāab<sup>ε/</sup></i> "offer, invite"	<i>kābir<sup>ε/</sup></i>	"ask for admission"
[no simplex]	cf <i>kábɪs</i>	Toende <i>id</i>
	<i>sūgur<sup>ε/</sup></i>	"forbear, be patient with"

Both words appear frequently in pan-regional set formulae [31](#) and may well be loanwords. They may be back-formations from the nouns *kābirí<sup>+</sup>* and *sūgurú<sup>+</sup>*, where *ri/ru* possibly originated in the equivalent of *r<sup>ε</sup>|a<sup>+</sup>* class singular flexions [9.6](#).

### 13.2.2 From nouns and adjectives

**-g-** derives many verbs from noun and adjective roots, with the meaning "make/become ..." With verbal roots the same suffix is inchoative [13.2.1.4](#).

<i>ňyᵛ'ɔs<sup>ε/</sup></i>	"smoke"	<i>ňyū'e<sup>+/</sup></i>	"set alight"
<i>ňwīig<sup>a/</sup></i>	"rope"	<i>ňwīig<sup>ε/</sup></i>	"make a rope"
<i>tādum<sup>m/</sup></i>	"weak person"	<i>tādig<sup>ε</sup></i>	"become weak"
<i>kpì'a<sup>+</sup></i>	"neighbour"	<i>kpì'e<sup>+</sup></i>	"approach"
<i>zūø<sup>ε</sup></i>	"hill"	<i>zùe<sup>+</sup></i>	"get higher, more"
<i>À-Tūl<sup>lε</sup></i>	"Breech-Delivered" <a href="#">32.2</a>	<i>tùlig<sup>ε</sup></i>	"invert"
<i>mā'asír<sup>ε</sup></i>	"cool, wet"	<i>mā'e<sup>+/</sup></i>	"get cool, wet"
		<i>(mā'al<sup>ε/</sup></i>	"make cool, wet")
<i>bōgvsír<sup>ε</sup></i>	"soft"	<i>būk<sup>ε/</sup></i>	"soften"
<i>tēbısír<sup>ε</sup></i>	"heavy"	<i>tēbig<sup>ε/</sup></i>	"get/make heavy"
<i>gīḡ<sup>a</sup></i>	"short"	<i>gīḡ<sup>ε</sup></i>	"scrimp"
<i>kpī'øḡ<sup>ɔ</sup></i>	"strong"	<i>kpè'ḡ<sup>ε</sup></i>	"strengthen"
<i>vūr<sup>ε/</sup></i>	"alive"	<i>vū'vug<sup>ε/</sup></i>	"make/come alive"
<i>pòɔdig<sup>a</sup></i>	"few"	<i>pò'ɔg<sup>ε</sup></i>	"diminish; denigrate"
<i>pìəlig<sup>a</sup></i>	"white"	<i>pèlig<sup>ε</sup></i>	"whiten"
<i>sābılíg<sup>a</sup></i>	"black"	<i>sōbig<sup>ε/</sup></i>	"blacken"
<i>nīn-múa<sup>+</sup></i>	"concentration"	<i>mù'e<sup>+</sup></i>	"redden, become intense"
<i>kōdvug<sup>ɔ</sup></i>	"old"	<i>kùdig<sup>ε</sup></i>	"shrivel up, dry out, age"
<i>sùḡ<sup>ɔ</sup></i>	"good"	<i>sùḡ<sup>ε</sup></i>	"help"
<i>tōvług<sup>ɔ</sup></i>	"hot"	<i>tōlig<sup>ε/</sup></i>	"heat up"
<i>mì'isug<sup>ɔ</sup></i>	"sour"	<i>mì'ig<sup>ε</sup></i>	"turn sour"
<i>zùlvug<sup>ɔ</sup></i>	"deep"	<i>zùlig<sup>ε</sup></i>	"deepen"
<i>lāllug<sup>ɔ</sup></i>	"far"	<i>lālig<sup>ε/</sup></i>	"get to be far, make far"
<i>màuk<sup>ɔ</sup></i>	"crumpled up"	<i>màk<sup>ε</sup></i>	"crumple up"
<i>dēεḡ<sup>a</sup></i>	"first"	<i>dèḡ<sup>ε</sup></i>	"precede"
<i>nèε<sup>ε</sup></i>	"clear, empty"	<i>nìe<sup>+</sup></i>	"appear"

With the addition of **-m** as a second derivational suffix:

<i>wàḡḡ<sup>ɔ</sup></i>	"wasted"	<i>wàḡum<sup>m</sup></i>	"waste away"
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**-l-** can make causatives from noun or adjective roots, often corresponding to an intransitive or patientive ambitransitive verb with derivational **-g-**:

<i>mā'e<sup>+/</sup></i>	"get cool"	<i>mā'al<sup>ε/</sup></i>	"make cool"
<i>pūñ'e<sup>+/</sup></i>	"rot"	<i>pōñ'ɔl<sup>ε/</sup></i>	"cause to rot"
<i>nìe<sup>+</sup></i>	"appear"	<i>nèɛl<sup>ε</sup></i>	"reveal"
<i>wō'vɔg<sup>ε/</sup></i>	"get wet"	<i>wō'vɔl<sup>ε/</sup></i>	"make wet"
<i>ñyá'aj<sup>a</sup></i>	"behind"	<i>ñyā'al<sup>ε/</sup></i>	"leave behind"
<i>gēog<sup>ɔ</sup></i>	"space between legs"	<i>gēɛl<sup>ε/</sup></i>	"put between legs" Tones sic
<i>līk<sup>a</sup></i>	"darkness"	<i>līgɪl<sup>ε</sup></i>	"cover up"

**-lum-** derives verbs from noun roots, meaning "act as ..." or "make/become ...":

<i>pɥ'ā<sup>a</sup></i>	"woman"	<i>pò'alɪm<sup>m</sup></i>	"cook"
<i>pòñ'ɔr<sup>ε</sup></i>	"cripple"	<i>pòñ'ɔlɪm<sup>m</sup></i>	"cripple, get crippled"
<i>gìk<sup>a</sup></i>	"dumb"	<i>gìgɪlɪm<sup>m</sup></i>	"become dumb"
<i>wàbɪr<sup>ε</sup></i>	"lame"	<i>wàbɪlɪm<sup>m</sup></i>	"make, go lame"
<i>gō'vɔs<sup>ε</sup></i>	"semi-ripe things"	<i>gù'vɪlɪm<sup>m</sup></i>	"become semi-ripe"
<i>bōgvɔd<sup>a</sup></i>	"client of diviner"	<i>bùgɪlɪm<sup>m</sup></i>	"cast lots"
		cf <i>bùk<sup>ε</sup></i>	"cast lots"

**-m-** appears deriving a verb from a noun root in

<i>nēɛr<sup>ε/</sup></i>	"millstone"	<i>nēɛm<sup>m/</sup></i>	"grind with a millstone"
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**-s-** has a factitive sense in

<i>zɥà<sup>+</sup></i>	"friend"	<i>zùəs<sup>ε</sup></i>	"befriend"
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**-b-** appears in

	<i>yā'ad<sup>ε</sup></i>	"clay"	<i>yà'ab<sup>ε</sup></i>	"mould clay"
cf	<i>yàge</i>	(Mooré) "make pottery"		

## 14 Derivational prefixes

### 14.1 Nouns and adjectives

Many noun stems, and one or two adjectives and adverbs, have an element preceding the root which is not the combining form of any noun. Such elements will be called **noun prefixes**. No finite verb form has a prefix.

Noun prefixes usually have no identifiable individual meanings. Even where parallel stems without prefixes or with different prefixes exist, there are no regular processes relating the various forms (contrast the manner-adverb prefix *à-* and the number prefixes.) However, noun prefixes are common in particular semantic fields, such as with nouns referring to small animals, reptiles and insects.

Most noun prefixes fall into just a few phonological types, with limited possibilities for vowel distinctions and for tones. Segmentally, they are mostly of the shape *CV(n)*, where *V* shows only the three-way *a i u* vowel distinction of affix vowels; the *i/u* distinction itself and realisations as [i] or [u] are predictable [4.4](#). There is also a complex reduplicated type *CVsɪn* or *CVlɪn*. Stems with noun prefixes usually lack derivational suffixes. Prefixes have either M or L tonemes throughout, and they differ from cbs in their tonal effects on following elements [7.2.4](#).

The distinction between noun prefixes and combining forms is not absolute, and a few prefixes clearly originated as cbs, sometimes with phonological simplifications. Other prefixes are related to verbal negative particles. Nevertheless, cbs and noun prefixes are distinct in principle, and most cases readily distinguishable in practice. Thus, an element is a combining form if it is part of a noun paradigm, if it ends in a consonant other than a nasal, if it has a vowel other than short *a i u* without glottalisation or contrastive nasalisation, or if it has M toneme and is followed by L spreading affecting singular and plural forms. On the other hand, an element is a noun prefix if it is formed by reduplication of the stem-initial consonant, or if it has M toneme and is not followed by L spreading affecting singular and plural forms.

Complicating the issue are many stems with elements preceding the final root which do not fit into the common segmental prefix patterns, though behaving tonally as prefixes. Most are **loanwords**, but not all: many names of ethnic groups and of Kusaasi clans are of this type [15](#).

For the personifier clitic *à-* as part of some common nouns referring to living creatures see [16.6](#); it is not a prefix but a proclitic particle.

### 14.1.1 Reduplication-prefixes

The simplest type of noun prefix copies the initial C of the root, followed by a vowel which is *ɪ* by default, but *ʊ* after labials, labiodentals and labiovelars; *ʊ* replaces *ɪ* before root *u/ʊ/ɔ* and *ɪ* replaces *ʊ* before root *i/ɪ/ɛ*. No cases occur with voiced stops or voiced fricatives.

<i>kùkɔ̃r<sup>ɛ/</sup></i>	"voice"
<i>kùkò<sup>mɛ</sup></i>	"leper"
<i>kìkàŋ<sup>a</sup></i>	"fig tree"
<i>kìkīrɪg<sup>a/</sup></i>	"tutelary spirit"
<i>k[p]ùk<sup>p</sup>àrɪg<sup>a</sup></i>	"palm tree"
<i>k<sup>p</sup>īk<sup>p</sup>īn<sup>na/</sup></i>	"merchant"
<i>k<sup>p</sup>àk<sup>ɔ̃</sup>r<sup>ɛ/</sup></i>	"tortoise" (anomalous prefix vowel)
<i>tītā'ar<sup>ɛ</sup></i>	"big"
<i>tītōmɪs<sup>ɛ</sup></i>	"sending" ( <i>tòm<sup>m</sup></i> "send")
<i>tàtəl<sup>ɛ</sup></i>	"palm of hand"
<i>pīpīrɪg<sup>a/</sup></i>	"desert"
<i>fōfōm<sup>mɛ</sup></i>	"envy"; "stye" (believed to result from envy)
<i>sìsì'əm<sup>m</sup></i>	"wind"
<i>zà-sìsōbɪr<sup>ɛ/</sup></i>	"evening"
	( <i>zà-</i> cb of <i>zàam<sup>m</sup></i> "evening", <i>sōb<sup>ɛ</sup></i> "get dark")
<i>lìlāalɪŋ<sup>a</sup></i>	"swallow"
<i>mìmīilím<sup>m</sup></i>	"sweetness"
<i>mìmīilóg<sup>ɔ̃</sup></i>	<i>id</i>

More complex is a similar type with a final nasal consonant; voiced stops and fricatives do occur with this type:

<i>gùngōm<sup>mɛ</sup></i>	"kapok material" ( <i>gòm<sup>mɛ</sup></i> "kapok fruit")
<i>dòndùug<sup>ɔ̃</sup></i>	"cobra"
<i>dìndēog<sup>ɔ̃/</sup></i>	"chameleon"
<i>bìmbìm<sup>mɛ</sup></i>	"altar"
<i>bòmbàrɪg<sup>a</sup></i>	"ant"
<i>zùn<sup>z</sup>òŋ<sup>a</sup></i>	"blind" ( <i>zū'əm<sup>m/</sup></i> "go/make blind")
<i>zīnzāyɪŋ<sup>ɔ̃/</sup></i>	"bat"
<i>kìnkàŋ<sup>a</sup></i>	"fig"
<i>tītōñríg<sup>a</sup></i>	"mole"
<i>pòmpōg<sup>ɔ̃</sup></i>	"housefly" (cf <i>tàmpūa<sup>+</sup></i> <i>id</i> <a href="#">9.3.2</a> )
<i>sīnsáañ<sup>̄</sup></i>	a kind of tiny ant
<i>nōb-púmpàuyɪŋ<sup>ɔ̃</sup></i>	"foot"

An even more complex type follows the reduplicated CV with *-sin* or *-lin*:

<i>kpìsɪnkpì</i> <sup>lɛ</sup>	"fist"
<i>tàsɪntà</i> <sup>lɛ</sup>	"palm of hand"
<i>sīlɪnsíùǹǵ</i> <sup>ɔ</sup>	"spider" pl <i>sīlɪnsîǹd</i> <sup>ɛ</sup>
<i>sīlɪnsíùǵ</i> <sup>ɔ</sup>	"ghost" pl <i>sīlɪnsîs</i> <sup>ɛ</sup>
<i>zīlɪnzíòǵ</i> <sup>ɔ</sup>	"unknown" cf <i>zī</i> <sup>+</sup> "not know"
<i>vòlɪnvùuñ</i> <sup>lɛ</sup>	"mason wasp"
<i>wàsɪnwà</i> <sup>lɛ</sup>	a parasitic gall on trees, called "mistletoe" in local English
<i>nēsɪnnēog</i> <sup>ɔ</sup>	"envious person" cf <i>nēn</i> <sup>na</sup> / "envy" WK others "centipede" = WK <i>nà'-nēsɪnnēog</i> <sup>ɔ</sup>

#### 14.1.2 *Da(n) ba(n) sa(n)*

<i>dàwàlɪg</i> <sup>a</sup>	"hot, humid period just before the rainy season"
<i>dàyūug</i> <sup>ɔ</sup>	"rat"
<i>dàyáam</i> <sup>ma</sup>	"woman's parent-in-law"
<i>dàtāa</i> <sup>=</sup>	"enemy" cf <i>nìn-tāa</i> <sup>=</sup> "co-wife", Ghanaian "rival"
<i>dàmà'a</i> <sup>=</sup>	"liar" cf <i>mà</i> <sup>+</sup> "lie"
<i>dàkīig</i> <sup>a</sup>	"sibling-in-law via wife"
<i>dàwān</i> <sup>nɛ/</sup>	"pigeon"
<i>dādúk</i> <sup>ɔ</sup>	a kind of large pot, cf <i>dūk</i> <sup>ɔ</sup> "pot"
<i>dàtìɸ</i> <sup>ɔ</sup>	"right hand"
<i>dàǵòbɪg</i> <sup>a</sup>	"left hand"
<i>bānāa</i> <sup>=</sup>	traditional long-sleeved smock
<i>bàlànɪr</i> <sup>ɛ</sup>	"hat"
<i>bàlàar</i> <sup>ɛ</sup>	"stick, staff"
<i>bālērɸg</i> <sup>ɔ</sup>	"ugly" cf <i>lēr</i> <sup>ɛ</sup> "get ugly"
<i>bàyēog</i> <sup>ɔ</sup>	"betrayal of secrets" cf <i>yēɛs</i> <sup>ɛ/</sup> "betray a secret"
<i>sākárùǵ</i> <sup>ɔ</sup>	"fox"
<i>sàbùa</i> <sup>+</sup>	"lover, girlfriend" ? <i>bòɔd</i> <sup>a</sup> "want, love"
<i>sāmán</i> <sup>nɛ</sup>	clear space in front of a <i>zàk</i> <sup>a</sup> "compound"

Various forms show prefixes of the form *Can-*; those with initial consonants other than *d b s* are probably best classified with the unanalysable residue of complex stems which includes loanwords [15](#):

<i>dànkòŋ</i> <sup>ɔ</sup>	"measles"
<i>sāngúnnìr</i> <sup>ɛ</sup>	"millipede"
<i>zànkù'ar</i> <sup>ɛ</sup>	"jackal"
<i>Zàngbèog</i> <sup>ɔ</sup>	"Hausa person"
<i>màngávŋ</i> <sup>ɔ</sup>	"crab"
<i>làngávŋ</i> <sup>ɔ</sup>	"crab"
<i>nānzū'us</i> <sup>ɛ/</sup>	"pepper"

The interesting word *nàyīg*<sup>a</sup> "thief" is written *na'ayiig* in NT/KB as if it were a compound with the cb *nā'*- "cow", but it has L toneme initially and the vowel is definitely not glottalised in WK's speech. Moreover, the sense is not confined to "cattle thief." The word is <sup>a</sup>|*b*<sup>a</sup> class and the *-g*- belongs to the stem: pl *nàyīg-nàm*<sup>a</sup>, though there is an analogical *g*<sup>a</sup>|*s*<sup>ɛ</sup> pl *nàyīs*<sup>ɛ</sup> as well; there is also a derived abstract noun *nàyīgum*<sup>m</sup> "thievery." The Farefare cognate of *nàyīg*<sup>a</sup> is *nàyìgà*, pl *nayigba* or *nayigsi*; Dagbani has *nayiɣa* pl *nayiɣsi* and also *tayiɣa id*.

### 14.1.3 Pū kù(n)

In some words these prefixes have a negative meaning, and they are then presumably connected with the verb negative particles *pū kù*:

<i>kòndù'ar</i> <sup>ɛ</sup>	"barren woman"; cf <i>dụ'à</i> <sup>a</sup> "bear, beget"
<i>nīn-pū-nān</i> <sup>na/</sup>	"disrespectful person"; cf <i>nān</i> <sup>ɛ</sup> "love, respect"
<i>tùb-pū-wúmnìb</i> <sup>a</sup>	"deaf people" (Rom 11:7) cf <i>tùbur</i> <sup>ɛ</sup> "ear", <i>wòm</i> <sup>m</sup> "hear."

However, most cases are not analysable:

<i>kòndùŋ</i> <sup>a</sup>	"jackal"
<i>gūmpūzēr</i> <sup>ɛ/</sup>	"duck"
<i>dāmpūsāar</i> <sup>ɛ</sup>	"stick"
<i>bān-kúsé</i> <sup>lɛ</sup>	"lizard" ? first element connected with <i>bàŋ</i> <sup>a</sup> "agama lizard", but the tones are unexpected.



### 14.1.4 Stranded combining forms

Some original cbs have become partly bleached of their original meaning and/or simplified phonologically, and then detached from their regular paradigms after being ousted by new cbs based on analogy with sg forms [9.2.2](#).

*nìn* "body" is accepted by WK as cb of *nīŋ*<sup>a</sup> *nīs*<sup>ε</sup> [= Mooré *yīŋga*] but the word is rare; as a noun prefix cf

*nìn-gbīŋ*<sup>ɔ/</sup> "human skin; body"  
*nìn-tāa*<sup>=</sup> "co-wife"

*dà* "man" is replaced as regular cb by forms segmentally remodelled on sg and pl *dàŋ-*, *dàp-*, but the *dà-* form is seen in

*dà-pāal*<sup>a/</sup> "son, boy" cf *pāalíg* "new"  
*dà-kòǎŋ*<sup>ε</sup> "son, bachelor" cf *àdàkóŋ'* "one"  
 compare *pùkòǎŋ*<sup>ε</sup> below

*pù* "woman" cf *pŷ'ā*<sup>a</sup> "woman" cb *pŷ'à-*. Identifiable in e.g.

*pùkòǎŋ*<sup>ε</sup> "widow"  
 cf Mooré *pùgkōoré* "widow"  
 with Mooré *pùgsádà* "young woman"  
 = Kusaal *pŷ'à-sādir*<sup>ε/</sup>

*pū-* "farm" cf *pōɔg*<sup>ɔ/</sup> "field, farm", pl *pōt*<sup>ε/</sup>, regular cb *pō-*; Mooré *púvgò* pl *pútò*  
 Tonally, this *pū-* behaves as a M prefix, not a cb [7.2.4](#).

*pūk-pāad*<sup>a/</sup> "farmer" (= *kpāad*<sup>a/</sup> id)

*nà'* "chief"(?) appears before a number of nouns signifying animals and insects:

*nà'-nēsinnēog*<sup>ɔ/</sup> "centipede" WK  
 cf *nēsinnēog*<sup>ɔ/</sup> "envious person" WK; others: "centipede"  
*nà'-zòm*<sup>mε</sup> "locust"  
*nà'-dàwān*<sup>nε/</sup> "pigeon" = *dàwān*<sup>nε/</sup>

The "chief" cb perhaps relates to traditional folklore; cf *à-kōra-díəm*<sup>ma</sup> "praying mantis" ("hyena's parent-in-law") and animal and bird names which incorporate the personifier clitic [16.6](#) like *à-dàalŷŋ*<sup>ɔ</sup> "stork", *à-gáúŋg*<sup>ɔ</sup> "pied crow", *à-mús*<sup>ε</sup> "cat."

## 14.2 Adverbs

The manner-adverb prefix *à-* appears before some stems which are also followed by apocope-blocking [17.4](#):

<i>àmḗǵá<sup>+</sup></i>	"truly"
<i>àsī́dǵá<sup>+</sup></i>	"truly"
<i>àníǵà<sup>+</sup></i>	"promptly"

The same prefix is also seen in a number of proadverbs and in the locative *àǵó<sup>lɛ</sup>* "upwards" [17.3](#). Forms with this prefix are all liaison words. The prefix is followed by M spreading, like the number prefix, but differs from it in that it does not cause a preceding LF-final vowel mora to appear as *-a* [8.2.2](#).

## 14.3 Number words

In all uses, the numbers 2 to 9 begin with an inseparable number prefix. Forms with number prefixes are all liaison words [8.2.2](#). Although unprefixed forms are not available for comparison, the number prefixes are probably followed by M spreading to the root of the number word.

The number prefixes represent **fossilised noun class agreement prefixes**. With the collapse of noun-class based grammatical gender [9.1](#) in favour of a system of natural gender [16.2.2](#) the old  $a|b^a$  class agreement pronouns *ò b̀à* have been generalised for animate while the old  $r^ɛ|a^+$  class singular pronoun *l̀ì* has been adopted for inanimate gender. In Dagbani, where there has been a very similar change, the inanimate singular pronouns are similarly based on the equivalent of the  $r^ɛ|a^+$  class, with the old plural pronoun *ǵa* still extant in older materials for inanimate plural (Olawsky 1999.) Number words originally agreed with the counted noun with a prefix similar in form to the corresponding plural pronoun, and the *à-* of the Kusaal numbers 2-9 used as quantifiers [16.4.2.1](#) represents original *\*ǵa-*.

Because of its origin from *\*ǵa-*, the *à-* number prefix, unlike all other *a-* particles and prefixes, causes a preceding LF-final vowel following a consonant to appear as *-a* rather than *-i* [8.2.2](#):

<i>bī́sǵá_ àtáń'</i>	"three children"
child:PL NUM:three	

This same *à-* is also seen in *àlá<sup>+</sup>* "how many?" contrasting with *àlá<sup>+</sup>* "thus", which has the manner-adverb *à-*:

<i>Pèédǵá_ àlá</i>	<sup>+</sup> ∅?	"How many baskets?"
Basket:PL NUM:how.many	CQ?	

*nìŋɿ* àlá "did thus"  
do **ADV**:thus

The expected corresponding number prefix *bà-* is not now found after nouns with animate gender, but is still preserved after personal pronouns:

*tì bàtáñ'* "we three"  
*yà bàyópòę* "you seven"  
*bà bàyí* "they two"

The forms of the number words 2-9 used for counting [16.4.2.2](#) represent the old *m<sup>m</sup>* class agreement, in the "abstract" sense of *m<sup>m</sup>* [9.1.1](#):

*h̄táñ'* "three" (in counting)  
*h̄nāas* "four" (in counting)  
*h̄nū* "five" (in counting)

Compare Nawdm *mì-tâ?* "three" *mì-ná:* "four" *mì-nû?* "five" etc in counting. When referring to a specific noun Nawdm numbers have a prefix agreeing with the noun class *nídbá bà-tâ?* "three people"; *mi* marks the abstract/mass class cognate to the Kusaal *m<sup>m</sup>* class (Fiedler 2012.)

The number prefix *bù-* appears in various adverbial number words [16.4.2.4](#). It probably represents either an old *b<sup>ɔ</sup>* or *m<sup>m</sup>* class agreement.

*àbùyí<sup>+</sup>* "twice"  
*àbùtáñ'<sup>+</sup>* "three times"  
*àbùnāasí<sup>+</sup>* "four times"  
*bùpīiga<sup>+</sup>* "ten times"  
*n̄ɔ́rí**m** b̀táñ'<sup>+</sup>* "three times"

## 15 Unanalysable complex stems

Numerous words in Kusaal (including the very name of the language, *Kūsáàl*<sup>ε</sup>) have stems which are more complex structurally than the ordinary unprefixated type but are simply unanalysable units. Tonally, they most often resemble forms with noun prefixes, though examples occur with an initial H toneme. They are often aberrant segmentally, for example in containing unusual consonant clusters. By no means all of these are identifiable loanwords; in particular, many names of ethnic groups and clans fall into this category.

Examples of such complex stems include

<i>Kūsáàs</i> <sup>ε</sup>	"Kusaasi"
<i>Ñwāmpūris</i> <sup>ε/</sup>	"Mamprussi"
<i>Kùtām</i> <sup>ma/</sup>	WK's clan
<i>gbáñyà'a</i> <sup>=</sup>	"lazy person" <i>gonya'am</i> "idleness" 1976 NT cf Dagbani <i>gbinyayli</i> "laziness"

### 15.1 Loanwords

As usual cross-linguistically, nouns form by far the largest group of identifiable loanwords. They are sometimes fitted into the noun class system by analogy [9.7](#). Analogy may also cause the initial à- of loanwords like *àrazánà*<sup>+</sup> "heaven" and *àrazàk*<sup>a</sup> "riches" to be treated tonally as fixed-L [8.3.1](#).

Most loanwords were probably borrowed from **Hausa** in the first instance. Hausa loans often stand out prominently as foreign elements by their deviation from the typical structure of Kusaal words, with its limitation of possible vowel contrasts by position within the word and its restrictions on consonant distributions.

Among nouns borrowed from Hausa are

<i>dāká</i> <sup>+</sup>	"box"	← <i>àdakàa</i> (← Portuguese <i>arca</i> )
<i>gādu</i> <sup>+</sup>	"bed"	← <i>gadoo</i>
<i>kèèkè</i> <sup>+</sup>	"bicycle"	← <i>kèèkè</i>
<i>bákpàè</i> <sup>+</sup>	"week"	← <i>bakwài</i> (Hausa "seven")

Identifiable verb loanwords are much less common. They are subject to the usual constraints on possible Kusaal verb shapes [13.2](#):

<i>dàam</i> <sup>m</sup>	"disturb, trouble"	← <i>dàamaa</i>
<i>bùg</i> <sup>ε</sup>	"get drunk"	← <i>bùgu</i> ; a Hausa idiom: literally "get thoroughly beaten"

Several function words are loans, most probably from Hausa:

<i>àséé</i>	"except"	← <i>sai</i>
<i>kōv</i>	"or"	← <i>koo</i>
<i>báa</i>	"not a..." <a href="#">29.4</a>	← <i>bâa</i>

Loanwords with clear Hausa counterparts do not necessarily originate in Hausa, which is not only a great lender of words to other languages but also a great borrower, and they may not always have been borrowed into Kusaal from Hausa itself. Some such words appear in many languages of the Sahel and Savanna: *hālí*<sup>+</sup> "until", Hausa *har*, Kikara Songhay *hálì id*, possibly from Arabic حتى *ḥatta*: (Heath 2005); *lùmbò*<sup>g</sup> "garden", Hausa *làmbuu*, Humburi Senni *làmbò* "enclosed vegetable garden"; *làbi*<sup>ya</sup> "be crouching, hiding behind something", Hausa *labèe id*, Kikara Songhay *lá:bú* "hide behind or under something." With Kusaal *làbi*<sup>ya</sup> and Hausa *labèe*, the coincidence of highly specific meanings with very similar forms is striking. However, if the Kusaal word is a Hausa loan, it has been remarkably well integrated into the language, with an invariable-verb type Long Form in *-ya* [2.3.2](#) and variable-verb assume-stance and make-assume-stance derivatives [13.2.1.1](#).

Loans from Hausa have travelled far in West Africa, with an entry point into Songhay via the Zarma and Kaado languages of Niger, e.g. Humburi Songhay *tílásò* "duty", Zarma, Kaado *tílàs* ← Hausa *tiilàs*. Accordingly, wide distribution does not in itself rule out Hausa origin or transmission.

Words from **Arabic** are frequent throughout the languages of the Sahel and Savanna; thus, among others:

<i>láafíya</i> <sup>+</sup>	"health"	Hausa	<i>laafiyàa</i>	<i>id</i>
		Mooré	<i>làafí</i>	<i>id</i>
		Kikara Songhay	<i>ʔàlà:fiyà</i>	<i>id</i>
		Arabic	العافية <i>ʔal-ʕa:fiya(tu)</i>	"(the) wellness"
<i>àrazàk</i> <sup>a</sup>	"riches"	Hausa	<i>arzikii</i>	<i>id</i>
		Mooré	<i>àzéká</i>	<i>id</i>
		Kikara Songhay	<i>ʔárzúkù</i>	"good luck"
		Arabic	الرزق <i>ʔar-rizq(u)</i>	"(the) livelihood"
			cf plural ارزاق <i>ʔarza:q(un)</i>	
<i>Tàláatà</i> <sup>+</sup>	"Tuesday"	Hausa	<i>Tàlaatàa</i>	
		Arabic	الثلاثاء <i>ʔaθ-θala:θa:ʔ(i)</i>	

<i>àrazánà</i> <sup>+</sup>	"heaven"	Hausa	<i>àljannàa</i>	"heaven, paradise"
		Mooré	<i>àrzǎnà</i>	<i>id</i>
		Kikara Songhay	<i>ʔàljánnà</i>	<i>id</i>
		Arabic	الجنة <i>ʔal-ʔanna(tu)</i>	"(the) garden, paradise"
<i>yàddā</i> <sup>+/</sup>	"assent"	Hausa	<i>yàrda</i>	(verb) "consent"
<i>yàdā</i> WK		Gao Songhay	<i>yarda/yadda</i>	<i>id</i>
		Kikara Songhay	<i>yárrè</i>	<i>id</i>
		probably Arabic	يرضى <i>yard<sup>ʕ</sup>a</i> : 3sg m ipfv of	
			رضى <i>rad<sup>ʕ</sup>iy(a)</i>	"be satisfied"

It is likely that Arabic words have mostly entered Kusaal via Hausa. Usually this is impossible to prove or disprove, but in some cases the Kusaal forms clearly resemble Mooré rather than Hausa; Arabic words have reached Mooré from several West African languages widely used by Muslims, including Dyula and the Songhay languages beside Hausa.

Thus *màljāk*<sup>al</sup> "angel" (always *malek* in NT versions prior to 2016) is derived from the Arabic ملاك *malʔak(un)*. The vocalism suggests transmission via Mooré *màlékà* and Toende *màlék*; the word is usually found in Christian materials, which would be consistent with this pathway (see below.) The forms clearly do not match Hausa *màlaa'ikàa*, which is from the Arabic plural ملائكة *mala:ʔika(tu)*. A similar case in the realm of religion is *Sūtáanà*<sup>+</sup> "Satan", matching Mooré *Sutāana* rather than Hausa *shàidān*, which is a learned borrowing of the Arabic شيطان *ʔayt<sup>ʕ</sup>a:n(u)*.

Loanwords from **Songhay** languages, probably via Mooré, include *bùrkìn*<sup>a</sup> "honest person", Mooré *bùrkĩná* "free, noble" (as in "Burkina Faso"), Dagbani *bilchina* "free, not slave", Yoruba *bòròkinní* "gentleman"; cf Kikara Songhay *bòrkĩn* "noble (caste.)" The word *bàɲɲu* is used only in *kpeñ' bàɲɲu* "get circumcised" (*kpeñ'*<sup>+</sup> "enter"), Mooré *kẽ bāongó id*; cf Kikara Songhay *bàŋgù* "pool, spring", *à hùró bàŋgù* "he entered the pool", i.e. "he was circumcised" (Trimingham 1959.)

Loans from other **Western Oti-Volta** languages are difficult to distinguish from cognates; the vast majority of similar words are due to common inheritance and not borrowing. Kusaal speakers themselves very often ascribe forms which are not part of their own usage to **Mooré** influence.

One word revealed as a loan by its phonology is *Wínnà'am*<sup>m</sup> (WK) *Wínà'am*<sup>m</sup> (always *Wina'am* NT/KB) "God." It is common in Christian materials; the Creator of traditional religion often appears simply as *Wīn*<sup>NE/</sup> in proverbs etc. *Wínnà'am* looks analysable as a compound of *wīn*<sup>NE/</sup> "god" and the stem of *nà'ab*<sup>a</sup> "chief" or *nā'am*<sup>m</sup> "chieftaincy", but the tones should then have been \**Wīn-ná'àm*, and the prevalence of the form *Wínà'am* with single *-n-* likewise shows that the form is not in fact a

synchronic compound in Agolle Kusaal. The earliest Christian missionary work among the Kusaasi began in Haute Volta (now Burkina Faso), using Mooré materials, but direct borrowing of the corresponding Mooré word *Wěnnàám* would not account for the glottalised *-a'a-*; most likely the immediate source of the loan is the **Toende Kusaal** of Haute Volta. Niggli's materials have *Wínā'am*, with a tonal fall like the Agolle *Wínà'am*, and always with single *n*: Niggli records consonant gemination in Toende only before the affix vowels of Long Forms.

The word *faangid* "saviour" in the NT/KB is read [fã:ɣ'ɪd] by my informants; preservation of *g* in this position 6.3.1 is almost completely isolated within Agolle Kusaal; apart from the corresponding gerund *faangir* "salvation", the only other case in my data is the gerund *zī'əg<sup>a</sup>* of *zī'e<sup>ya</sup>* "be standing" used by DK KT instead of KED *zī'a<sup>+</sup>* 12.1.1.2.) The expected agent noun from *fāeñ<sup>+/</sup>* "save" is *fāañd<sup>a/</sup>*, presumably avoided as identical to the agent noun of *fāñ<sup>+</sup>* "rob, snatch", found in NT/KB as *faand* "robber." WK has the identical agent noun *fāañd<sup>a/</sup>* for both verbs, and he specifically confirmed that the word had both meanings in his idiolect.

As with *Wínà'am*, *faangid* is probably a loan, either from Mooré *fāagdá* "sauveur", or from Toende Kusaal, where loss of \**g* is consistent word-finally after *all* long vowels (*bīi* "child" = *bīig<sup>a</sup>*, *būū* "goat" = *būvg<sup>a</sup>*), but optional elsewhere, with variation between speakers (Niggli, "La phonologie du kusaal"):

<i>páa</i>	"arriver" (Agolle <i>pāe<sup>+</sup></i> "reach")
<i>Õ bu paage.</i>	"Il n'est pas arrivé." (Agolle <i>Ò pū pāée.</i> )

Niggli's dictionary has both *fāagɪt* and *fāat* for "sauveur", with *fāat* also glossed as "voleur, brigand."

A more everyday example is WK's *kīibú<sup>+</sup>* cb *kīib-* "soap." Written sources have *kī'ib*, probably *kī'ɪb<sup>ɔ/</sup>* = Toende *kí'ɪp*. The length and quality of the vowels clearly identify the source as **Mampruli *kyiibu***: contrast Farefare *kí'íbó*, Dagbani *chibo*.

Other words with singulars ending in *-ɪ<sup>+</sup>* or *-u<sup>+</sup>* 9.6 like *kābirí<sup>+</sup>* "permission for entry" and *sūgurú<sup>+</sup>* "forbearance" may similarly have originated as loans from other Western Oti-Volta languages.

I have identified few loans from **Twi/Fante** ("Akan"), the major lingua franca of southern Ghana; in part, this surely reflects my own lack of knowledge of that language. However, as of 1995, knowledge of Twi was certainly less common among the Kusaasi than knowledge of Hausa or Mooré. Loans include

<i>kōdú<sup>+</sup></i>	"banana"	← <i>kwadu</i>
<i>sāafi<sup>+</sup></i> (?tones)	"lock, key"	← <i>sāfē</i> "key" (← Portuguese <i>chave</i> )
<i>būriyá<sup>+</sup></i>	"Christmas"	← <i>bronya</i> (itself of unclear origin)

A few loans from **English** are found. English differs even more than Hausa from Kusaal in phonological structure, and loanwords which are sufficiently naturalised that they are used by speakers unfamiliar with English have often undergone considerable changes:

<i>àlɔ̀pìr</i> <sup>ɛ</sup>	"aeroplane"	? back-formation from [alɔ̀pɪɾɪn] taken as locative <i>àlɔ̀pìrì-n</i> <sup>ɛ/</sup>
<i>dɔ̀'átà</i> <sup>+</sup>	"doctor"	(cf Dagbani <i>dɔ̀yɛ́ id</i> )
<i>tɔ̀klàe</i> <sup>+</sup>	"torch"	← "torchlight"
<i>lɔ̀r</i> <sup>ɛ</sup>	"car, lorry"	(often borrowed even in Francophone Africa: cf Kabiye <i>lɔ̀rɪyɛ</i> , Mooré <i>lórè</i> )

The word *pootum* "complain about officially" found in the 1976 NT version is ultimately from the English "report"; cf Mampruli, Buli *pooti id*.

English stress may be represented by a H toneme which remains fixed throughout the paradigm: *lɔ̀yà* "cars", not \**lɔ̀yá* 9.7.

Several loanwords of English origin have probably been transmitted via Hausa:

<i>kɔ̀tù</i> <sup>+</sup>	"court"	Hausa <i>kootù</i>
<i>sɔ̀gjà</i> <sup>a</sup>	"soldier"	Hausa <i>soojà</i>
<i>tɛ́ɛbù</i> <sup>ɛ</sup>	"table"	Hausa <i>teebùr</i>
<i>wādá</i> <sup>+</sup>	"law"	Hausa <i>oodà</i> (← English "order") sg <i>wādir</i> <sup>ɛ/</sup> cb <i>wād-</i> created by back-formation

A clear **French** loan in Agolle Kusaal is *làmpɔ̀* (i.e. *l'impôt*) "tax", as in *làmpɔ̀-dí'às*<sup>a</sup> "tax gatherer." This word is widespread in northern Ghana (Dagbani *lampoo*), reflecting extensive French influence in the region prior to the British annexation. Another word probably derived from French is *kàsɛ́t*<sup>a/</sup> "witness, testimony", Mooré *kàsétò* "testimony, proof", as in *kàsét sébrè* "receipt" ("evidence writing.") The ultimate origin is probably French *cachet* in the sense "seal (of authenticity)", with the Mooré *-t-* perhaps introduced from the corresponding French verb: *il cachète* "he seals." Mooré *kàsétò* and Farefare *kàsétò* have only the abstract sense "testimony"; the adaptation as a <sup>a</sup>|*b*<sup>a</sup> class human-reference noun "witness" seems to be a Kusaal innovation (Agolle and Toende) enabled by the dropping of the final vowel.

There are naturally many more French loans in the Toende Kusaal of Burkina Faso (Niggli 2014.)



## Syntax

### 16 Noun phrases

#### 16.1 Overview

A nominal phrase may be either a noun phrase (NP) or an adverbial phrase (AdvP [17](#).) A noun phrase has a noun, pronoun or quantifier as head. If present, the **article** *lā*<sup>+/</sup> occurs last in a NP [16.5](#). (For the sole exception, see [20.7](#).)

Dependent nominal phrases may precede the head, possibly recursively, as **predeterminers**. The meaning depends on the nature of the head: some words have specialised rôles as NP heads [16.10.3.1](#); with quantifier or pronoun heads the sense is **partitive**; predeterminers of gerunds and similar nouns are subjects; predeterminers of all other heads are **possessors** [16.10.3](#).

A nominal phrase may be a relative clause [28.2](#). No dependents may occur with a relative clause apart from the article or a predeterminer. Nominal phrases may be formed by **coordination** [16.7](#) or by **apposition** [16.8](#).

As is characteristic of Oti-Volta, **compounding** [16.9](#) is pervasive in NP formation, often where most languages use uncompounded constructions. Closeness of syntactic binding need not be reflected in whether the components are compounded or not [16.9](#). Adjectives and postdeterminer pronouns regularly compound with the preceding head; accordingly the combining form is a regular part of the noun paradigm. Combining forms also function as **premodifiers**, particularly before deverbal nouns in the rôle of arguments.

Uncombined NPs of various kinds also appear within NPs as premodifiers, and uncombined quantifier and adverbial phrases may follow heads as postdeterminers.

Personal pronouns accept only postdeterminer pronouns as dependents.

#### 16.2 Noun phrase categories

##### 16.2.1 Number

Number is a category only of nouns, pronouns and quantifiers. Agreement is confined to pronouns. Verbal predicators show no agreement with any argument (on plural-subject imperatives see [25.2.3](#).) However, in compounds of noun + adjective and noun + postdeterminer pronoun, it is the dependent which inflects to show the number of the head noun cb [16.11.1](#).

Kusaal resembles English in distinguishing between **count** nouns, with singular and plural, and **mass** nouns which normally make no such distinction, and characteristically refer to liquids or substances or abstractions. Abstract nouns may be count nouns; so, for example with gerund forms which can be interpreted as referring to particular instances of the action of the verb:

<i>zɔ̃ɔg</i> <sup>ɔ̃</sup>	<i>zɔ̃ɔs</i> <sup>ɛ</sup>		"race"
<i>bū'əsúg</i> <sup>ɔ̃</sup>	<i>bū'əsá</i> <sup>+</sup>	<i>bū'əs-</i>	"question"
<i>zàańsúŋ</i> <sup>ɔ̃</sup>	<i>zàańsíma</i> <sup>+</sup>	<i>zàańsúŋ-</i>	"dream"

Some abstract count nouns are formally plural but construed as singular [9.5](#)

<i>dì'əma</i> <sup>+</sup>	"festival"
<i>pj'àń'ad</i> <sup>ɛ</sup>	"word, language"
<i>tēń'əsá</i> <sup>+</sup>	"thought"

Cf *tēń'əsá yīnní* "one thought" (Acts 4:32).

Typical underived mass nouns belong to the *b*<sup>ɔ̃</sup> and *m*<sup>m</sup> noun classes, which do not have paired sg/pl suffixes, but some are formally plural, and gerunds of 3-mora stem verbs regularly show sg *r*<sup>ɛ</sup> or *g*<sup>ɔ̃</sup> suffixes [12.1.1.1](#).

The count/mass distinction is significant in the choice of quantifiers [16.4.1](#) and when plurals are formed with *nám*<sup>a</sup> [9.4](#), and it affects the meaning of constructions with preceding NPs as dependents [16.10](#).

Mass nouns can be used in count senses (as in English): *dāam nám* "beers."

Count nouns can be used in mass senses, where number distinctions are irrelevant [16.10.2.2](#):

<i>fūug dɔ̃ɔg</i>	"tent" (cloth hut): <i>fūug</i> "item of clothing, shirt"
<i>dàad bún-nám</i>	"wooden things": <i>dàad</i> "pieces of wood"

Manner-adverbs resemble mass nouns syntactically. Mass nouns may occur as manner adverbs, as may count nouns used where number is irrelevant [17.4](#):

<i>Ṁ kēj nōbá.</i>	"I went on foot." SB
1SG go leg:PL.	WK corrected to <i>Ṁ kēj nē nōbá</i> ( <i>nē</i> "with")

### 16.2.2 Gender

Gender is marked only in pronouns. It is natural, distinguishing **animate** from **inanimate**. Not only human beings, but also supernatural beings, "fairies" and the like have "animate" gender. Without a context, my informants all rejected

<i>*Ò à nē náaf.</i>	attempted "It is a cow."
3AN COP FOC COW:SG.	

Nevertheless, the Bible versions and other written materials often do use the animate pronouns for higher animals:

*Bung ya'a bood ye o lubuf, fu po nyeti o tubaa.*

*Bùŋ yá' bòod yé ò lūbú f,*

Donkey:SG if want that 3AN throw.off 2SG.OB,

*fù pō ñyētí ò túbāa +ø.*

**2SG NEG.IND see:IPFV 3AN ear:PL NEG.**

"If a donkey wants to throw you off, you don't see his ears." KSS p44  
(i.e. "If there's a will, there's a way.")

*Ka wief ya'a sigi li ni, li zulɔŋ na paae o salibir.*

*Kà wìəf yá' sīgí lì nī, lì zùlɔŋ ná pāe ò sàlibir.*

And horse:SG if descend 3INAN LOC, 3INAN depth IRR reach 3AN bridle:SG.

"If a horse goes down in it, its depth will reach its bridle." (Rev 14:20)

In stories where animals speak, they are naturally assigned animate gender. Trees, which are animate in the traditional Kusaasi world view, may also have animate gender:

*Tiig wela bigisid on a si'em.*

*Tìg wélà bigisid ón àñ sī'em.*

Tree:SG fruit:PL show:IPFV 3AN:NZ COP INDF.ADV.

"The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

In the 1996 version the gender has been changed to inanimate:

*Tiig wela bigisid lin a tisi'a.*

*Tìg wélà bigisid lín àñ tí-sī'a.*

Tree:SG fruit:PL show:IMPF 3INAN:NZ COP tree-INDF.INAN.

"The fruit of the tree shows what tree it is." (Mt 12:33, 1996)

Babies may be counted as animate or inanimate gender:

*Ò/Lì à nē bí-līa.* "He/she/it is a baby."

**3AN/3INAN COP FOC child-baby:SG.**

When body parts are metaphorically represented as having opinions in this New Testament passage, they have animate gender:

*Nobir ya'a yelin ye, on pu a nu'ug la zug, o ka' ningbiŋ nii, lin ku nyanjin  
keen ka o ka' ningbiŋ nii.*

*Nóbìr yá' yèlī-n yē, ́n p̄ áñ nú'ùg lā zúg,*

Leg:SG if say-DP that 3AN:NZ NEG.IND COP hand:SG ART upon,

*ò k̄ā' nín-gbīŋ níú +∅, līn kú ñyāŋɿ-n ∅*

3AN NEG.BE body-skin:SG LOC NEG, DEM.INAN NEG.IRR accomplish-DP CAT

*kēε-n k̄à ò k̄ā' nín-gbīŋ níú +∅.*

cause-DP and 3AN NEG.BE body-skin:SG LOC NEG.

"If the leg were to say, because it is not a hand, it is not in the body, that would not cause it not to be in the body." (1 Cor 12:15, 1976)

(In the 1996 version the indirect speech is changed to direct, as throughout.)

The relevant distinction is thus whether the referent is being regarded as a potential thinking agent or "person"; if a first or second person pronoun could in principle apply, the gender is "animate."

At some points the language makes a clear distinction specifically between human and non-human. It is this distinction which is useful for predicting noun class membership on the basis of a SF [9.1](#), reflecting the fact that the <sup>a</sup>|b<sup>a</sup> class has exclusively human reference. Only human-reference nouns can be used as modifiers after a head cb like adjectives [16.11.1.5](#); probably only human-reference heads can be used with appositional relative clauses [28.2.4](#). Cf also *nīn-* (human) and *būn-* (non-human) as "dummy" cbs with following adjectives [16.10.3.1](#).

There has been a change over the past decades in the **alignment of gender and number**. The current system distinguishes animate/inanimate in the singular with no gender distinction in the plural. In older sources like the 1976 NT, inanimate pronoun forms used as heads, like demonstrative *nē<sup>+/</sup>*, are used indifferently for sg or pl, occasionally with *nàm<sup>a</sup>* plurals to avoid ambiguity. However, even the 1976 NT always uses the animate plurals *bàmmā<sup>+/</sup>* *bàn<sup>ε</sup> sīāba<sup>+</sup>* of the *dependent* pronouns for inanimate, and my informants use the animate plural forms of all pronouns freely for both genders both as dependents and heads:

*Bà à nē kūgá.*

"They are stones."

3PL COP FOC stone:PL.

In my informants' unselfconscious utterances there seem to be signs of gender distinctions breaking down altogether:

*Nīf-káŋā, ́n sáñ'àm nē.*

Eye-DEM.DEI.SG, 3AN.CNTR spoil FOC.

"This eye, it's spoilt." KT

*M̄ p̄ ŋyē-ó-o* +∅. "I can't find it [a stethoscope]" (Overheard)  
**1SG NEG.IND see-3AN.OB NEG.**

*sālima lá'àd né ò bōtus* "gold stuff and (gold) cups" WK  
 gold item:PL with **3AN** cup:PL

Speakers correct the gender to inanimate if their attention is drawn to it.

The dummy subject pronoun "it" is always *lì*, never *ò*.

The inanimate sg pronoun subject *lì* is not changed to animate *ò* to agree with an animate complement of *àḡñ<sup>a</sup>* "be something":

*Li anε Zugsoɓ la.* "It is the Lord." (Jn 21:7)  
*Lì à nē Zūg-sóɓ lā.*  
**3INAN COP FOC head-one:SG ART.**

### 16.2.3 Person

Person is a category confined to personal pronouns. The verbal predicator shows no agreement with any argument (on plural commands see [25.2.3](#).) Person is straightforward, with no inclusive/exclusive distinctions and no honorific uses. 2sg is used in proverbs for a generic "one":

*Bung ya'a bood ye o lubuf, fu po nyeti o tubaa.*  
*Bòḡ yá' bòɔd yé ò lūbú f,*  
 Donkey:SG if want that **3AN** throw.off **2SG.OB**,  
*fù p̄ ŋyētí ò túbāa* +∅.  
**2SG NEG.IND see:IPFV 3AN ear:PL NEG.**

"If a donkey wants to throw you off, you don't see his ears." KSS p44  
 (i.e. "If there's a will, there's a way.")

The 3rd Person plural is used as a non-specific "they" for turning passive constructions actively, much as in English:

*Bà yòɔdī f súḡàa* +∅?  
**3PL pay:IPFV 2SG.OB good:ADV PQ?**

"Are you well paid?" "Do they [never mentioned] pay you well?" SB

This construction has become grammaticalised so far that in VP chaining, the object can be construed as the grammatical subject [23.1](#), e.g.

*Diib wusa nari ba di.* "All foods may be eaten." (Rom 14:20)  
*Dīb wōsa nārì\_∅ bà dí.*  
 Food all must **CAT 3PL** eat.

There are formal means of distinguishing different third persons by the use of pronoun ellipsis [24.1.5.2](#) and logophoric use of the free pronouns [26.3.2](#).

## 16.3 Pronouns

### 16.3.1 Personal

		<u>Proclitic</u>	<u>Enclitic</u>	<u>Free</u>	<u>Subject+ñ</u>
Sg	1st	<i>m̄</i>	<i>m<sup>a</sup></i>	<i>mān</i> SF <i>mánē</i> LF	<i>mán</i>
	2nd	<i>fù</i>	<i>f<sup>p</sup></i>	<i>fūn</i> SF <i>fúnē</i> LF	<i>fún</i>
	3rd an	<i>ò<sup>8</sup></i> [ɔ]	<i>o</i> [ɔ]	<i>ōn<sup>ε</sup></i>	<i>ón</i>
	3rd inan	<i>lì</i> or <i>dì</i>	<i>li<sup>+</sup></i>	<i>līn<sup>ε</sup></i> or <i>dīn<sup>ε</sup></i>	<i>lín</i> or <i>dín</i>
Pl	1st	<i>tì</i>	<i>ti<sup>+</sup></i>	<i>tīnám<sup>a</sup></i> <sup>9</sup>	<i>tīnámì_∅</i>
	2nd	<i>yà</i>	<i>ya<sup>+</sup></i>	<i>yānám<sup>a</sup></i>	<i>yānámì_∅</i>
	3rd	<i>bà</i>	<i>ba<sup>+</sup></i>	<i>bān<sup>ε</sup></i>	<i>bán</i>

"an" = animate, "inan" = inanimate: on gender see [16.2.2](#).

The alternate form *mām* also occurs for 1st sg in any rôle. The clitics are liaison words [8.2](#). They are always non-contrastive. The proclitics are subjects and NP/AdvP predeterminers, and the enclitics are objects. The "+ñ" forms are used as subjects in ñ-clauses [28](#). The 2pl subject has an enclitic form *y<sup>a</sup>* used *after* imperatives [25.2.3](#) with the allomorph *-ní-* before liaison [8.2.1.2](#).

For the realisation of 3sg animate <sup>o</sup> see [8.2.1.1](#). My informants only have *l-* forms for 3sg inanimate; for bound objects, no *d-* forms are extant.

Free forms may be used for cbs before relative pronouns [28.2.3](#):

*Fun kanε buoli fū mēŋ ...* "You who call yourself ... (Rom 2:17)  
*Fōn-kánì bùòlì\_ fù mēŋ ...*  
**2SG-REL.SG** call **2SG** self ...

**Number** is sg/pl; Kusaal has no honorific usages of plural for singular like Mooré. For the interaction of number and gender see [16.2.2](#).

8) Toende Kusaal has *ō*. The original form was probably *\*ñm̄v*, with later *\*ñm̄* → *\*ñ* before the rounded vowel. Cf also the Dagbani free pronoun *ɲuna* = Kusaal *ōn<sup>ε</sup>*.

9) Toende has 1pl *tun* 2pl *nam* for the free pronouns; the *nam* component of the Agolle forms is presumably the element seen in the pluraliser *nám<sup>a</sup>* [9.4](#).

### 16.3.2 Demonstrative

Some forms of the demonstrative pronouns are limited to usage either as NP heads or as postdeterminer pronouns, while other forms may appear in both uses.

Head or postdeterminer pronoun:

	<u>Animate sg</u>	<u>Inanimate sg</u>		<u>Plural</u>
Long	<i>òṅā<sup>+/</sup></i>	<i>lìnā<sup>+/</sup></i>	far	<i>bàmmā<sup>+/</sup></i>
Short	<i>òn<sup>ε</sup></i>	<i>lìn<sup>ε</sup></i>	far	<i>bàn<sup>ε</sup></i>

Head only:

Long		<i>nē'ṅá<sup>+</sup></i>	near	
Short		<i>nē'<sup>+/</sup></i>	near	<i>nē'-nám<sup>a</sup></i> NT

Postdeterminer pronoun only:

Long	<i>kàṅā<sup>+/</sup></i>	<i>kàṅā<sup>+/</sup></i>
Short	<i>kàn<sup>ε</sup></i>	<i>kàn<sup>ε</sup></i>

Note the tone difference in the short series from the free 3rd person pronouns. The postdeterminer-only series is based on an obsolete *g<sup>a</sup>|s<sup>ε</sup>* class pronoun *kà*, parallel to *lì*, originally *r<sup>ε</sup>|a<sup>+</sup>* class. My informants use these forms for animate reference as well as inanimate, but NT prefers *òṅā<sup>+/</sup>* *òn<sup>ε</sup>*.

Postdeterminer pronouns follow a noun cb. Some speakers allow sg and pl noun forms, but these probably have the tones of combining forms [16.8](#). After quantifiers (other than *àdàkóń'*), which lack cbs, *kàn<sup>ε</sup>* *kàṅā<sup>+/</sup>* do not occur, but *kàn<sup>ε</sup>* may follow a free pronoun doing duty for a cb [16.3.1](#).

Examples after nouns:

<i>dụ'átà lā lór-kàṅā</i>	"this car of the doctor's"
<i>bù-kàṅā lā</i>	"that goat"

After a quantifier:

<i>bèdvgū línā</i>	"this multitude"
--------------------	------------------

After a free pronoun form used as a cb:

<i>fūn-kánì bùèl ...</i>	"you who call ..."
--------------------------	--------------------

Postdeterminer pronouns follow any adjectives:

*n̄s-píàl-kàṅā*

"this white hen"

The "short" series are used for referents not in view, as interrogatives in the sense "which?" and (much the most commonly) as the basis of **relative pronouns** [28.2.3](#). The demonstratives do not distinguish near and far except with sg inanimate heads; "that" can be specified by following the demonstrative with *lā*<sup>+/</sup> and "this" by a following *ñwà*<sup>+</sup> (cf French *ça ci*.) This use of *lā*<sup>+/</sup> as deictic rather than article is enabled by the fact that demonstratives automatically make the NP definite [16.5](#).

*dàṅ-kàṅā sáàm*

"this/that man's father"

*dàṅ-kàn sáàm*

"that (not visible) man's father"

*dàṅ-kàṅā lā sáàm*

"that man's father"

*dàṅ-kàṅā ñwá sáàm*

"this man's father"

*tèṅ-kàn lā ná'àb*

"the king of that country" (from a story)

*sān-kán lā*

"at that time"

### 16.3.3 Indefinite

	<u>Animate sg</u>	<u>Inanimate sg</u>	<u>Plural</u>
Head or postdeterminer	<i>s̄</i> <sup>+</sup>	<i>s̄</i> <sup>ə</sup> <sup>a</sup>	<i>s̄</i> <sup>əba</sup> <sup>+</sup>
Postdeterminer only	<i>s̄</i> <sup>a</sup> <sup>+</sup>	<i>s̄</i> <sup>a</sup> <sup>+</sup>	

Note that the vowel is *not* glottalised in the plural. For NT WK, but not KT, *s̄*<sup>a</sup><sup>+</sup> is much commoner than *s̄*<sup>ə</sup><sup>a</sup> used as a postdeterminer. WK feels that for people *s̄*<sup>a</sup><sup>+</sup> is pejorative; NT occasionally has *s̄*<sup>+</sup> for inanimate: *tèṅ-s̄*<sup>+</sup> "a certain land." For indefinite pronouns in relative clauses see [28.2.2](#).

The sense is "some, someone, something", "a certain", indefinite but *specific*:

*yà bì-s̄*<sup>'</sup>

"a certain child of yours"

**2PL** child-**INDF.AN**

The meaning is often contrastive, "another, a different" (compare Hausa *wani*, which has very similar usage in general to this pronoun, Jaggar p314, Caron pp102ff):

*ka man ti ye m sig la, ka s̄' pun dèṅi sig sa.**kà mán tì yé m̄ s̄'íg lā,*and **1SG:NZ** afterward say **1SG** descend **ART**,*kà s̄' pún dèṅi\_ø s̄'íg sá.*and **INDF.AN** already before **CAT** descend thither.

"when I'm then about to go down, someone else goes down first." (Jn 5:7)



*Mεερι one an Magdalen ne Μεερι sō'*

*Meeri ónì àñ Magdalen nē Meeri sō'*

Mary **REL.AN COP** Magdalen with Mary **INDF.AN**

"Mary who was Magdalen and another Mary" (Mt 28:1)

*Winnig mōr o meḡ venlim, ka nwadig me mōr venlim si'a.*

*Winnig mōr ò mēḡ véñlìim kà ñwādig mé mōr véñlìim-sī'a.*

Sun:**SG** have **3AN** self beauty and moon:**SG** also have beauty-**INDF.INAN**.

"The sun has its own beauty and the moon, too, has another beauty."

(1 Cor 15:41)

*M̄ ná tī\_ f tí-sī'a.*

**1SG IRR** give **2SG.OB** medicine-**INDF.INAN**.

"I'll give you a different medicine." WK

The indefinite pronouns can be used to introduce new information:

*Dàḡ-sō' dāa bé ...*

"There was a certain man ..."

Man-**INDF.AN TNS EXIST** ...

but this is likely to mean "There was another man ..."; it is commoner just to use an indefinite NP [16.5 30.4](#):

*Dāḡ dāa bé ...*

"Once there was a man ..."

Man:**SG TNS EXIST** ...

*Sō'/sī'əl mé-kàma* means "anyone, anything, everyone, everything":

*O niḡid si'el mekama su'vḡa.*

*Ò niḡid sī'əl mé-kàma súḡā.*

**3AN** do:**IPFV INDF.INAN** also-whatever good:**ADV**.

"He does everything well." (Mk 7:37)

In negative clauses the indefinites mean "(not) ... anything", "(not) ... anybody":

*Ka so' kudin ku len nyee li ya'asa.*

*Kà sō' kūdum kú lēm ñyées\_ lī yá'asā +∅.*

And **INDF.AN** ever **NEG.IRR** again see **3INAN.OB** again **NEG**.

"Nobody will ever see it again." (Rev 18:21, 1996)

*S̄*' *kā'e* +∅. "There's nobody there."  
**INDF.AN NEG.BE NEG.**

*M̄* *p̄* *yél s̄*əla +∅. "I didn't say anything."  
**1SG NEG.IND say INDF.INAN NEG.**

### 16.3.4 Interrogative

#### Animate

*à*́'ò̄n̄<sup>ε</sup> "who?"

#### Inanimate

*b̄*<sup>+</sup> "what?"

Plurals with *nàm*<sup>a</sup> may be used if a specifically plural answer is being sought. The initial *à-* of *à*́'ò̄n̄<sup>ε</sup> is fixed-L and behaves like the manner-adverb prefix with regard to liaison [8.2.2](#):

... *keŋ tisi anò'ɔnɛ?* "to go to whom?" (1 Samuel 6:20)  
 ... *kĕŋ\_∅ tísì\_ à'ò̄n̄<sup>ε</sup> +∅?*  
 ... go CAT give who CQ?

### 16.3.5 Reciprocal

*Tāaba*<sup>+</sup> "one another" appears as *tāab* clause-medially for some speakers. It occurs also as an adjective meaning "fellow-": *ò tùm-tùm-tāaba* "his fellow-workers"; the stem also appears in the bound noun *-tāa*<sup>=</sup> used after imperfective gerunds [13.1.1.4](#), and with noun prefixes in *nìn-tāa*<sup>=</sup> "co-wife" and *dātāa*<sup>=</sup> "enemy."

Examples of the pronoun use:

*Sòŋimī\_∅ tāaba.* "Help one another."  
 Help:IMP 2PL.SUB each.other.

*Tì yúùg nē tāaba.* "It's been a long time." KT  
 1PL delay with each.other.

*Bà d̄l nē tāaba.* "They went together." (*d̄l*<sup>la/</sup> "accompany")  
 3PL follow with each.other.

## 16.4 Quantifiers

### 16.4.1 Overview

Formally, quantifiers resemble noun sg or pl forms, frequently with apocope-blocking [6.4](#); most number words [16.4.2](#) are also preceded by number prefixes [14.3](#).

Quantifiers can be classified as **count** or **mass** [16.2.1](#), but the distinction is only of significance when the quantified noun is mass type, in which case a count quantifier is ungrammatical; with count nouns there is no restriction and either type of quantifier is acceptable:

	<i>nīdɪb bédvǔgū</i>	"a lot of people"
	<i>nīdɪb bábɪgā</i>	"many people"
	<i>kù'əm bédvǔgū</i>	"a lot of water"
not	* <i>kù'əm bábɪgā</i>	*"many water"

Mass quantifiers are

<i>bédvǔgū</i> <sup>+/</sup>	"a lot"	<i>pāmm</i> SF	"a lot" (LF <i>pāmné</i> <a href="#">6.4</a> )
<i>fīñ</i> <sup>=</sup>	"a little (liquid)"	<i>bī'əlá</i> <sup>+</sup>	"a little"
<i>wūv</i> <sup>=</sup>	"all"	<i>wōsa</i> <sup>+</sup>	"all"

Count quantifiers include the number words, and also

<i>bábɪgā</i> <sup>+/</sup>	"many"	<i>kàlɪgā</i> <sup>+/</sup>	"few"
<i>fāañ</i> <sup>=</sup>	"every"	<i>zāñ'a</i> <sup>=</sup>	"every"
<i>kàm</i> <sup>a</sup>	"every"		

*Kàm*<sup>a</sup> "every" occurs by itself as a quantifier and also before others:

*sāŋá kám = sāŋá kám zāñ'a* "all the time"

Quantifiers appear typically as postdeterminers in NPs [16.11.2.2](#), but like pronouns they may also be heads of NPs, naturally manifesting the category of number:

<i>Pāmm ké nā.</i>	"Many came."
<i>Bédvǔgū ké nā.</i>	"Many came."
<i>Bédvǔgū lā ké nā.</i>	"The crowd came"
<i>Àyí ké nā.</i>	"Two came."
<i>Àyí lā ké nā.</i>	"The two came."

Quantifier heads pluralise with *nàm*<sup>a</sup>:

*màljāk-nám túsà pīiga nám* "tens of thousands of angels"

*Àyí námá\_ àyí á nē nāasí.*

**NUM:two PL NUM:two COP FOC four.**

"Two two's are four."

Quantifier heads may be followed by postdeterminer pronouns; as quantifiers have no combining forms, there is no compounding:

*Ka ti ye ti nye diib yaani moogin nwa diis nidib bedego bama nwa?*

*Kà tì yé tì ñyē dīib yáa ní mōɔɔv-n ñwá*

And **3PL** say **3PL** find food where **LOC** grass:**SG-LOC** this

*∅ dīis nīdīb bédvǔ bāmā ñwá +∅?*

**CAT** feed person:**PL** many **DEM.DEI.PL** this **CQ?**

"Where are we going to find food in this wilderness to feed this crowd of people?" (Mt 15:33, 1996: KB *nimbama nwa wusa* "all these people")

*nīdīb bédvǔ bānì kē nā lā*

person:**PL** much **REL.PL** come hither **ART**

"the crowd of people who have come"

All cases where quantifiers are followed by postdeterminer pronouns are probably quantifier-headed phrases, not NPs with quantifiers as dependents.

As with pronoun heads of NPs, there is a contrast between a phrase with a quantifier head and a NP with a quantifier as a dependent [16.11.2.2](#), and the latter construction is **partitive** [16.10.3](#).

## 16.4.2 Number words

The basic number words are quantifiers, but there are associated forms used as adverbs; for "one", there are also forms meaning "first" and "only."

The quantified noun is normally plural, except with *yīnní*<sup>+</sup>, but may be singular with units of measure:

*yōlvǔgá àtáñ'*

"¢600 [cedis]"

(*yōlvǔg*<sup>3/</sup> "sack" for £100/¢200; Hausa *jàkaa*.)



	<i>kūg-yínnì</i> <sup>+</sup>	"one stone" (L spreading <a href="#">8.4</a> )
cf	<i>kūgvr yīnní</i> <sup>+</sup>	"one stone" (no L spreading)

In Dagbani both "one" and "ten" can be used after a combining form, but Kusaal has only a few isolated forms like *dà-pīga* "ten days".

After personal pronouns the number prefix is *bà-* instead of *à-* [14.3](#):

<i>tì bàtáñ'</i>	"we three"
<i>yà bàyɔ̀pɔ̀ɛ</i>	"you seven"
<i>bà bàyí</i>	"they two"

### 16.4.2.2 Counting forms

1 to 9 have different forms used in counting, lacking apocope-blocking and using the number prefix *h-* instead of *à-* [14.3](#).

1	<i>yēóŋ</i> or <i>àdàkóñ'</i>	6	<i>h̄yúèb</i>
2	<i>h̄yí</i>	7	<i>h̄pɔ̀ɛ</i> [tone sic]
3	<i>h̄táñ'</i>	8	<i>h̄n̄í</i>
4	<i>h̄nāas</i>	9	<i>h̄wāɛ</i>
5	<i>h̄nū</i>		continuing <i>pīga</i> , <i>pī nē yí</i> as with quantifiers

*Àdàkóñ'* can also be used as a quantifier:

*búvg àdàkóñ'* "one goat"

*Lì ká' àdàkóñ'ɔ̀* <sup>+∅</sup>. "It's not one."

**3INAN NEG.BE NUM:one NEG.**

The reduplicated adverb form *kōñ'kō* is used as a postposition [17.6](#), as in

*h̄n̄ kōñ'kō* "by myself"

Referring to the numbers in the abstract, as in performing arithmetic, the quantifier forms are used, not the counting forms:

*Àyí námá\_ àyí á nē nāasí.*

**NUM:two PL NUM:two COP FOC four.**

"Two twos are four."



Another is to use numbers as pre-dependents before *dāan*<sup>a</sup> "owner of ..."; such phrases are then themselves used either as NP heads or as postdeterminers:

<i>àyí dāan lā</i>	"the second one"
<i>būvgá àtáñ' dāan lā</i>	"the third goat"

*Yīigá dāan* may be used for "first." In "*Kusaal Solima ne Siilima*" p35 ordinal forms used in counting "first, second, third ..." appear without apocope-blocking: *atan'-daan ... ka anaas-daan ... ka nu-daan ... ka yuob-daan ... ka poi-daan ... ka nii-daan ... ka wai-daan ... ka piig-daan*, but my informants use the ordinary quantifier forms in this construction.

#### 16.4.2.4 Adverbs

Multiplicatives (answering *àbùlǎ?* "how many-fold?") are expressed

<i>yīmmú<sup>+</sup></i>	"straight away, at once"
<i>àbùyí<sup>+</sup></i>	"twice"
<i>àbùtáñ'<sup>+</sup></i>	"three times"
<i>àbùnāasí<sup>+</sup></i>	"four times"

and so on, with the same stems after the prefixes as for the quantifiers, up to

<i>bùpīiga<sup>+</sup></i>	"ten times"
----------------------------	-------------

The *à-* of these forms is not the number prefix but the manner-adverb formant, and a LF-final vowel mora before it is *-i* not *-a*; its attachment only to 2-9 is presumably therefore analogical.

Answers to *nōwrá àlǎ* "how many times?" have forms of the pattern

<i>nōwr yīnní<sup>+</sup></i>	"once"
<i>nōwrá àtáñ'<sup>+</sup></i>	"three times"
or <i>nōwrím b̀táñ'<sup>+</sup></i>	"three times" NT

This *nōwr* is not "mouth" (= Mooré *nóorè*) but corresponds to Mooré *náooré* "times", homophonous with Mooré *náooré* "leg"; cf Toende Kusaal *nō'ōt* = Agolle *nóbir* "leg". Original open and closed *oo* fall together when nasalised [4.1.1](#). For the semantics cf Hausa *sàu ukù* "three times" *sau* "foot(print)." Niggli's dictionary gives Toende *nó'ot* (tone *sic*) in the sense "*fois*" and even has *nōba ayi* beside *nó'ot ayi* "*deux fois*." Agolle *nōwr* "times" does not have a glottalised vowel, however.



Distributives ("two by two" etc) are reduplicated forms without apocope-blocking; there is no L spreading on the second part except with 10, 100, 1000:

1	<i>yīn yīn</i>	10	<i>pī pīg</i>	100	<i>kòbìg kóbìg</i>
2	<i>àyí yí</i>	20	<i>pīsí pīsí</i>	200	<i>kòbísí kóbísí</i> or <i>kòbìs yí yí</i>
3	<i>àtán' tán'</i>	30	<i>pīs tán' tán'</i>	300	<i>kòbìs tán' tán'</i>
4	<i>ànāas nāas</i>	40	<i>pīs nāas nāas</i>		<i>etc</i>
5	<i>ànū nū</i>	50	<i>pīs nū nū</i>	1000	<i>tūsır túsır</i>
6	<i>àyúèb yúèb</i>	60	<i>pīs yúèb yúèb</i>		
7	<i>àyópòḗ pòḗ</i>	70	<i>pīs yópòḗ pòḗ</i>		
8	<i>àníí níí</i>	80	<i>pīs níí níí</i>		
9	<i>àwāḗ wāḗ</i>	90	<i>pīs wāḗ wāḗ</i>		

Intermediate numbers are made by replacing the last part of the usual quantifier phrase with a distributive:

*pīs nū nē nāas nāas* "by fifty-fours"

The distributives can have a preceding NP as a determiner:

*dābá àyópòḗ pòḗ* "weekly" ("by sevens of days")

### 16.4.3 Proquantifiers

Quantifiers have corresponding proforms; the *à-* is the *number* prefix, and induces preceding LF-final *-a* not *-i* [8.2.2](#); contrast proadverbs [17.7](#).

#### Demonstrative

*àlá<sup>+</sup>*

"so much/many"

#### Indefinite

*sīəm<sup>m</sup>*

"some amount"

#### Interrogative

*àlá<sup>+</sup>*

"how much/many?"

### 16.5 The article *lā<sup>+</sup>*/

The two words *lā<sup>+</sup>* and *ñwà<sup>+</sup>* presumably originated as corresponding deictics "that" and "this." Although *ñwà<sup>+</sup>* retains this sense, *lā<sup>+</sup>* in the great majority of its occurrences is a definite article. It retains a deictic sense, in opposition to *ñwà<sup>+</sup>*, in the non-verbal predicators *n lā*, *n ñwà* [22](#) and after demonstratives [16.3.2](#).

Unlike *lā<sup>+</sup>*, *ñwà<sup>+</sup>* can stand alone as a NP:

*Ñwà á nē bīg.*

This **COP FOC** child:SG.

"This is a child." WK; tones *sic*.

Both *lā*<sup>+/</sup> and *ñwà*<sup>+</sup> always stand finally in the NP (though this entire phrase may be a predeterminer within another NP) except for the marginal case where a VP-final particle occurs in an *ñ*-clause, when it may follow the article attached to the clause [20.7](#).

As the definite article, *lā*<sup>+/</sup> corresponds in many cases to English "the", marking referents as specific and already established. However, unlike "the", *lā*<sup>+/</sup> is not typically used for "familiar background", unless there was an explicit prior mention of the referent:

*Winnig lí yā.* "The sun has set."  
Sun:SG fall PFV.

It is not used with pronouns, or with proper names of people or places, which are inherently definite:

*mān* "me"  
*À-Wīn* "Awini"  
*Bòk* "Bawku"

Nor is it used with abstract mass nouns, which do not distinguish definite from indefinite (compare the neutralisation of the referring/non-referring distinction implied in their construction when they appear as premodifiers [16.10.2.2](#)):

*Nɔŋilim pu naada.* "Love does not come to an end." (1 Cor 13:8)  
*Nòŋilím pū nāadá* +∅.  
Love NEG.IND finish:IPFV NEG.

*Lā*<sup>+/</sup> is not used in vocatives:

*Bīiga* +∅! "Child!"  
Child:SG voc!

This contrasts with *ñwà*<sup>+</sup>, which is common in vocatives [25.2.4](#):

*Bīs ñwá!* "Children!" [bi:sa]

There is no indefinite article: a NP with no *lā*<sup>+/</sup> is indefinite if it could have taken *lā*<sup>+/</sup> in the sense of the article. When a NP of a type which can take the article appears without it, the sense may be non-referential. This is the case, for example, with negative-bound nouns like *bīig* "child" in

*M̄ bīg kā'e +∅.* "I've no child" WK  
**1SG child:SG NEG.BE NEG.**

and with the complement of *àḡñ<sup>a</sup>* "be something" when used ascriptively [21.2](#):

*Ò à nē bīg.* "She is a child."  
**3AN COP FOC child:SG.**

An indefinite NP is only likely to have a *specific* sense in the context of an explicit introductory presentational statement, such as the introduction of a new character in a story [30.4](#):

*Dau da be mori o biribing*  
*Dāy dá bē\_ ∅ mōrí\_ ò bī-díbiŋ*  
**Man:SG TNS EXIST CAT have 3AN child-boy:SG**  
 "Once there was a man who had a son ..." KSS p35

*Anina ka o nyē dau ka o yu'ur buon Aneas.*  
*Àníná kà ò ñyē dāy kà ò yū'ur búèn Aneas.*  
**ADV:there and 3AN see man:SG and 3AN name:SG call:IPFV Aeneas.**  
 "There he found a man whose name was Aeneas." (Acts 9:33)

Outside such contexts, a referential indefinite NP is usually *generic*; unlike English "the", *lā<sup>+/</sup>* is not used with generic reference:

*Tumtum pu gat o zugdaana.*  
*Tùm-tùm pū gát ò zūg-dáanā +∅.*  
**Work-worker:SG NEG.IND pass:IPFV 3AN head-owner:SG NEG.**  
 "The servant does not surpass his master." (Jn 15:20)

*Tiig walaa bigisid lin an tisi'a.*  
*Tiig wélàa\_ ∅ bigisid lín àñ tí-sī'a.*  
**Tree:SG fruit:PL CAT show:IPFV 3INAN:NZ COP tree-INDF.INAN.**  
 "It's the fruit of the tree that shows what tree it is." (Mt 12:33)

*Kusaas ye ...* "The Kusaasi say ..." KSS p16  
 drawing the moral of a story.

Generic reference core arguments are incompatible with a VPred with the particle *nē<sup>+/</sup>* in its temporal sense [30.1.2.1.2](#).

A possessive predetermining NP ending in *lā*<sup>+/</sup> makes the following head definite, and the head does not itself take the article:

*dụ'átà lā bîg* "the doctor's child"  
 not \**dụ'átà lā bîg lā*

Pronouns and personal names as possessive predeterminers do *not* have this effect; only predeterminers *with the article*, along with demonstrative pronouns, automatically make their NPs definite:

*Wínà'am málîāk* "an angel of God"  
*Wínà'am málîāk lā* "the angel of God"

*̀̀n bîg* "my child" (at first mention)  
*̀̀n bîg lā* "my child" (previously mentioned)

In *Pu'a sɔ' da be mɔr o bipuŋ ka kikirig dɔl o. Ka o wum Yesu yela, ka keŋ igin o tuon. Ka sɔs Yesu ye o kadim kikirig la yis o biig la ni.*  
*Pu'̀̀à-sɔ' dá bɛ̀ ø mɔr ̀̀ ò bī-púŋ kà kíkírɪg dɔ́ll-ó̀ ø.*  
 Woman-INDF.AN TNS EXIST CAT have 3AN child-girl:SG and fairy:SG follow 3AN.OB.  
*Kà ̀̀ wúm Yesu yé̀là, kà kēŋ̀ ø igin ̀̀ ò t̀̀en.*  
 And 3AN hear Jesus about, and go CAT kneel.down 3AN in.front.  
*Kà sɔs Yesu yé̀ ò kàdım kíkírɪg lā̀ ø yís ̀̀ ò bīg lā ní.*  
 And beg Jesus that 3AN drive.out:IMP fairy:SG ART CAT expel 3AN child:SG ART LOC.  
 "There was a woman whose daughter was oppressed by a devil. She heard about Jesus and came and knelt down before him. She asked Jesus to cast the devil out of her child." (Mk 7:25-26)

the article does not occur in *̀̀ ò bī-púŋ* "her daughter" on first introduction, but does occur in *̀̀ ò bīg lā* "her child" after the reference is established. Note the idiom at first introduction of a new possessed referent:

*Pu'a sɔ' da be mɔr o bipuŋ*  
*Pu'̀̀à-sɔ' dá bɛ̀ ø mɔr ̀̀ ò bī-púŋ*  
 Woman-INDF.AN TNS EXIST CAT have 3AN child-girl:SG  
 "There was a woman who had a [literally "her"] daughter..." (Mk 7:25)

*Dau da be mori o biribing*  
*Dāy dá bɛ̀ ø m̄rí̀ ò bī-dí̀bìŋ*  
 Man:SG TNS EXIST CAT have 3AN child-boy:SG  
 "Once there was a man who had a son ..." KSS p35

and *M̄ bīig k̄ā'e +∅.* "I've no child" WK  
**1SG child:SG NEG.BE NEG.**

*M̄ bīig lā k̄ā'e +∅.* "My child's not there" WK  
**1SG child:SG ART NEG.BE NEG.**

further demonstrating that pronoun possessors do not automatically entail definiteness of the head. A postposition with a predeterminer with the article does not become referential, can appear as a NP premodifier [16.10.2.3](#), and may function for focus purposes as pragmatically non-recoverable [30.1.2.2](#).

Certain words consistently lack the article after a pronoun possessor even if they are specific old information. This may be a question of uniqueness within a particular context; examples are *bā'+/* and *sàam*<sup>ma</sup> "father."

The presence of the article itself, not definiteness, causes dropping of the empty particle *nē* which follows complements of comparisons [18.1](#).

For an unambiguously indefinite specific meaning like "some, another", indefinite pronouns are used [16.3.3](#).

*Nā'-sīəbà ʒñbìd nē mɔɔd.*  
 Cow **INDF.PL** chew:**IPFV** **FOC** grass:**PL**.  
 "Some cows are eating grass."

An indefinite pronoun is necessary to make the head indefinite after a predeterminer with the article:

*du'átà lā bí-sɔ'* "a child of the doctor's"  
 doctor:**SG** **ART** child **INDF.AN**

The number *yīnní*<sup>+</sup> "one" is sometimes used to introduce a new referent, but remains a number word, and is not bleached to an indefinite article:

*Farisee dim nid yinne da be*  
*Farisee díim nìd yīnní dà bè ...*  
 Pharisee individual.**PL** person:**SG** one **TNS** **EXIST** ...  
 "There was one man of the Pharisees ..." (Jn 3:1)

cf *Dapa atan' n da be.* "There were once three men." KSS p16  
*Dāpá\_ àtáñ' n dá bè.*  
 Man:**PL** **NUM**:three **CAT** **TNS** **EXIST**

## 16.6 Personifier clitics

Indigenous Kusaasi personal names are always preceded by the personifier clitics *À-* or *Ñ-/Ṁ-*; *À-* is the default, with *Ñ-/Ṁ-* appearing before adjective stems. *Ṁ-* is found before labial consonants. These are all liaison words. This *À-*, like the manner-adverb prefix *à-*, is preceded by word-final *-i*, not *-a* as with the number prefix.

Personal names do not take the article or modifiers, but may take pre- or postdeterminers. *À-*, but not *Ñ-/Ṁ-*, are deleted after a predeterminer.

Personal names can pluralise with *nàm<sup>a</sup>*; such plurals can mean e.g. "more than one person called Awini"; Niggli's Toende Kusaal dictionary also gives the *cum suis* meaning: *Awinnam*: "Awin and his people. *Awinne et consort (les Awinne).*"

<i>À-Wīn</i>	"Awini"
<i>tì Wīn</i>	"our Awini"
<i>Ṁ Wīn</i>	"my Awini"
<i>À-Wīn-kánjā</i>	"this Awini"
<i>À-Wīn nám</i>	"Awinis"
<i>Ñ-Dāvug</i>	"Ndago"
<i>tì Ñ-Dāvug</i>	"our Ndago"

In speech, *À-* is used before most foreign names also, though the NT (unlike the Mooré Bible) uses the names without the proclitic (and often in English spelling.)

<i>À-Mūusa</i>	"Moses"
<i>À-Yīisa</i>	"Jesus"
<i>À-Sīimóòn</i>	"Simon"

For examples of Kusaasi names see [32.2](#).

NT has some personifications of abstractions: *À-Sàñ'vŋ* "Destruction, Abaddon."

In stories where animals are characters, animal names take *À-*:

<i>À-Bāa</i>	"Mr Dog"
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A number of animal and bird names incorporate the clitic as part of the common noun, without any implication of personification; among such nouns are *à-dàalúŋ<sup>ɔ</sup>* "stork" *à-gáùŋg<sup>ɔ</sup>* "pied crow" *à-kōra-díàm<sup>ma</sup>* "praying mantis" and the loanword *à-mús<sup>ɛ</sup>* "cat." Thus

<i>à-dàalúŋ</i>	"a stork"
<i>m̄/mān dáalúŋ</i> <b>1SG/1SG.CNTR stork:SG</b>	"my stork"
<i>dāy lā dáalúŋ</i> <b>man:SG ART stork:SG</b>	"the man's stork"
<i>Lì à né à-dàalúŋ.</i> <b>3INAN COP FOC PERS-stork:SG.</b>	"It's a stork"
<i>M̄ ñyé à-dàalúŋ.</i> <b>1SG see PERS-stork:SG.</b>	"I've seen a stork."

The *à-* clitic is not simply elided after a predeterminer but is completely *displaced*, as shown by the M spreading affecting the stem. *À-* thus behaves syntactically like a predetermining personal pronoun; it is also *phonologically* similar to a clitic pronoun [8.2.2](#). This may reflect a historical origin in an indefinite third-person pronoun "someone", perhaps related to the Mooré 3sg pronoun *yě~a*.

A further similarity with personal pronouns appears when *verb phrases* are nominalised by the personifier clitic, which then takes the place of a subject pronoun in the sense "someone who ...":

<i>Atum sɔ'</i>	"Siloam" <a href="#">20.1</a> (Jn 9:7)
<i>À-tùm sɔ'</i> <b>PERS-send INDF.AN</b>	("Someone sent someone")

<i>Apv-kpen'-banu dim</i>	
<i>À-pō kéñ' bàyvu dímm</i> <b>PERS-NEG.IND enter circumcision individual:PL</b>	
"the Uncircumcised" (Eph 2:11)	

This is common in proverbs and similar set expressions:

<i>À-dāa yél kā' tímm +∅.</i> <b>PERS-TNS say NEG.HAVE medicine NEG.</b>	
"Did-say has no remedy." (No use crying over spilt milk.)	
<i>À-ñyē nē nīf sǒñ'ɔ̄ À-wòm tùba.</i> <b>PERS-see with eye:SG be.better.than PERS-hear ear:PL</b>	
"Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)	

À-Kīdigi\_ ∅ Bū'əs

**PERS-cross CAT ask**

"Crossed over and asked"

(name of the constellation Orion.)

Apozotyel

À-Pō-zót-yēl

**PERS-NEG.IND-run:IPFV-thing:SG**

"Doesn't-fear-trouble", character in KSS p35.

The expected final LF in this expression, induced by the negative clitic paired with *pō*, is seen only when the name is clause-final:

*Apozotyel da ane o saam biig ma'aa.*

À-Pō-zót-yēl

*dá à né ò sàam bìig mà'aa.*

**PERS-NEG.IND-run:IPFV-thing:SG TNS COP FOC 3AN father:SG child:SG only**

"Fears-nothing was his father's only child." KSS p35

À- can appear as the predeterminer of the subject of an entire clause, with the meaning "someone whose ...":

*Bà kèn né À-nà kúv\_ ò nūa yír, kà bà pō kén*

**3PL go:IPFV FOC PERS-IRR kill 1SG chicken:SG house:SG and 3PL NEG.IND go:IPFV**

*À-nōvs bé yírē +∅.*

**PERS-chicken:PL EXIST house:SG NEG.**

"They go to Will-kill-my-chicken's house, but not to Got-chickens' house."

("The rich are not always hospitable.")

[Cf *Nōvs bé*. "There are chickens, chickens exist."]

À-Tiim bódìg yā

**PERS-medicine get.lost PFV**

Personal name [32.2](#), literally "Someone's medicine has got lost."

Nominalisations with à- can pluralise with *nàm*<sup>a</sup>:

À-zī'\_ ∅ kpí nàm kpîd né kà téñbìd.

**PERS-NEG.KNOW CAT die PL die:IPFV FOC and tremble:IPFV.**

"Those who don't know death, are dying with a struggle." (Proverb)

(i.e "It's a storm in a teacup.")



## 16.7 Coordination

Coordination is characteristically a feature of NPs, but also occurs with AdvPs.

The particles for "or" are *bēē* or *kūv*. Here the two are synonymous; the only place where they consistently have different senses is in the formation of polar questions [25.2.2](#). Both, like English "or", are by default taken as exclusive "or" but admit the inclusive interpretation "or both." This can be spelt out explicitly:

*Bīg lā kūv dāy lā kūv bà wōsa*

child:**SG ART** or man:**SG ART** or **3PL** all

"The man, or the child, or both" WK

The particle for "and" for NPs and AdvPs is *nē*. This *nē* is fundamentally the same word as the preposition "with" [18.1](#); the conjunctions *bēē* and *kūv* can be used in a parallel way. *Nē* links nominal words and phrases, but no clauses other than (previously nominalised) *ḥ*-clauses.

Consistent with this analysis, it is not possible to omit coordinating particles in a series of three or more items, or to use *nē* to join two words with the same referent:

*À-Wīn nē À-Bōgūr nē À-Nà'ab  
dū'átà nē ná'àb*

"Awini, Abugri and Anaba"

"a doctor and a chief"

(necessarily two different people)

Coordination within NPs is restricted.

In compounds, the only possibility is a coordinated head before an adjective:

*Ka m nye saṅgbauṅ nē teṅgbaung paal.*

*Kà m̄ ñyē sáṅ-gbàuṅ- nē téṅ-gbàuṅ-páal*

And **1SG** see heaven-skin- with earth-skin-new:**SG**.

"And I saw a new heaven and a new earth." (Rev 21:1)

but \**[bēṅíd nē kī] kúèš*

not possible for "seller of *bēṅíd nē kī*"

(beanleaf-and-millet, a conceptual unity

like "fish and chips", "lox and bagels")

Coordinated heads may not share a determiner or an article:

*m ba'abiis nē m saamnāma*

*m̄ bā'-bīš nē m̄ sām-nāmā +∅*

**1SG** father-child:**PL** with **1SG** father-**PL** **VOC**

"my siblings and [my] fathers!" (Acts 7:2)

*py'ā lā nē dāy lā* "the woman and the man"  
 woman:SG ART with man:SG ART

*Yīgá*<sup>+</sup> "firstly" [16.10.3](#) is a modifier "former", rather than a determiner in

*yiiga sanḡbauḡ nē tenḡbauḡ nē atεuk*  
*yīgá sàḡ-gbàḡ nē tén-gbàḡ né àtìyuk*  
 firstly heaven-skin:SG with earth-skin:SG with sea:SG  
 "the former heaven and earth and sea" (Rev 21:1)

Coordinated heads may share a single modifier, as long as it is not a cb:

*Kūsáàl sólímà nē sílímà* "Kusaasi stories and proverbs"  
 Kusaal story:PL with proverb:PL

*Kūsáàs kùèb nē yīr* "Kusaasi agriculture and housing"  
 Kusaasi:PL hoeing with house:SG

*sālma bûtìs nē díísímà* "gold cups and spoons"  
 gold cup:PL with spoon:PL ("all of them gold", KT)

However, KT WK both agreed that

*sālma lá'àd nē bûtìs*

must mean "gold goods and [not gold] cups", WK offering the correction

*sālma lá'àd né ò bûtìs* "gold goods and (gold) cups" WK  
 gold item:PL with 3AN cup:PL

where *ò* refers to *sālma*. (See [16.2.2](#) on the unexpected gender of the pronoun.) The difference from *sālma bûtìs nē díísímà* (above) is probably that "cups" are a subtype of "goods", impairing the parallel between the coordinated units and making it less natural to supply the ellipsis than in *sālma bûtìs nē [sālma] díísímà* "gold cups and [gold] spoons" (I am grateful to Tony Naden for this suggestion.)

Coordinated dependents are permitted so long as there is no compounding:

*o nya'andɔlib pii nē yi* "his twelve disciples" (Mt 26:20)  
*ò ñyà'an-dòllib pīi nē yí*  
 3AN after-follower:PL ten with two

*du'átà nē ná'àb lā lóyà* "Doctor's and the chief's cars"  
 doctor:SG with chief:SG ART car:PL

*sāluma nē ānzúrfà lál'àd* "gold and silver goods"  
 gold with silver item:PL

The last two examples, like their English translations, are ambiguous; they can, but need not, be taken as representing ellipsis of the first of two repeated heads within a coordination of two parallel dependent + head NPs (cf [24.1.5.1](#)):

	<i>du'átà (láyà) nē ná'àb lā lóyà</i>	"[Doctor's cars] and [the chief's cars]"
	<i>sāluma (lál'àd) nē ānzúrfà lál'àd</i>	"[gold goods] and [silver goods]"
cf	<i>[du'átà nē ná'àb lā] lóyà</i>	"the cars of [Doctor-and-the-chief]"
	<i>[sāluma nē ānzúrfà] lál'àd</i>	"[gold-and-silver] goods"

Elliptical interpretations are sometimes impossible. As is not possible to coordinate cbs, and *nē* cannot join NPs with the same reference, this is the case with

*ānzúrfà nē sāluma lál'-māan* "silver- and goldsmith"  
 silver with gold item-maker:SG

cf *\*ānzúrfà lál'- nē sāluma lál'-māan* (impossible)  
*ānzúrfà lál'-māan nē sāluma lál'-māan* (necessarily two different people)

## 16.8 Apposition

For apposition in locative AdvPs see [17.3](#).

Titles and other NPs may precede personal names in apposition:

*Na'ab Agrippa* "King Agrippa." (Acts 25:13)

*Li pu nar ye fu di fu ba'abiig po'a Herodiase.*

*Lì pū nār yé fù dí fù bā'-bîg pu'á Herodiase +∅.*

**3INAN NEG.IND** must that **2SG** take **2SG** father-child:SG wife:SG Herodias **NEG.**

"It's not right for you to marry your brother's wife Herodias." (Mt 14:4, 1996)

*... lebis ye, eenn, o zua Asibigi n kabirid.*

*... ∅ lèbis yē, Ēēñ, ò zùà À-Sībıgı n kábıríd.*

...CAT reply that, Yes, **3AN** friend:SG **PERS-termite:SG** CAT ask.admission:IPFV.

"...replying that, Yes, it was his friend Termite asking for admission." KSS p12

The fact that the personifier clitic à- is not omitted in these cases shows that the relationship is not dependent-head [16.6](#).

Personal pronouns in apposition use free forms [30.5](#):

*Man Paul* [...] *pu'ʊsidi ya.* "I, Paul ... greet you." (2 Thess 3:17)

*Mān Paul* [...] *pú'ʊsìdī\_ yá.*

**1SG** Paul greet:IPFV **2PL.OB.**

Two compounded noun stems with the same referent seem necessarily to have human reference; this is regarded as adjectival use of the second noun [16.11.1.5](#). Appositional relative clauses probably must have human reference; again the second element has adjectival function [28.2.4](#). I have no other examples in NPs where the second component is not a personal name.

Apposition is to be distinguished from cases where a preceding head has no combining form, as with quantifiers, or coordinated structures [16.7](#), or where the cb has the segmental, but not tonal, form of the singular [9.2.2](#). A number of compounds found in the 1976 NT version are systematically replaced by forms written with the initial component as a singular in the 1996 revision:

<i>Nonaar Paal</i> for <i>Nonapaal</i>	<i>Nō-ná-pāal</i>	"New Testament"
<i>Siig Sun</i> for <i>Sisun</i>	<i>Sì-sùŋ</i>	"Holy Spirit"

The tonal evidence from similar cases in my informants' speech shows that this reflects segmental remodelling of combining forms, not expansion of the rôle of apposition at the expense of compounding:

<i>lànnɪg-kàŋā</i>	"this squirrel"	WK
<i>dàp-bàmmā</i>	"these men"	WK

The many examples of *Siig Sun* in the [1996 NT audio version](#) are likewise clearly read as *Sìɪg-sùŋ* (or *Síɪg-sùŋ* with M spreading) or *Sì-sùŋ*, not \**Sīɪg-súŋ*.

SB showed a much greater tendency to produce segmental sg forms before postdeterminer pronouns and even adjectives than my other informants.

## 16.9 Compounding

Like other Oti-Volta languages, Kusaal shows abundant productive formation of compound nouns. Kusaal compounds fall into two basic types, depending on whether the combining form is the head or a premodifier. Compounding is the regular construction for head nouns with following adjectives and postdeterminer pronouns [16.11.1](#) [16.11.2.1](#):

<i>bōvg<sup>a</sup></i>	"goat"
<i>bù-pìəlɪg<sup>a</sup></i>	"white goat"
<i>bù-kàŋā<sup>+/</sup></i>	"this goat"
<i>bù-pìəl-kàŋā<sup>+/</sup></i>	"this white goat"

It is also the normal construction for a generic concrete noun when preceding a head as a modifier [16.10.2.1](#) or as a generic argument to a deverbal noun [16.10.1](#):

<i>nà'ab lā wíəf zōvr</i>	"the chief's horse's tail"
but <i>nà'ab lā wíd-zōvr</i>	"the chief's horse-tail"

Regardless of which element precedes, the last stem shows the noun class suffixes which mark number for the head. Preceding stems appear as combining forms, typically bare stems which have undergone apocope, though analogical remodelling is common, and regular with some stem types [9.2.2](#). Compounding is so productive that the cb is a regular part of noun and adjective flexion [9.1](#).

For the tone sandhi rules which affect the component following the combining form see [8.3](#) [8.4](#). They are not sensitive to whether the cb is head or modifier.

Compounds may have compound components, most often as a result of the addition of an adjective or postdeterminer pronoun to an existing compound, where the binding of the new element is weaker than that within the existing compound:

<i>[bù-pìəl-]kàŋā</i>	"this [white goat]"
<i>[nīn-wók-]pìəlɪg</i>	"white [tall person]"
<i>[zà'-nō-]pìəlɪg</i>	"white gate" ("white [compound-mouth]")

A compound may appear as a generic argument to a following deverbal noun:

<i>[zà'-nō-]gúr</i>	"gate-keeper"
<i>[[zà'-nō-]gúr-]kàŋā</i>	"this [gate-keeper]"

Kusaal also possesses bahuvrihi adjectives [16.11.1.4](#) formed by zero-derivation of a noun-adjective compound to an adjective:

<i>nīf-ñyáuk</i>	"one eye"
<i>bù-[nīf-ñyáuk]</i>	"[one-eyed] goat"
<i>nōb-wók</i>	"long leg"
<i>kùg-[nōb-wók]</i>	"[long-legged] stool"

The bahuvrihi meaning is also possible when the compound is used as the complement of *àɛñ*<sup>a</sup> "be something":

*Kùg-kàṅā á nē nōb-wók.*  
 Chair-DEM.DEI.SG COP FOC leg-long:SG.  
 "This chair is long-legged." WK

Adjective combining forms can only be used before another adjective or before a postdeterminer pronoun. If a noun-adjective compound is used as a generic argument it must adopt a sg or pl form:

*fū-zéñdà kùəs* "seller of red (i.e. dyed) cloth"  
 not \**fū-zéñ'-kùəs*

Compounds may contain uncompounded elements within their structure, because regardless of whether compounded or not **modifiers bind tighter than generic arguments, which bind tighter than determiners**. Generic non-count NPs referring to substances appear as premodifiers within other NPs [16.10.2.2](#):

<i>sāluma bútiṅ</i>	"gold cup"
<i>ānzúrfà nē sāluma lá'àd</i>	"silver and gold goods"

Even if they consist of phrases rather than single words, they therefore bind more tightly to a following cb used as a generic argument than the cb does to a following deverbal noun:

	<i>[ānzúrfà lá'-]māan</i>	"silversmith" ("[silver goods]-maker")
	<i>[ānzúrfà nē sāluma lá'-]māan</i>	"silver- and goldsmith"
cf	<i>[fū-zéñdà] kùəs</i>	"[dyed cloth]-seller" with an adjective postmodifier (see above)

If the cb is itself a premodifier, the the construction is nested, with the cb binding to the following head and the preceding unbound premodifier applying to the whole resulting compound:

<i>sāluma</i> [zá'-nōɔr]	"golden gate" ("golden [compound-mouth])"
<i>zūgú-n</i> [níf-gbáɥŋ]	"upper eyelid" ("upper [eye-skin])"

Determiners, whether preceding or following the head, and whether compounded or uncompounded, have the loosest binding:

[ <i>sāluma</i> bútiŋ-]kàŋā	"this [gold cup]"
[[ <i>sāluma</i> lá'-]màan-]kàŋā	"this [[gold-item]-maker]"
ò [[ <i>sāluma</i> lá'-]māan]	"her [[gold-item]-maker]"

### 16.10 Dependents preceding the head

The head of a NP may be preceded by a dependent. Only one is permitted, but the resulting NP may itself recursively serve as the head of a NP with yet another pre-dependent. Cbs come last, and predeterminers precede premodifiers:

<i>Wínà'am</i> [pú'vsùg [fúùg dǒ̀g]]
"tabernacle" (God's [worship [cloth hut]])

The nature of the pre-dependent determines whether compounding occurs: generic arguments of any type before deverbal nouns must be cbs; generic *count* nouns as premodifiers must be cbs; all other pre-dependents appear uncompounded.

For the rules regarding L spreading after pre-dependents see [8.4](#).

Pronoun, pronoun-like, quantifier or deverbal heads lead to the pre-dependent + head construction having specialised meanings [16.10.3](#). With other head types:

A pre-dependent NP with definite and/or count reference is a possessor.

A pre-dependent AdvP or uncompounded indefinite mass NP is a premodifier.

One quantifier appears as a predeterminer.

### 16.10.1 Generic arguments to deverbal nouns

If the head is a deverbal noun, it may be preceded by a combining form representing a **generic argument**. The argument is a cb irrespective of whether the argument is a count or mass noun.

<i>dā-núùr<sup>ε</sup></i>	"beer-drinking"
<i>gēl-kúèš<sup>a</sup></i>	"egg-seller"

With **agent nouns** from transitive verbs the cb normally represents an object. Agent nouns from intransitives may have an AdvP or indirect object cb argument. These compounds can be freely coined, and their meanings are generally transparent, but there are many idiomatic set expressions. Examples:

<i>nīn-kúùd<sup>a</sup></i>	"murderer"
<i>bù-kūvd<sup>a/</sup></i>	"goat-killer"
<i>nō-kúùd<sup>a</sup></i>	"hen-killer"
<i>pɥ'à-kūvd<sup>a/</sup></i>	"woman-killer"
<i>nō-záñ<sup>lε</sup></i>	"holder of hens"
<i>wìd-kùèš<sup>a</sup></i>	"horse-seller"
<i>bù-kùèš<sup>a</sup></i>	"goat-seller"
<i>sàlɪm-kùèš<sup>a</sup></i>	"gold-seller"
<i>dā-núùd<sup>a</sup></i>	"beer-drinker"
<i>zīm-gbáñ'ád<sup>a</sup></i>	"fisherman" ("fish-catcher")
<i>nō-dí'èš<sup>a</sup></i>	"chief's spokesman" ("command-receiver") (Ghanaian English "linguist")
<i>tàn-mēɛd<sup>a</sup></i>	"builder" ( <i>tān<sup>nε</sup></i> "earth")
<i>làmpō-dí'èš<sup>a</sup></i>	"tax collector" (French <i>l'impôt</i> )
<i>gbàn-mī'id<sup>a/</sup></i>	"scribe" NT ("book-knower")
<i>pɥ'à-sāñ'am<sup>ma</sup></i>	"adulterer" ("woman-spoiler")
<i>zà'-nō-gúr<sup>a</sup></i>	"gate-keeper" ( <i>zà'-nōɔr<sup>ε/</sup></i> "gate")
<i>dà-kīəd<sup>a</sup></i>	"wood-cutter"
<i>kòñb-kīm<sup>na</sup></i>	"herdsman" ( <i>kòñb-</i> as cb of <i>būn-kóñbùg<sup>ɔ</sup></i> "tame animal")
<i>bùl-sīgıd<sup>a/</sup></i>	"well-diver" ( <i>bùlɪg<sup>a</sup></i> "well")
<i>tùen-gāt<sup>a</sup></i>	"leader" ( <i>Ò gàad túèn</i> "He's gone ahead")
<i>ñyà'an-dò<sup>la</sup></i>	"disciple" ( <i>ñyá'an<sup>a</sup></i> "behind") ( <i>dō<sup>la/</sup></i> "accompany")
<i>pɥ'à-lā'ad<sup>a</sup></i>	"laugher at women" WK ( <i>Ò là'ad pō'ab</i> "He laughs at women")



My informants freely create and cite agent nouns in isolation, but it is unusual in practice for agent nouns to appear thus; in my materials only *bāŋɪd*<sup>a</sup> "wise man", *sĭākɪd*<sup>a</sup> "believer", *sūŋɪd*<sup>a</sup> "helper", *fāaŋd*<sup>a/</sup> "robber" "Saviour" occur often. With monosyllabic agent nouns there is often a preceding cognate cb, sometimes an object, but often apparently just a reduplication of the agent noun stem:

<i>màal-māan</i> <sup>na</sup>	"sacrificer"
<i>zī-zīd</i> <sup>a</sup>	"carrier-on-head"
<i>tù'as-tù'as</i> <sup>a</sup>	"talker"
<i>zàb-zàb</i> <sup>a</sup>	"warrior" (tone <i>sic</i> )
<i>zòt-zòt</i> <sup>a</sup>	"racer, athlete"
<i>tùm-tùm</i> <sup>na</sup>	"worker"

Cbs occur before deverbal **instrument nouns** in object or adverb senses:

<i>sĭà-lǝɔdɪŋ</i> <sup>a</sup>	"belt" (waist-tying thing)
<i>nīn-gótɪŋ</i> <sup>a</sup>	"mirror" (eye-looking thing)
<i>nīn-gótis</i> <sup>ε</sup>	"spectacles"

If the head is a **gerund**, a cb pre-dependent may represent a subject or complement. For the *-r*<sup>ε</sup> (not *-b*<sup>ɔ</sup>) suffix of these 2-mora stem gerunds see [12.1.1.1](#).

If the underlying verb is transitive, a cb pre-dependent cannot be a subject. It is most often an object:

<i>pɥ'à-dīr</i> <sup>ε</sup>	"marriage" ( <i>Ò dì pɥ'ā</i> "He's married a wife")
<i>nīn-kúùr</i> <sup>ε</sup>	"murder"
<i>dā-núùr</i> <sup>ε</sup>	"beer-drinking"
<i>Sāmán-piər</i> <sup>ε</sup>	Traditional New Year ("Courtyard Cleaning")
<i>bùgúm-tǝɔŋr</i> <sup>ε</sup>	Fire Festival ("Fire Throwing")
<i>nǝ-lǝr</i> <sup>ε</sup>	"fasting" ("mouth-tying")
<i>nǝ-pǝr</i> <sup>ε</sup>	"oath" ( <i>pǝ</i> <sup>+</sup> "swear")
<i>nǝ-náàr</i> <sup>ε</sup>	"covenant" ( <i>nā</i> <sup>+</sup> "join")
<i>nīn-báàl-zǝɔr</i> <sup>ε</sup>	"pity" ( <i>Ò zòt-ō nīn-báalig</i> . "He has pity on him")

It may represent an AdvP:

<i>mǝ-pīl</i> <sup>le</sup>	"grass roof" ("covering with grass")
<i>kùm-vū'ugír</i> <sup>ε</sup>	"resurrection" ( <i>Ò vò'ug kūmin</i> . "He came alive from death.")

Although many of these are set forms, free creation of nonce-forms is possible:

*fū-yéèr<sup>ε</sup>* "shirt-wearing" WK

Cbs as subjects are thus confined to verbs which can be used intransitively:

*nōb-kóòr<sup>ε</sup>* "breaking a leg" (*kò<sup>+</sup>* is intransitive)

*nū'-módìr<sup>ε</sup>* "swelling of the hand"

*wìn-līr<sup>ε</sup>* "sunset"

(*Winnig lí yā*. "The sun has set/fallen.")

*sūñ-sáñ'òṅ<sup>ɔ</sup>* "sorrow"

(*M̄ sūñf sáñ'àm nē*. "My heart is spoilt"

= "I'm sad.")

*sūñ-péèñ<sup>nε</sup>* "anger" (*M̄ sūñf péìḡ nē*. "My heart is white.")

## 16.10.2 Premodifiers

Modifiers can never be specific. They vary in form depending on the nature of the dependent. AdvP premodifiers may contain *constituents* with specific reference, but as AdvPs they do not themselves refer.

### 16.10.2.1 Generic count nouns

A count noun as a premodifier must appear as a combining form.

Compounds with a count noun premodifier are freely created, but resemble the compounds seen in other languages more closely than the type with combining form heads preceding adjectives and postdeterminer pronouns. Set forms with individualised lexical meanings often occur when the combining form is dependent, but rarely when it is a head before an adjective and never with postdeterminer pronouns.

Note the contrast between a generic premodifier and a predeterminer in e.g.

*bīḡ fúùḡ* "a child's shirt" (belonging to some child)

*bì-fūug* "a children's shirt" (perhaps a small woman's)

*nà'ab lā wíðf zōvr* "the chief's horse's tail" (the chief has a horse)

*nà'ab lā wíd-zōvr* "the chief's horse-tail" (the chief may not own a complete horse at all)

Cb premodifiers have a very general quasi-adjectival sense. The resulting compounds are very liable to develop specialised lexical meanings:

<i>wāb-móɔgū-n</i> WK	"in elephant-bush, where there are elephants"
<i>zà'-nōɔr</i>	"gate" ("compound-mouth")
<i>mà-bīg</i>	"sibling" ("child by [same] mother")
<i>bā'-bîg</i>	"half-sibling" ("child by [same] father")
<i>tèŋ-bīg</i>	"native" ("child of a country")
<i>nàsàa-sìlv</i>	"aeroplane" (European hawk) ILK

WK has the exceptional forms

<i>náaf-bì'isím</i>	"cow's milk"
<i>būvg-bí'isím</i>	"goat's milk"

where the modifier has singular form and tone, but the tone sandhi is that of a compound (note the lack of M spreading after *náaf-*.)

A cb premodifier of a deadjectival abstract noun may have a sense much like a generic argument:

<i>sūñ-kpí'òŋ</i> <sup>ɔ</sup>	"boldness" ("heart-strength")
<i>sūñ-má'asím</i> <sup>m</sup>	"joy" ("heart-coolness") ( <i>M sūñf má'e yā</i> . "I'm joyful.")
<i>nìn-tōllím</i> <sup>m</sup>	"fever" ("body-heat")
<i>wīn-tóŋg</i> <sup>ɔ</sup>	"ill fate" ("fate-bitterness")

Cases like these resemble those where the second element is a gerund [16.10.1](#), but deadjectival nouns are not gerunds [12.2](#), and such constructions are not limited to cases where corresponding adjectival verbs exist:

<i>pù-pìəlím</i> <sup>m</sup>	"holiness" ("inside-whiteness")
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### 16.10.2.2 Generic non-count NPs

Premodifiers may also consist of noun phrases with generic non-count reference. If they have *abstract* senses, they ascribe a quality to the head:

<i>nā'am kúk</i>	"throne" ("chieftaincy chair")
<i>nā'am sú'ulim</i>	"kingdom" ("chieftaincy possession")
<i>pù'usug dóŋg</i>	"temple" ("worship house")
<i>tōlígír bún</i>	"heater" ("heating thing" = <i>bōn-tólígír</i> <sup>ε</sup> )
<i>dōgub dút</i>	"cooking pots"
<i>līgidi túvmà</i>	"expensive work" ( <i>līgidi</i> + "money")

Language names may appear as abstract nouns describing an ethnic group:

<i>Kūsáàl yír nē kūəb</i>	"Kusaasi houses and agriculture"
<i>Nàsāal búgúm</i>	"electricity" ("European fire")

NPs with *concrete* mass sense express the material of which the head consists. Most often the premodifier is a single noun:

<i>sālima bútiŋ</i>	"golden cup"
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Count nouns may appear if used in a mass sense [16.2.1](#):

<i>fūug dǎ̀g</i>	"tent" (cloth hut)
<i>dàad bún-nám</i>	"wooden things" ( <i>dàug</i> <sup>3</sup> "piece of wood")

NPs formed by coordination may occur in this use:

<i>sālima nē ānzúrfà lá'àd</i>	"gold and silver goods"
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Such premodifiers are referential, and can be the antecedents of pronouns:

<i>sālima lá'àd né ò bǔtus</i>	"gold goods and [gold] cups" WK <a href="#">16.7</a>
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Contrast the non-referential use of mass nouns as generic arguments:

<i>sàlim-kùəs</i>	"gold-seller"
<i>dā-núùd</i>	"beer-drinker"

Cb forms of abstract non-count nouns do sometimes occur as premodifiers:

	<i>tǎŋp-sǎb<sup>a</sup></i>	"warrior"	( <i>tǎŋp</i> <sup>3</sup> "war")
	<i>pù-pìəl-sǎb<sup>a</sup></i>	"holy person"	(Rom 3:10, 1996)
but	<i>pù-pìəlɪm sǎb<sup>a</sup></i>	"holy person"	(Mt 10:41, 1996)
	<i>pù-pìəl-tǔuma<sup>+</sup></i>	"holy actions"	(Rom 6:13, 1996)
but	<i>pù-pìəlɪm túmà<sup>+</sup></i>	"holy actions"	(Mt 5:10, 1996)

An interesting case involving a concrete mass noun is the compound *ky'à-ñwīg* "current" ("water" + "rope.") This perhaps represents "aquatic rope" in contrast to \**kù'əm ñwīg* "a rope made of water"; the construction with concrete mass premodifiers may be limited to the specific sense "made of ..."

### 16.10.2.3 Adverbial phrases

Like indefinite mass nouns, AdvPs as pre-dependents are premodifiers (contrast the determiner sense of AdvPs *following* the head [16.11.2.3](#).)

AdvPs as premodifiers may not be proadverbs. I do not have any examples of time AdvPs used as NP premodifiers.

Examples of AdvP premodifiers:

<i>bōgusígā dáàn</i>	"softly-softly sort of person"
<i>dūniya ní nìn-gbīṅ</i>	"earthly body"
<i>kù'əmī-n bún</i>	"water creature"
<i>kù'əmī-n dín</i>	"aquatic one"
<i>kǎlvgu-n nǎ-dáḡg</i>	"crayfish" ("in-the-river cock")

Although the AdvPs in cases like

<i>dàtìṽṽ níf</i>	"right eye"
<i>dàgòbìg níf</i>	"left eye"
<i>zūgú-n níf-gbáṽṽ</i>	"upper eyelid"
<i>tēṽṽ-n níf-gbáṽṽ</i>	"lower eyelid"

seem to answer "which?" rather than "what kind of?", the possibility of indefinite plurals like *dàtìṽṽ níni* "right eyes" or *tēṽṽ-n níf-gbánà* "lower eyelids" shows that the construction is actually modifying, not determining.

Postpositional phrases with *yēlá*<sup>+</sup> "about" [17.6](#) appears as premodifiers, not predeterminers. Adverbs, including postpositions, behave as generic non-count NPs syntactically; they are not made specific by a definite predeterminer:

<i>Kūsáàs kùèb nē yīr yélà gbàṽṽ</i>	"A book about Kusaasi houses and agriculture"
<i>dàṽṽ-kàṅā lā yélà gbàṽṽ</i>	"a book about that man" WK

In the same way, locative AdvPs, including Kusaal place names with no locative particle, may occur as uncompounded premodifiers:

<i>B̀̀k díṽṽ</i>	"Bawku people"
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The head of locative AdvPs is the locative particle itself, with a zero allomorph in the case of locative AdvPs such as Kusaal place names which are "intrinsically locative" [17.3](#); like other postpositions, this is never itself referential and is not itself rendered specific even though it has a specific predeterminer. See also on locative complements and their focus behaviour [30.1.2.2](#).

### 16.10.3 Predeterminers

The **quantifier** *yīgá*<sup>+</sup> "firstly" appears as a predeterminer "first" [16.4.2.3](#), e.g.

*līnē da an yīiga dabisir*

*līnē ∅ dá àñ yīigá dàbı́sır.*

**3INAN.CNTR CAT TNS COP firstly day:SG.**

"That was the first day." (Genesis 1:5)

Count and/or definite reference NPs as preceding dependents before noun heads are also **determiners**.

If the head itself is a pronoun or quantifier the construction is **partitive**:

<i>nīn-síabà</i>	"certain people"	<i>síabà</i>	dependent
<i>yà sō'</i>	"some one among you"	<i>sō'</i>	head
<i>nīdɪb lā síabà</i>	"certain of the people"	<i>síabà</i>	head
<i>nīdɪb síabà</i>	"certain ones among people"	<i>síabà</i>	head
<i>nīdɪb bédugū</i>	"a lot of people"	<i>bédugū</i>	dependent
<i>nīdɪbá àyí</i>	"two people"	<i>àyí</i>	dependent
<i>nīdɪb bédugū lā</i>	"the lot of people, the crowd"	<i>bédugū</i>	dependent
<i>nīdɪbá àyí lā</i>	"the two people"	<i>àyí</i>	dependent
<i>nīdɪb lā bédugū</i>	"a lot of the people"	<i>bédugū</i>	head
<i>nīdɪb lá àyí</i>	"two of the people"	<i>àyí</i>	head

The sense is also partitive if the head is a relative clause with an indefinite pronoun as relative:

*Pa'alimi ti nidiba ayi' nwa fun gaŋ sɔ'*

*Pà'alımī tí nīdɪbá\_ àyí ñwá fún gāŋ sō'*

Teach:**IMP 1PL.OB** person:**PL NUM:two** this **2SG:NZ** choose **INDF.AN**

"Tell us which of these two people you have chosen" (Acts 1:24)

NP predeterminers before **gerunds** and other abstract nouns describing events or processes are interpreted as **subjects**:

*Dāy lā kúlòg dāa mālsí\_ m.*

Man:**SG ART** return.home:**GER TNS** be.sweet **1SG.OB**.

"The man's return home pleased me."

A generic object argument may also occur as a combining form, and adjunct AdvPs or VP-final particles [20.7](#) may follow the head:

*ninsaalib yadda niḡir Wina'am ni*  
*nīn-sáalib yáddā-niḡir Wínà'am ní*  
 Person-smooth:PL assent-do:GER God LOC  
 "People's faith in God." (Rom 4:14)

*ya antu'a morim koto ni ne taaba la*  
*yà àntu'à-mōrīm kótù ní nē tāaba lā*  
 2PL case-have:GER court:SG LOC with each.other ART  
 "your going to law with each other in court" (1 Cor 6:7, 1976)

*Ninsaal Biig la lebug la na*  
*Nīn-sáal Bīg lā lébug lā nā*  
 Person-smooth:SG Child:SG ART return:GER ART hither  
 "the return of the Son of Man" (Mt 24:27)

Other deverbal abstract nouns may also be used in this way:

*Kristo kum dapuudir zug* "Christ's death on the cross" (1 Cor 1:18)  
*Kristo kúm dá-pūdír zúg*  
 Christ death wood-cross:SG upon

Constructions of this type are rarely used in place of content clauses or as adjuncts, but most often as subjects or with postpositions.

The words *mēḡ*<sup>a/</sup> "self", *dāan*<sup>a</sup> "owner", *sōb*<sup>a</sup> "individual" and *būn*<sup>nε/</sup> "thing" as heads have specialised senses with predeterminers (see below.)

In all other cases, predeterminers express **possessors**.

<i>n̄n bīg</i>	"my child"
<i>dāy lā bīg</i>	"the man's child"
<i>dāy lā bíàr bīg náàf zōvr</i>	"the man's elder brother's child's cow's tail"
<i>Kūsáàs wádà</i>	"customs of the Kusaasi"

Such determiners do *not* automatically make a NP definite even when themselves definite [16.5](#).

A partitive sense is not possible with noun (as opposed to pronoun) heads:

*nīdɪb lā gígìs* "the dumb ones belonging to the people"  
 Not possible as "among the people" WK.

### 16.10.3.1 Before *mēŋ*<sup>a</sup>/ *dāan*<sup>a</sup> *sōb*<sup>a</sup> *būn*<sup>ne</sup>/

Certain nouns occur exclusively as heads with a dependent. There is characteristically a specialised sense in the dependent/head relationship. (For *Adverbs* as heads of AdvPs with preceding dependents see **postpositions** [17.6](#).)

*Mēŋ*<sup>a</sup> "self" is used indifferently for sg/pl, always with a predeterminer:

<i>m̄ mēŋ</i>	"myself"
<i>yà mēŋ</i>	"yourselves"
<i>nà'ab lā mēŋ</i> chief:SG ART self	"the chief himself"
<i>Bà ñyέε_ bà mēŋ.</i> 3PL see 3PL self.	"They've seen for themselves."

"Self" forms must be used for verb arguments referring back to the clause subject :

<i>M̄ ñw'é_ε_ m mēŋ.</i> 1SG hit 1SG self.	"I hit myself."
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not \**M̄ ñw'é\_ε\_ m* or \**M̄ ñw'é\_ mān*.

Kusaal resembles English, as opposed to (say) French, in using a pronoun possessor with body parts acted on by their owner, e.g.

*Ba pu piesidi ba nu'us wuv lin nar si'em la ka ditta.*  
*Bà p̄ p̄ p̄āsídí\_ bà nú'ùs w̄v lín nār s̄'am lá*  
 3PL NEG.IND clean:IPFV 3PL hand:PL like 3INAN:NZ be.proper INDF.ADV ART  
*kà dítā +∅.*  
 and eat:IPFV NEG.

"They don't wash their hands properly before they eat." (Mt 15:1)

Where ordinary pronouns would be permissible, using *mēŋ* implies contrast:

<i>M̄ píə_ m̄ mēŋ nú'ùs.</i> 1SG wash 1SG self hand:PL.	"I washed my own hands."
<i>Fù mēŋ k̄v bí-liaa +∅?</i> 2SG self or child-baby:SG CQ?	"Yourself or the baby?" ("Which of you needs the doctor?")



See also [16.11.2.3](#) on *amēṅá*<sup>+</sup> "really, truly" as a postdeterminer "genuine, real"; cf the adjective *mēṅír*<sup>ε</sup> seen in *yēl-mēṅír*<sup>ε</sup> "truth" ("genuine matter.")

**Dāan**<sup>a</sup> "owner of ...", *nām*<sup>a</sup> pl, always has a preceding dependent NP or AdvP. In a few set forms this is a generic count noun cb:

*yī-dáàn*<sup>a</sup> "householder" = *yī-sób*<sup>a</sup> Hausa *màì gidaa*  
*tèṅ-dāan*<sup>a</sup> literally "land-owner": traditional earth-priest

Normally, the possession is expressed by a free NP, definite or indefinite:

*lír dáàn*<sup>a</sup> "car owner"  
*būvg dáàn*<sup>a</sup> "goat owner"  
*kù'əm dáàn*<sup>a</sup> "water owner"  
*tìṅ dáàn*<sup>a</sup> "bearded man" Hausa *màì geemùu*  
*dāam dáàn*<sup>a</sup> "beer owner"  
*pōɔg lā dáàn*<sup>a</sup> "the owner of the field" (Mt 21:40)

*Zu-wok daan po gangid bugum.*

*Zù-wōk dáàn pō gánìd búgúmm* <sup>+∅.</sup>

Tail-long:SG owner:SG NEG.IND step.over:IPFV fire NEG.

Proverb: "One with a long tail doesn't step over a fire."

(If you have family commitments you shouldn't take risks.) KSS p38

An abstract possession refers to a quality, as with Hausa *màì*, or Arabic ذو

*pù-pìəlīm dáàn*<sup>a</sup> "holy person"

Manner-adverbs can appear in the same sense as abstracts before *dāan*<sup>a</sup>:

*būgvsígā dáàn*<sup>a</sup> "softly-softly sort of person" WK

See [16.4.2.3](#) on the use of *dāan*<sup>a</sup> with numbers to make ordinal expressions.

**Sōb**<sup>a</sup> "the one of ..." is a dummy head for a preceding NP or AdvP dependent; it specifies only number and gender and is otherwise semantically empty.

Animate	sg	<i>sōb</i> <sup>a</sup>
Animate	pl	<i>dìm</i> <sup>a</sup>
Inanimate	sg/pl	<i>dìn</i> <sup>nε</sup>

With noun or pronoun predeterminers the meaning is possessive:

*mān dín*<sup>nɛ</sup> "my one, mine"  
*À-Wīn dím* "Awini's family"

*Fōn pǎǎ'ád nē tīnám dín.*

**2SG.CNTR** speak:**IPFV FOC 1PL.CNTR** individual.**INAN.**

("We can't speak your language but ...") "You're speaking ours."

Abstract NPs and AdvPs preceding *sōb*<sup>a</sup> are premodifiers:

*pù-pìəlim sōb*<sup>a</sup>  
 pl *pù-pìəlim dím*<sup>a</sup> "holy person" (*pù-pìəlim*<sup>m</sup> "holiness")

*dūniya ní dìn*<sup>nɛ</sup> "earthly one" (1 Cor 15:44)  
*Bòk dím* "Bawku people"

The quantifier *yīgá*<sup>+</sup> "first" is a predeterminer in

*yīgá sōb*<sup>a</sup> "first (person)" beside *yīg-sōb*<sup>a</sup> *id*

Specialised senses may be found with cb premodifiers:

*yī-sōb*<sup>a</sup> "householder" (*yī*<sup>ɛ/</sup> "house")  
 pl *yī-sōb-nàm*<sup>a</sup>  
*yī-dím*<sup>a</sup> "members of the household"  
*nīf-sōb*<sup>a</sup> "miser" (*nīf*<sup>ɸ/</sup> "eye")  
*tāñp-sōb*<sup>a</sup> "warrior" (*tāñp*<sup>ɔ</sup> "war")  
*zūg-sōb*<sup>a</sup> "boss" NT "Lord" (*zūg*<sup>ɔ/</sup> "head")  
 pl *zūg-sōb-nàm*<sup>a</sup>

The expression *ōn sōb*<sup>a</sup> means "the person we were just talking about."

**Bōn**<sup>nɛ/</sup> "thing" is probably derived from the old gender agreement pronoun for abstracts. It is used in many constructions as a dummy placeholder. It can make a regular *r<sup>ɛ</sup>|a*<sup>+</sup> class plural *bōná*<sup>+</sup>, but in placeholder use it is found indifferently as sg and pl, or pluralises with *nàm*<sup>a</sup> like inanimate pronouns:

*Bōn-námá* àlá *kà fù ñyētá* <sup>+∅?</sup>  
 Thing-**PL** **NUM**:how.many and **2SG** see:**IPFV CQ?**  
 "How many things do you see?" SB

It is used (beside *nīn-* "person" for human) as a dummy non-human cb before adjectives, avoiding the use of an adjective as complement of *àḡñ<sup>a</sup>* "be" [21.2](#).

*Dīb á nē bōn-súj.* "Food is good." ("Food is a good thing.")  
Food **COP FOC** thing-good:**SG**.

WK requires adjectives to have the suffix *m<sup>m</sup>* in abstract meanings [16.11.1.1](#). Some adjectives cannot be used as NP heads at all; *bōn-* is necessary in:

*bōn-vúr<sup>ε</sup>* "living thing"

No adjective cb may be a head, so *bōn-* is also necessary in:

*bōn-píàl-kàḡā<sup>+/</sup>* "this white one"

Deverbal adjectives with no preceding cb are interpreted as agent nouns [13.1.1.2.1](#), so *bōn-* marks different meanings in e.g.

*bōn-kúvdír<sup>ε</sup>* "thing to do with killing"  
but *kūvdír<sup>ε</sup>* "killer"

Note the idioms

*bōn-gíḡ<sup>a</sup>* "short chap" (informal, humorous)  
*bōn-kúdòḡ<sup>ɔ</sup>* "old man" (the normal expression)  
(but *pṹ'à-ñyá'aj<sup>a</sup>* "old woman")

*Bōn* also occurs with abstract and AdvP premodifiers:

*tōlḡír bún<sup>nε</sup>* "heating thing, heater" = *bōn-tōlḡír<sup>ε</sup>*  
*kù'əmīn bún<sup>nε</sup>* "water creature"

*Bōn* is a "thing", tangible or abstract, while *dīn* is purely a semantically empty head, with only number and gender specified:

*kù'əmīn dín<sup>nε</sup>* "the (non-human) one in the water, aquatic one"

### 16.11 Dependents following the head

Dependents follow a head noun in the order adjective(s), quantifier, postdeterminer pronoun or AdvP, article.

It is characteristic of Kusaal and of other Oti-Volta languages that the normal construction with both adjectives and postdeterminer pronouns is that they follow the head noun, which is itself reduced to a combining form, while the dependent inflects to show the number of the head. **Quantifiers** do not have separate combining forms, and are not followed by the postdeterminer-only forms *kàn<sup>ε</sup> kàŋā<sup>+/</sup>* of the demonstrative pronouns [16.3.2](#) (cf on apposition [16.8](#).) For quantifiers as postdeterminers see [16.11.2.2](#).

Compounds where the combining form is the head are formed absolutely freely with completely transparent meaning, and correspond to uncompounded constructions in most other languages. It is largely because of such head-first compounds that the combining form needs to be treated as a standard part of noun and adjective paradigms, and it is in these cases particularly that cbs remodelled segmentally on the basis of the singular form (or even the plural) [9.2.2](#) are frequent.

<i>būvg<sup>a</sup></i>	"goat"
<i>bù-pìəlɪg<sup>a</sup></i>	"white goat"
<i>bù-kàŋā<sup>+/</sup></i>	"this goat"
<i>bù-pìəl-kàŋā<sup>+/</sup></i>	"this white goat"

Compounds with postdeterminer pronouns naturally cannot be lexicalised; compounds with adjectives may develop specialised individual lexical meanings, though much less often than modifier-first compounds.

For my informants WK and DK, a noun preceding a postdeterminer pronoun must appear as a combining form, but SB accepts preceding sg/pl forms. I did not record the tones of such forms, but this is probably simply segmental remodelling of cbs [9.2.2](#). Thus for SB:

<i>?náaf-kàŋā</i>	"this cow"	cf <i>náaf-bì'isím</i> <a href="#">16.10.2.1</a>
<i>?nāaf-káŋā</i>		

but *nā'-káŋā* "this cow" WK DK SB

### 16.11.1 Postmodifiers: adjectives

Adjectives always follow the head, and do not themselves appear as heads, except to a very limited extent as complements to *àɛñ<sup>a</sup>* "be something" 21.2.

The combination noun + adjective is almost invariably rendered with noun cb before the adjective, which inflects as sg pl or cb on behalf of the head noun. My informants could sometimes be induced to accept sg + adjective but never produced such forms spontaneously.

<i>būvg<sup>a</sup></i>	"goat"	<i>būs<sup>ε</sup></i>	"goats"
<i>bù-pìəlīg<sup>a</sup></i>	"white goat"	<i>bù-pìəlis<sup>ε</sup></i>	"white goats"
<i>bù-sùŋ<sup>ɔ̃</sup></i>	"good goat"	<i>bù-sùma<sup>+</sup></i>	"good goats"
<i>nūa<sup>+/</sup></i>	"hen"	<i>nōs<sup>ε/</sup></i>	"hens"
<i>nō-píəlīg<sup>a</sup></i>	"white hen"	<i>nō-píəlis<sup>ε</sup></i>	"white hens"
<i>nō-súŋ<sup>ɔ̃</sup></i>	"good hen"	<i>nō-súmà<sup>+</sup></i>	"good hens"

A second adjective or a postdeterminer pronoun can follow a first adjective, which thus itself appears as a cb:

<i>nīn-wók-pìəlīg<sup>a</sup></i>	"white tall person"
<i>nō-píəl-kàŋā<sup>+/</sup></i>	"this white hen"

However, a noun + adjective compound cannot form a cb to be used as the generic argument of a deverbal noun; a sg/pl form appears instead:

<i>fū-zéñdà kùəs<sup>a</sup></i>	"seller of red (i.e. dyed) cloth"
not <i>*fū-zéñ'-kùəs<sup>a</sup></i>	

i.e. adjective cbs may only precede other adjectives or postdeterminer pronouns.

Compounds with adjectives may develop specialised lexical meanings:

<i>nū'-bíl<sup>a</sup></i>	"finger" ("small hand")
<i>tì-sābulím<sup>m</sup></i>	a traditional remedy ("black medicine")

Several names of plant and tree species are formed in this way:

<i>gòñ'-sābulíg<sup>a</sup></i>	Haaf <i>gosablīga</i> "Acacia Hockii" ("black thorn")
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### 16.11.1.1 Class agreement

There are isolated set forms showing traces of the old agreement system:

	<i>là'-bīəlíʔ</i>	NT	"small coin" ( <i>lā'afʔ</i> "cowrie")
cf	<i>bī'əlá<sup>+</sup></i>		"a little"
	<i>dà-sī'ər<sup>ε</sup></i>		"some day; perhaps" ( <i>dāar<sup>ε</sup></i> "day")
cf	<i>sī'a<sup>+</sup></i>		"some"
	<i>dàbɪs-sī'ər<sup>ε</sup></i>		"some day" ( <i>dàbɪsɪr<sup>ε</sup></i> "day")
cf	<i>sī'a<sup>+</sup></i>		"some"
	<i>pɥ'à-pāal<sup>a/</sup></i>		"bride" ( <i>pɥ'ā<sup>a</sup></i> "wife")
cf	<i>pāalíg<sup>a</sup></i>		"new"
	<i>dà-pāal<sup>a/</sup></i>		"young man, son" ( <i>dāɥ<sup>+</sup></i> "man")
cf	<i>pāalíg<sup>a</sup></i>		"new"

where the dependents do not normally occur with these class suffixes.

There remains a rule in WK's speech (not DK's) and in written materials requiring *m<sup>m</sup>* class agreement in adjectives modifying *m<sup>m</sup>* class mass nouns, and also after *būn* "thing" when it has abstract rather than concrete sense:

	<i>dā-pāalim<sup>m</sup></i>	"new millet beer"
		WK does not accept <i>*dā-páàl</i> , <i>*dā-pāalíg</i> .
	<i>tì-sābulim<sup>m</sup></i>	"black medicine", a specific traditional remedy
	<i>tì-vōnnim<sup>m</sup></i>	"oral medication" ("swallowing medicine")
	<i>tì-kōvdim<sup>m</sup></i>	"poison" ("killing medicine")
	<i>kpāñ-sóɔŋdìm<sup>m</sup></i>	"anointing oil" ( <i>kpāañm<sup>m</sup></i> "oil, grease")
	<i>būn-bóɔdìm<sup>m</sup></i>	"desirable thing" (1 Cor 14:1: <i>nòŋulim<sup>m</sup></i> "love")
but	<i>būn-bóɔdìr<sup>ε</sup></i>	"desirable thing" (BNY p17: a sheep)
	<i>būn-ñyétim<sup>m</sup></i>	"the visible world"
but	<i>būn-ñyétìr<sup>ε</sup></i>	"a visible object"

The exceptional character of the *m<sup>m</sup>* class in this matter is presumably due to its strong semantic association with the meanings "liquid" and "abstract."

### 16.11.1.2 Downtoning

Adjectives may show apocope-blocking [6.4](#) as a downtoner (all examples KT):

<i>Lì à nē fū-píə̀lìgā.</i>	"It's a whitish shirt."
<i>Lì à nē fū-píə̀lìgā lā.</i>	"It's the whitish shirt."
<i>Lì à nē wíùg.</i>	"It's red."
<i>Lì à nē wíugō.</i>	"It's reddish."
<i>fū-wíugō lā</i>	"the reddish shirt"
<i>Lì à nē tītā'ari.</i>	"It's biggish."

This seems to be possible only with singular forms.

### 16.11.1.3 Ideophones

Adjectives cannot themselves take adverbs as modifiers. In e.g.

<i>Lì à nē píə̀lìg pāmm.</i>	"It's very white"
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the adverb *pāmm* must be taken with the copula verb rather than the adjective; it is not possible to say

<i>*fū-píə̀lìg pāmm lā</i>	attempted "the very white shirt"
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However, in any syntactic rôle an adjective may be immediately followed by an ideophone with intensifying force. As is common cross-linguistically, ideophones often display unusual phonological features. An ideophone is specific to a particular adjective, along with any cognate adjectival verb.

<i>Lì à nē píə̀lìg fáss fáss.</i>	"It's very white."
<i>Lì à nē sābɪ́lìg zím zím.</i>	"It's deep black."
<i>Lì à nē zíń'a wím wím.</i>	"It's deep red."

Ideophones are not limited to use with adjectives as complements of *àeń<sup>a</sup>* "be something/somehow" but occur with adjectives in their normal modifier rôle:

<i>Lì à nē fū-zíń'a wím wím.</i>	"It's a deep red shirt."	WK
<i>M̃ ńyé fū-zíń'a wím wím.</i>	"I've seen a deep red shirt."	WK
<i>Fū-zíń'a wím wím bé.</i>	"There's a deep red shirt."	WK
<i>M̃ bóòd fū-zíń'a wím wím lā.</i>	"I want the deep red shirt."	WK

Adjectival verbs may take ideophones as intensifiers; they share the ideophone of the corresponding adjective:

<i>Ò à nē wōk tólùlì.</i>	"She's very tall."
<i>Ò à nē gīŋ tírúgà.</i>	"She's very short."
<i>Ò wà'am tólùlì.</i>	"She's very tall."
<i>Ò gìm nē tírúgà.</i>	"She's very short."

I could not elicit ideophones for all adjectives by any means, not even those with gradable senses; thus WK has only

<i>Lì à súŋā pāmm.</i>	"It's very good."
<i>Lì à nē bē'ed pāmm.</i>	"It's very bad."
<i>Lì zùlɪm pāmm.</i>	"It's very deep."
<i>Lì mà'as pāmm.</i>	"It's very damp."

Apart from adjectival verbs, I have found no unequivocal ideophones in use with verbs; thus only

<i>Ò tùm pāmm.</i>	"She's worked hard."
<i>Ò tùm hālí.</i>	"She's worked hard." <a href="#">18.1</a>
<i>Ò zò pāmm.</i>	"She's run a lot."
<i>Ò zò hālí.</i>	"She's run a lot."

However, many verbs can be followed by "onomatopoeic" words which resemble ideophones at least in phonology:

<i>Ò zòt nē tólìb tólìb.</i>	"He [a rabbit] is running lollop-lollop." WK
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Such words occur very frequently in the collection of traditional stories "*Kusaal Solima ne Siilima*." They are evidently stereotyped and often show phonological features not found in the regular vocabulary, but they do not seem to be uniquely associated with particular verbs and are perhaps more of the nature of the "rat-tat-tat" onomatopoeic words familiar in European languages.

For more detail on Kusaal ideophones see Abubakari 2017.



### 16.11.1.4 Bahuvrihis

The combination noun + adjective may be used as a bahuvrihi adjective itself:

<i>Lì à nē nū'-kpíílúŋ.</i>	"It's a dead hand."
<i>Bīig lā á nē nū'-kpíílúŋ.</i>	"The child is dead-handed."
<i>Ò à nē bí-[nū'-kpíílúŋ].</i>	"He's a dead-handed child."

In constructions like *bì-nū'-kpíílúŋ*<sup>ɔ</sup> "child with a withered hand" the adjective is modifying the cb immediately preceding it, not *vice versa*. It is not possible to say *\*bì-nū'-kpîm*<sup>m</sup>, and in such constructions the adjective may even be plural despite singular reference of the whole noun + adjective compound:

<i>bì-tùb-kpīda</i> <sup>+</sup>	"deaf child" ( <i>tùbur</i> <sup>ε</sup> "ear", <i>kpi</i> <sup>+</sup> "die")
plural <i>bì-tùb-kpīda nám</i> <sup>a</sup>	
or <i>bì-tùb-kpīdis</i> <sup>ε</sup>	
<i>bì-tùb-līd</i> <sup>ε</sup>	"child/children with blocked ears" ( <i>lī</i> <sup>+</sup> "block up")

Accordingly, the construction is zero-derivation of a noun-adjective compound to an adjective, and not modification of an adjective by a cb.

Other examples of bahuvrihis:

<i>kùg-nōb-wók</i> <sup>ɔ</sup>	"long-legged stool"
<i>kùg-nōb-wá'àd</i> <sup>ε</sup>	"long-legged stools"
<i>zūg-máuk</i> <sup>ɔ</sup>	
plural <i>zūg-má'àd</i> <sup>ε</sup>	"crushed-headed"
<i>zù-wōk</i> <sup>ɔ</sup>	"long-tailed"
<i>nōb-gíŋ</i> <sup>a</sup>	"short-legged"
<i>zū-péelùg</i> <sup>ɔ</sup>	"bald"; cf <i>Dau so'</i> <b>zug ya'a pie</b>
plural <i>zū-péelà</i> <sup>+</sup>	"If a man has gone bald" (Leviticus 13:40)
<i>lām-fóòg</i> <sup>ɔ</sup>	"toothless" ( <i>lām</i> <sup>mε</sup> / "gum" <i>fùe</i> <sup>+</sup> "draw out")
plural <i>lām-fóòd</i> <sup>ε</sup>	<a href="#">9.2.1</a>

The two adjectives "one of a pair" [16.4.2.3](#) are often used in bahuvrihis: *ňyàuk*<sup>ɔ</sup> pl *ňyà'ad*<sup>ɛ</sup> for eyes:

<i>nīf-ňyáuk</i> <sup>ɔ</sup>	"one eye"
<i>bà-nīf-ňyáuk</i> <sup>ɔ</sup>	"one-eyed dog"

*yīuŋ*<sup>ɔ</sup>/ pl *yīná*<sup>+</sup> of other paired body parts:

<i>tùb-yīuŋ</i> <sup>ɔ</sup> /	"one ear"
<i>bì-tùb-yīná</i> <sup>+</sup>	"one-eared children"
<i>nōb-yíuŋ</i> <sup>ɔ</sup>	"one-legged"
<i>nū'-yíuŋ</i> <sup>ɔ</sup>	"one-handed"

### 16.11.1.5 Nouns as adjectives

Human-reference nouns may be used as adjectives modifying other human-reference nouns. This is particularly common with <sup>a</sup>|*b*<sup>a</sup> class words:

	<i>bì-sāan</i> <sup>a</sup> / or <i>bì-sáaŋ</i> <sup>a</sup>	"stranger-child"
only	<i>bù-sáaŋ</i> <sup>a</sup>	"stranger goat"

	<i>bì-kpī'im</i> <sup>m</sup> /	
or	<i>bì-kpìilúŋ</i> <sup>ɔ</sup>	"dead child"
only	<i>bù-kpìilúŋ</i> <sup>ɔ</sup>	"dead goat"

	<i>bì-dāu</i> <sup>+</sup>	
or	<i>bì-dāuŋ</i> <sup>ɔ</sup>	"male child"
only	<i>bù-dāuŋ</i> <sup>ɔ</sup>	"male goat"

*bì-pu'ā*<sup>a</sup> or *bì-puāk*<sup>a</sup> "female child"

	<i>bì-zū'əm</i> <sup>m</sup> /	
or	<i>bì-zònzòŋ</i> <sup>a</sup>	"blind child"

The same behaviour is also seen with some agent nouns:

	<i>pu'à-zàaŋs</i> <sup>a</sup>	"dreamy woman" KT
	<i>nīn-nén</i> <sup>na</sup>	"envious person"
	<i>bì-sīn</i> <sup>na</sup> / or <i>bì-sīnníg</i> <sup>a</sup>	"silent child"
only	<i>bù-sīnníg</i> <sup>a</sup> or <i>bù-sīnnúŋ</i> <sup>ɔ</sup>	"silent goat"

However, WK usually reports a contrast between agent nouns/deverbal adjectives with head-second compounds in <sup>a</sup>|*b*<sup>a</sup> class and head-first compounds in *g*<sup>a</sup>|*s*<sup>ε</sup> or *r*<sup>ε</sup>|*a*<sup>+</sup> class, even with derivatives of intransitive verbs:

<i>pɥ' à-kūvdíg<sup>a</sup></i>	"murderous woman, murderess"
<i>pɥ' à-kūvd<sup>a/</sup></i>	only "killer of women"
<i>pɥ' à-lā'adíg<sup>a</sup></i>	"woman given to laughing"
<i>pɥ' à-lā'ad<sup>a</sup></i>	"laugher at women"

Nouns (of any class) expressing bodily defects can be used adjectivally:

<i>bì-zùnzòŋ<sup>a</sup></i>	"blind child"
<i>bì-gìk<sup>a</sup></i>	"dumb child"
<i>bì-wàbɪr<sup>ε</sup></i>	"lame child"
<i>bì-bālĒrvɔ<sup>ɔ</sup></i>	"ugly child"
<i>bì-pòŋ'ɔr<sup>ε</sup></i>	"crippled child"

Other examples include:

<i>nàsàa-bīg<sup>a</sup></i>	"European child"
<i>yàmmvug-bī-púŋ<sup>a</sup></i>	"girl slave"
	(written <i>yamug bipuŋ</i> Acts 16:16, 1976 <a href="#">9.2.2</a> )
<i>yàm-bī-púŋ<sup>a</sup></i>	"girl slave" (WK's preferred form)
cf <i>yàmmvug bí-púŋ<sup>a</sup></i>	"slave's girl"
<i>bī-púŋ-yàmmvug<sup>a</sup></i>	"slave girl"
<i>nà'-bīg<sup>a</sup></i>	"prince" ("royal child" not "boy king")
<i>bì-nà'ab<sup>a</sup></i>	<i>id</i>
<i>dàɥ-bīg<sup>a</sup></i>	"male child"
cf <i>bì-dāɥ<sup>+</sup></i>	<i>id</i> (above)

Except with deverbal nouns as second elements, there seem to be no grounds for choosing either the first or second element of these compounds as the head, and these structures are essentially appositional. However, rather than set up a third basic type of compound, it seems simplest to regard these cases as reflecting adjectival use of human-reference nouns. Such nouns also resemble adjectives in that they can form the basis of derived abstract nouns, though in most cases they do so by adding derivational suffixes rather than simply being used directly in the *m*<sup>m</sup> class like adjective stems [12.2](#).

## 16.11.2 Postdeterminers

### 16.11.2.1 Postdeterminer pronouns

Demonstrative, indefinite and interrogative pronouns may follow a NP head cb as postdeterminers.

Pronouns naturally also occur as NP heads. Some pronouns have forms used only as heads or only as postdeterminers [16.3.2](#) [16.3.3](#).

### 16.11.2.2 Quantifiers

Quantifiers as NP dependents follow the head, except for *yīgá*<sup>+</sup> "firstly." A head can appear as a cb only with *yīnní*<sup>+</sup> "one" and in a few fixed expressions [16.4.2.1](#); elsewhere, quantifiers are not subject to L spreading:

	<i>kūg-yínní</i> <sup>+</sup>	"one stone"
but	<i>kūgvur yīnní</i> <sup>+</sup>	"one stone"

I do not have any examples of co-occurrence with adjectives; when quantifiers precede postdeterminer pronouns the construction is probably always to be taken as a quantifier head with a predeterminer, not a postdetermining quantifier.

<i>nīdɪb bédvǫ</i>	"a lot of people"
<i>nīdɪb bédvǫ lā</i>	"the lot of people, the crowd"
<i>nīdɪbá àyí</i>	"two people"
<i>nīdɪbá àyí lā</i>	"the two people"

The head + quantifier postdeterminer construction contrasts in meaning with the *partitive* sense of predeterminer + quantifier head [16.10.3](#).

Quantifiers as postdeterminers can be coordinated: this is the mechanism for the creation of numbers other than simple digits, tens or hundreds [16.4.2.1](#).

*o nya'andɔlib pii nɛ yi*  
*ò ñyà'an-dòllɪb pīi nē yí*  
**3AN** after-follower:PL ten with two  
 "his twelve disciples" (Mt 26:20)

### 16.11.2.3 Adverbial phrases

AdvPs following a NP head are postdeterminers. Proadverbs do not occur in this use. There is no compounding or L spreading.

Contrast the premodifying use with the postdetermining in

	<i>mōɔɡv-n wábùg lā</i>	"the wild elephant" ("What kind of elephant?")
but	<i>wābvg mōɔɡv-n lā</i>	"the elephant in the bush" ("Which elephant?")

I do not have any unequivocal examples of time adverbs in this position; in

*ñwāɔɔs yúùm lā púvgū-n* "months in the year" SB

the postposition phrase is formally locative, though used metaphorically.

The manner-adverb *amēŋá* "really, truly" occurs meaning "genuine, real":

*Ńn sōb á nē dɔ'átà amēŋá lā.*

**3AN.CNTR individual.AN COP FOC doctor:SG ADV:real:ADV ART**

"That one's the real doctor."

When an abstract noun with verbal sense has a preceding NP functioning as subject, a following AdvP may occur which represents an adjunct in the corresponding clause structure. Such adjuncts may also even be prepositional phrases, which are not found elsewhere as NP dependents, and even VP-final particles occur. Accordingly, this is best regarded as a distinct clause nominalisation process rather than part of NP structure as such; see further [16.10.3](#).

*ya antu'a morim koto ni ne taaba la*

*yà àntɔ'á-mōrím kótù ní nē tāaba lā*

**2PL case-have:GER court:SG LOC with each.other ART**

"your going to law with each other in court" (1 Cor 6:7, 1976)

## 17 Adverbial phrases

### 17.1 Overview

Most adverbs can be categorised as adverbs of time, place or manner.

Adverbial phrases characteristically appear as adjuncts within clauses and VPs. They also appear as arguments of verbs [17.5](#), and (excepting proadverbs) as NP determiners or modifiers [16.10.2.3](#) [16.11.2.3](#). AdvPs of time, circumstance or reason usually appear as clause adjuncts [25.1.1](#) before the subject, or as VP adjuncts [20.6](#), but AdvPs of place or manner may only appear as VP adjuncts or preceding the subject through preposing with *kà* [30.2](#).

Many adverbs are formally identical to nouns. Unequivocally distinctive adverbs include proadverbs [17.7](#) and various types which do not conform to ordinary noun structure.

Many adverbial phrases represent adverbial *uses* of NPs, and have the usual structural possibilities for NPs. Otherwise, the range of structures for AdvPs is more limited. Only specialised *postpositions* can have a NP predeterminer [17.6](#).

Absolute clauses occur as adverbs of time/circumstance [28.1](#), while relative clauses with pronouns expressing place or manner occur as corresponding types of AdvP. As with NPs, coordination of AdvPs uses the particle *nĕ*.

### 17.2 Time and circumstance

Adverbial phrases expressing **time** may be instantiated by proadverbs [17.7](#) or by distinctive time adverbs which do not have the structure of nouns, such as

<i>zīná</i> <sup>+</sup>	"today"
<i>sù'əs</i> <sup>a</sup>	"yesterday"
<i>dūnná</i> <sup>+</sup>	"this year"

Some time adverbs resemble nouns in form but lack cb or pl forms, and cannot be referred to by pronouns, or occur with dependents, e.g. *bēog*<sup>ɔ</sup> "tomorrow"; *dāar*<sup>ε</sup> "day after tomorrow/day before yesterday" is in the same category but happens to be homophonous with the ordinary noun *dāar*<sup>ε</sup> "day."

However, many time AdvPs are simply NPs with temporal meanings, and no special marking. Such NPs may consist of single nouns, but the possibility of adding dependents distinguishes them from specialised time adverbs; see [32.9](#) and e.g.

<i>yú'vŋ</i> <sup>ɔ</sup>	"night"
<i>nīntāŋ</i> <sup>a/</sup>	"heat of the day, early afternoon"
<i>úun</i> <sup>nε</sup>	"dry season"

Adverbial phrases expressing **circumstances** are typically absolute clauses; such clauses are also frequently used to express time [28.1.1](#).

No formal distinction is made between a point in time and a period over which a state of affairs persists:

*Fù ná kùl bēog.* "You'll go home tomorrow."  
**2SG IRR** go.home tomorrow.

*Tì kpélìm ànínā dábìsà bí'əlà.*  
**1PL** remain **ADV**:there day:**PL** few.  
 "We stayed there a few days."

Time AdvPs can be coordinated:

*Bēogv-n nē záàm kà fù ná nīŋ tí-kàŋā.*  
 Morning-**LOC** with evening and **2SG IRR** do medicine-**DEM.DEI.SG**.  
 "You'll use this medicine morning and evening."

### 17.3 Place

Locative adverbs comprise proforms along with Kusaasi place names; other locative AdvPs use the locative particle  $nī^{+}/\sim n^{\epsilon}$ . It is not possible to use a noun other than a place name by itself as a place adverb, unless it has become a postposition [17.6](#); synchronically such postpositions are separate lexical items, and the process of zero-derivation that created them is no longer productive.

The core adverb of place is thus the locative particle, which has the allomorphs  $nī^{+}/$  and  $n^{\epsilon}$  along with **zero allomorph** accompanying the "intrinsically locative" forms discussed below; like all postpositions, this is never referential even though it has a predeterminer. This accounts for the availability of all kinds of locative AdvP as NP premodifiers [16.10.2.3](#) and for the focus behaviour of locatives [30.1.2.2](#).

The form  $nī^{+}/$  is used after words ending in a vowel in SF, after pronouns and after loanwords; the liaison enclitic  $n^{\epsilon}$  is used elsewhere:

<i>mù'arī-n</i>	"in a lake"	<i>yōdá nī</i>	"among names"
<i>m̄ nī</i>	"in me"	<i>mān nī</i>	"in me"

*la'asvɔ dɔɔdɪn nɛ suoya ni*  
*là'asvɔ dɔɔdī-n nē sɔyɛyá nī*  
 assembly:**SG** house:**PL-LOC** with road:**PL LOC**  
 "in the synagogues and in the streets" (Mt 6:2)

*Yīr*<sup>ε/</sup> "house" has the exceptional sg and pl locative forms *yín*<sup>nε</sup> *yáa-n*<sup>ε</sup> which have the particular nuance "home", as in the parting formula

*Pò'usim yín.* "Greet (those) at home." i.e. "Goodbye."

Note also the locative adverb *yìŋ*<sup>a</sup> "outside."

The article *lā*<sup>+/</sup> may precede or follow the locative particle:

or *mù'arī-n lā*  
*mù'ar lā ní* "in the lake"

Quantifiers may also follow the locative particle:

*m gbana ni wusa* "in all my letters" (2 Thess 3:17, 1996)  
*m̀ gbàna ní wōsa*  
**1SG letter:PL LOC all**

The meaning is completely non-specific location: at, in, to, from. The locative particle is attached to nouns which are not place names whenever they are used as complements of verbs expressing motion or location:

*Kem Siloam buligini pie fu nini.*  
*Kèm Siloam búlgō-ni\_ø píə\_ fù nīnī.*  
Go:IMP Siloam well:SG-LOC CAT wash 2SG eye:PL.  
"Go to the well of Siloam and wash your eyes." (Jn 9:7)

*Ka Suntaana kpen' Judas [...] sunfun.*  
*Kà Sūtāanà kpéñ' Judas [...] súñfī-n.*  
And Satan enter Judas [...] heart:SG-LOC.  
"Satan entered Judas' heart." (Lk 22:3)

*Ka Paillet len yi nidibin la na ya'asi yeli ba ye...*  
*Kà Paillet lélm yī nīdībī-n lā nā yá'àsī\_ø yéllī\_ bā yē...*  
And Pilate again emerge person:PL-LOC ART hither again CAT say 3PL.OB that ...  
"Pilate came out to the people again and said to them ..." (Jn 19:4)

ILK has, transposed into the orthography of this grammar:

*Ò bè dá'a-n.* "He's at market."  
*Ò bè sjà'arī-n.* "He's at the bush."  
*Ò bè p̄ɔɔgú-n.* "He's at the farm."



<i>Ò bè yín.</i>	"He's at home."
<i>Ò bè sākulí-n.</i>	"He's at school."
<i>Ò bè mōɔɔɔ-n.</i>	"He's in the grasslands."
<i>Ò bè kōlɔɔ-n.</i>	"He's at the stream."
<i>Ò bè tūmmi-n.</i>	"He's at work."

More precise locative meanings are expressed with postpositions, many of which themselves include the locative particle [17.6](#).

*Ò dìɔɔl gbáɔɔn lā téɛbòl lā zúɔɔ.*  
**3AN** lay.down book:**SG ART** table:**SG ART** upon.  
 "She's put the book on the table."

*Dāɔ lā bé nē dɔ-kàɔnā lā púɔɔɔ-n.*  
 Man:**SG ART EXIST FOC** hut-**DEM.DEI.SG ART** inside:**SG-LOC**.  
 "The man is inside that hut."

Kusaasi place names [32.3](#), many postpositions, and a number of proadverbs [17.7](#) are "intrinsically locative", here analysed as accompanied by a zero allomorph of the locative particle (see above):

<i>Ò bè Bók.</i>	"He's at Bawku." ILK
<i>Ò bè Témpáan.</i>	"He's at Tempane." ILK
<i>Ò kèn Bók.</i>	"He's gone to Bawku."
<i>Ò dìɔɔl gbáɔɔn lā téɛbòl lā zúɔɔ.</i>	"She's put the book on the table." (above)
<i>dàtìɔɔ<sup>ɔ</sup> or dítúɔɔ<sup>ɔ</sup></i>	"righthand"
<i>dàgòbɔɔ<sup>a</sup></i>	"lefthand"
<i>àgól<sup>lɛ</sup> or àgólá<sup>+</sup></i>	"upwards"
<i>lāllí<sup>+</sup></i>	"far off" (? <i>lāl ní<sup>+</sup></i> )

Place names often have a locative proform in apposition, particularly to express rest at a place, as opposed to movement towards or away:

<i>M̄ ná kēɔ Bók.</i>	"I'm going to Bawku."
<i>Fò yúùɔ Bók kpēláa?</i>	"Have you been long in Bawku (here)?"
<i>Fò yúùɔ Bókàa? SB</i>	(rejected by WK as "Mooré")

In the speech of my informants, foreign place names share the syntactic behaviour of Kusaal place names as intrinsically locative, but especially in the sense

of rest at a place, the NT often either uses the postposition *nī*<sup>+/</sup> or paraphrases like *Jerusalem tēḡī-n* "in Jerusalem-land."

Proforms used in locative heads of relative clauses are intrinsically locative, and consequently so is the relative clause as a whole [28.2](#):

*biig la n be si'el la*

*bīg lá ñ bē sī'əl lā*

child:SG ART NZ EXIST INDF.INAN ART

"the place where the child was" (Mt 2:9, 1976)

*ka mōri fu keḡ zin'ikanε ka fu pu bōōda.*

*kà mōrí\_ fù\_ ø kēḡ zín'-kànı kà fù pū bōōdā +ø.*

and have 2SG.OB CAT go place-REL.SG and 2SG NEG.IND want NEG.

"and take you where you do not want." (Jn 21:18)

Some words incorporate *n*<sup>ε</sup> always, whether used as locatives or not:

	<i>tēḡ-pōūgv-n<sup>ε/</sup></i>	"village"
pl	<i>tēḡ-pōūvdı-n<sup>ε/</sup></i>	

Note also the *time* expressions:

<i>bēog<sup>ɔ</sup></i>	"tomorrow"
<i>bēogv-n<sup>ε/</sup></i>	"morning"
<i>sān-sí'ā-n lā</i>	"at one time, once..." <a href="#">24.1.3</a>
<i>yīgı-n<sup>ε</sup></i>	"at first"

Locative AdvPs can be coordinated:

*Nyalima na be winnigin ne nwadigin ne nwadbibisin.*

*Ñyālímá nà bē wínnìgī-n nē ñwādıgı-n nē ñwād-bíbı́sı́-n.*

Wonder:PL IRR EXIST sun:SG-LOC with moon:SG-LOC with moon-small:PL-LOC.

"There will be wonders in the sun, moon and stars." (Lk 21:25)

**Reason-why** AdvPs are construed like place-AdvPs, with a metaphorical extension of the sense of the postposition *zūg* "upon" [17.6](#); similarly for proforms:

<i>àlá zùg<sup>ɔ</sup></i>	"therefore"	<i>bō zúg<sup>ɔ</sup></i>	"why?"
<i>dìn zúg<sup>ɔ</sup></i>	"therefore"		

### 17.4 Manner

AdvPs of manner may be instantiated by proforms, and there also are several morphologically distinctive manner-adverb formations. Various NP types can be used as manner AdvPs; like time adverbs, true manner-adverbs do not take dependents.

Distinctive manner-adverbs often show apocope-blocking [6.4](#). Some have the **manner-adverb prefix à- [14.2](#) or are derived from adjective stems with the suffixes *m<sup>m</sup>* or *-ga<sup>+</sup>* [12.3](#). Others include**

<i>pāalú<sup>+</sup></i>	"openly"
<i>ñyāe<sup>nɛ/</sup></i>	"brightly, clearly" written <i>nyain</i> <a href="#">1.3.2</a>

*Ñyāe<sup>nɛ/</sup>* shows the characteristic distribution of a manner-adverb rather than a noun, appearing as complement of *àñ<sup>a</sup>* "be something" and as an adjunct:

<i>Wina'am a su'um nyain.</i>	"God is light." (1 Jn 1:5, 1996)
<i>Wínà'am áñ súm ñyāe.</i>	
God <b>COP</b> good: <b>ABSTR</b> brightly.	

<i>... kɛ ka ti lieb nyain.</i>	"... make us light." (1 Jn 1:7)
<i>... ké kà tì líàb ñyāe.</i>	
... cause and <b>1PL</b> become brightly.	

<i>... na nye lini nie nyain pamm</i>	
<i>... nà ñyē línì nìe ñyāe pāmm</i>	
... <b>IRR</b> see <b>REL.INAN</b> appear brightly much	
"...will see a great light" ["what appears very brightly"] (Mt 4:16, 1976)	

A number of manner-adverbs are formed by **reduplication of roots**.

<i>nà'anā<sup>+/</sup></i>	"easily"
<i>tò'ɔtɔ<sup>+/</sup></i>	"straight away" (Moore <i>taotao id</i> )
<i>kɔñ'ɔkɔ<sup>+</sup></i>	"solely, by oneself"

Reduplication of nouns forms a number of **distributive** manner-AdvPs:

<i>dàbɪsɪr dábɪsɪr</i>	"day by day"
<i>zĩñ'ig zĩñ'ig</i>	"place by place"

Reduplication of number words is similarly distributive [16.4.2.4](#).

Reduplication of manner-adverbs themselves is intensifying:

*àmēḡá mēḡá* "very truly"  
*àsídà sídà* "very truly"

*M̄ wúm Kūsáàl bī'əlá.* "I know Kusaal a little."  
**1SG** hear:**IPFV** Kusaal slightly,

*M̄ wúm bī'əl bī'əl.* "I understand a very little."  
**1SG** hear:**IPFV** little little.

A very common form of manner-AdvP is a relative clause using the proform *sī'əm*<sup>m</sup> "somehow" as head [28.2.2](#).

Manner-adverbs resemble generic mass nouns in their syntactic behaviour in several respects. Even count nouns in generic senses may be encountered as AdvPs:

*M̄ kēj nōbá.* "I went on foot." SB; WK corrected this to  
**1SG** go leg:**PL**. *M̄ kēj nē nōbá*, using *nē* "with."

A prepositional phrase with *nē* occurs parallel to a count plural used adverbially in

*À-ñyē nē nīf sǒñ'w̄* *À-wòm t̀̀ba.*  
**PERS**-see with eye:**SG** be.better.than **PERS**-hear ear:**PL**  
 "Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)

Mass quantifiers, like abstract mass nouns, are frequently used adverbially:

*Ò t̀̀m bédugō.* "She's worked a lot."  
*Ò t̀̀m pāmm.* "She's worked a lot."

*Wōsa* "all" readily switches from quantifying an object to adverbial use:

*Bà g̀̀sī t̀̀ tí wōsa.* "They've looked at us all." WK  
**3PL** look.at **1PL.OB** all. (for: *Bà g̀̀sí t̀̀ wōsa*. **3PL** look.at **1PL** all.)

This is not a universal property of quantifiers:

*Bà g̀̀sī tí bédugō.* "They've looked at us a lot." WK  
*Bà g̀̀sí t̀̀ bédugō.* "They've looked at a lot of us." WK

Numbers have specific forms for the adverbial meaning "so many times"

[16.4.2.4](#); the other count quantifiers sometimes appear similarly as adverbs:

*Bà gòsī tí bábıgā.* "They've looked at us many times." WK  
*Bà gòsı́ tì bábıgā.* "They've looked at many of us." WK

Manner AdvPs can be coordinated: so for example with *sī'əm* clauses [28.2.2](#).

## 17.5 AdvPs as verb arguments

The prototypical use of AdvPs is as adjuncts within the VP, or for time or circumstance AdvPs, as clause adjuncts:

*Fù dúə wēlá +ø?* literally "How did you rise?"; morning greeting.  
 2SG rise how CQ?

*Bēogú\_ fù ná kūl.* "You're going home tomorrow." SB  
 Tomorrow 2SG IRR return.home.

AdvPs also occur as verb arguments. All types can appear as subjects of the verb *àñ<sup>a</sup>* "be something /somehow" [21.2](#). Adjectival verbs may also have an AdvP subject, and there are a few examples with other verbs:

*Yıñ venl, ka poogin ka'a su'um.*  
*Yıñ véñl kà pūvgv-n kā' súmm +ø.*  
 Outside be.beautiful and inside:SG-LOC NEG.BE good:ABSTR NEG.  
 "Outside is beautiful but inside is not good." (Acts 23:3, 1996)

*Kristo da kpıi ti yela la ke ka ti bañ nōñılım an si'em.*  
*Kristo\_ø dà kpıi\_ tı yēlá lā ké kà tı bāñ nōñılım\_ø àñ sī'əm.*  
 Christ NZ TNS die 1PL about ART cause and 1PL realise love NZ COP INDF.ADV  
 "Christ dying for us makes us understand what love is like." (1 Jn 3:16)  
 (absolute clause AdvP [28.1](#) as subject)

In *Sùñā bé.* "OK it is." WK  
 Good:ADV EXIST.

*sùñā* is however used metalinguistically, meaning "the word *sùñā*."

The verb *àñ<sup>a</sup>* characteristically takes a manner-adverb or derived abstract noun complement in preference to an adjective [21.2](#).

Kusaal frequently uses manner-adverb proforms instead of pronouns with abstract reference as verb objects [20.2.1](#):

Ò nìḡí àlá. "She did that." ("thus")  
**3AN do ADV:thus.**

Relative clauses with the proform *sī'am*<sup>m</sup> "somehow" as head are accordingly used after verbs of cognition, reporting and perception, to express the subordinate interrogative sense "say [etc] what ..." [28.2.2](#).

Verbs with appropriate meanings frequently take locative AdvPs as complements, rather than as adjuncts [20.3](#). The verb *kā'ẹ* "not be" shows differing sandhi behaviour depending on the status of the AdvP [8.5.3](#).

## 17.6 Postpositions

Postpositions are adverbs with a predeterminer [16.10.3](#). Most are either literally or metaphorically locative. Postpositional phrases are AdvPs and can be preposed with *kà* [30.2](#) freely, unlike prepositional phrases with *nē*. Regardless of the definiteness of their predeterminers, postpositions continue to behave syntactically like generic non-count nouns, so that postpositional phrases as NP pre-dependents are modifiers rather than determiners [16.10.2.3](#).

Postpositions may not be coordinated, but their predeterminers may:

*tinam ne fun sɔvɔginɛ?* "between us and you?" (Mt 8:29)  
*tīnám nē fūn súbvū-né* +∅?  
**1PL with 2SG between-LOC PQ?**

Many postpositions are readily recognisable as special uses of ordinary nouns. Some postpositions are AdvPs including the locative particle.

*zūg*<sup>ɔ/</sup> "onto" (*zūg*<sup>ɔ/</sup> "head")

*téɛbùl lā zúg* "onto the table"

*Zūg*<sup>ɔ/</sup> is frequently used metaphorically to express a **reason** "because of ..."

*dāy lā zúg* "on account of the man"  
*bō-zúgò?* "why?" (cf *bō zúgō* "because" [24.1.3](#))

*Mán ñwè' dāy lā zúg kà police gbáñ'a\_m.*

**1SG:NZ strike man:SG ART upon and police seize 1SG.OB.**

"Because I struck the man the police arrested me." [28.1.2](#)

Although reason-AdvPs are, as here, frequently preposed with *kà*, they may occur as clause-level presubject adjuncts [25.1.1](#):

*Pian'akanε ka m pian' tisi ya la zug, ya anε nyain.*

*Pìǎñ'-kànı kà m̀ pìǎñ' ∅ tísì yā lā zúg, yà á nē ñyāe.*

Word-REL.SG and 1SG speak CAT give 2PL.OB ART upon, 2PL COP FOC brightly.

"Because of the the words I have spoken to you, you are clean." (Jn 15:3)

The set expression *sāa zúg*<sup>3</sup> is used for "sky"; it is intrinsically locative:

*Ka kukɔr yi saazug na ...*

*Kà kùkɔr yī sāa zúg nā ...*

And voice emerge rain onto hither

"And a voice came from heaven..." (Jn 12:28)

**zūgú-n<sup>ε</sup>**

"on"

*téebùl lā zúgū-n*

"on the table"

**tēḡír<sup>ε</sup>**

"under" (*tēḡ*<sup>a</sup> "ground")

*téebùl lā tēḡìr*

"under the table"

As a locative adverb without a predeterminer:

*Gòsim tēḡír!*

"Look down!", more commonly *Gòsim tēḡi-n!*

**pūvgū-n<sup>ε/</sup>**

"inside" (*pūvg*<sup>a</sup> "belly, inside")

*dūk lā pūvgū-n*

"in the pot"

*ñwādis yúòm lā pūvgū-n*

"months in the year" (metaphorical locative)

**bābá<sup>+</sup>**

"beside" (pl of *bābı*<sup>ε/</sup> "sphere of activity")

*m̀ nōbá bāba*

"beside my feet"

**sìsùvgū-n<sup>ε/</sup>**

"between" (replaced by *sùvgū-n<sup>ε/</sup>* in KB)

*tīnám nē fūn sísùvgū-n*

"between us and you"

**tùèn<sup>nɛ</sup>**

"in front of"

*dāká lā túèn*

"in front of the box"

cf *Gòsim túèn!*

"Look to the front", without a predeterminer

**gbìn<sup>nɛ</sup>**"at the bottom of" (*gbìn<sup>nɛ</sup>* "buttock")*zūer lā gbín*

"at the foot of the mountain"

**ñyá'an<sup>a</sup>**"behind; after (time)" (*ñyá'an<sup>a</sup>* "back")*lì ñyá'an<sup>a</sup>*"afterwards" as a presubject adjunct [25.1.1](#)*Nē'ηá ñyá'àη kà ò kūl.***DEM.DEI.INAN** after and **3AN** return.home.

"After this she went home."

**sā'an<sup>ɛ/</sup>**

"into/in the presence of", "in the opinion of"

*Wínà'am sá'àn*

"in the sight of God"

*Fò ná dī'e tìim pɹ'á-bàmmā lā sá'àn.***2SG IRR** receive medicine woman-**DEM.DEI.PL ART** among.

"You'll get the medicine from where those women are."

**yēlá<sup>+</sup>**"about, concerning" (pl of *yēl<sup>ɛ/</sup>* "matter, affair")*Bà yèl·ō\_ ø mān yēlá wōsa.***3PL** say **3AN.OB 1SG.CNTR** about all

"They told him all about me."

**kōñ'ɔkō**cf *àdàkóñ'* "one" [16.4.2.2](#)*m̀ kōñ'ɔkō*

"by myself"



## 17.7 Proadverbs

Adverbs have corresponding proforms.

	<u>Demonstrative</u>		<u>Indefinite</u>		<u>Interrogative</u>
Place	<i>kpē</i> <sup>+</sup>	"here"	<i>ziñ'-sīa</i> <sup>+</sup>		<i>yáa ní</i> <sup>+</sup> "where?"
	<i>kpēlá</i> <sup>+</sup>	"there"	"somewhere"		<i>yáa</i> "whither
	<i>àní</i> <sup>+</sup>	"there"			/whence?"
	<i>àínā</i> <sup>+/</sup>	"there"			
Time	<i>nānná</i> <sup>+</sup>	"now"	<i>sān-sí'a</i> <sup>+</sup>		<i>sān-kán</i> <sup>ε</sup> "when?"
	<i>nānná-nā</i> <sup>+/</sup>	"now"	"sometime"		<i>būn-dáàr</i> <sup>ε</sup> "which day?"
	<i>sān-kán</i> <sup>ε</sup>	"then"			<i>bò-wìn</i> <sup>nε</sup> "what time of day?"
Manner	<i>àñwá</i> <sup>+</sup>	"like this"	<i>sī'əm</i> <sup>m</sup>		<i>wēlá</i> <sup>+</sup> "how?"
	<i>àwá nā</i> <sup>+/</sup>	"like this"	"somehow"		
	<i>àlá</i> <sup>+</sup>	"like that"			

The indefinites are used in relative clauses [28.2.2](#).

The *à-* of the "manner" forms is the manner-adverb prefix and is preceded by the LF-final vowel *-i* [8.2.2](#); contrast proquantifiers [16.4.3](#).

Proforms expressing reason are formed with the postposition *zūg*<sup>ɔ</sup> [17.6](#):  
*àlá zùg*<sup>ɔ</sup> "because of that", *bōzúgò?* "why?" (cf *bō zúgō* "because" [24.1.3](#).)

## 18 Prepositions

Prepositional phrases function typically as clause adjuncts, but sometimes as VP complements [20.4](#). They cannot form components of noun phrases. Neither prepositions, nor their objects, can be coordinated. For prepositions used as conjunctions see [24.1.3](#).

### 18.1 Simple

*nē* is "with" in both the "accompanying" and instrumental senses. The *nē* "and" which coordinates NPs and AdvPs [16.7](#) is presumably fundamentally the same word, although in that sense it is parallel in usage to *bēε* and *kōv* "or", which do not behave as prepositions. Unlike other prepositions, *nē* may only take NPs as complements, including nominalised *ñ*-clauses, but excluding content clauses; it cannot function as a conjunction.

WK has forms of *nē* with bound personal pronouns:

<i>ní m<sup>a</sup></i>	<i>ní tī<sup>+/</sup></i>
<i>ní P</i>	<i>ní yā<sup>+/</sup></i>
<i>n-ó<sup>o</sup> [nǒ(:)]</i>	<i>ní bā<sup>+/</sup></i>
<i>ní lī<sup>+/</sup></i>	

The *ne o* of the 1996 NT version is frequently read [nǒ] in the audio version.

Other speakers only use *nē* with free pronouns; WK has alternative forms also with *né* before those clitic pronouns which have a vowel in SF: *né lì*, *né tì*, *né yà*, *né bà*, with the pronouns having L toneme throughout; SB has the same forms. The H toneme on the preposition in WK's forms with *ní* is difficult to explain; compare perhaps the tonemes of Pattern H 2-mora stem verbs before object pronouns [7.3.1](#).

Examples for *nē*:

*Lìgúním\_ fù nīf né fù nú'ùg.*

Cover:IMP 2SG eye:SG with 2SG hand:SG.

"Cover your eye with your hand."

*Bà kèŋ nē nōbá.*

"They've gone on foot." WK

3PL go with leg:PL.

*Dìm nē Wīn, dā tú'às nē Wīnné †∅.*

Eat:IMP with God:SG, NEG.IMP talk with God:SG NEG.

"Eat with God, don't talk with God."

(Proverb. Be grateful for God's generosity and don't complain.)

*Kulim ne sumbugusum.*

*Kùlim nē sùmbūgusím.*

Return.home:IMP with peace.

"Go home in peace." (Mk 5:34)

*[Bárìkà né fù] kēn kēn.*

[Blessing with 2SG ] arrival arrival.

"Welcome!" (a greeting template 31)

*M̄ géñ' né fù.* "I'm angry with you." SB

1SG get.angry:PRV with 2SG.

**wōv** "like" occurs often after *wēn*<sup>na/</sup> "resemble" introducing its complement; the preposition *nē* also frequently occurs instead of *wōv*.

The object of comparison, whether introduced by *wōv* or by *nē* after *wēn*<sup>na/</sup>, is followed by an empty particle *nē* after any object which does not already have the article *lā*<sup>+/</sup>, even if it is a pronoun, or is specific:

*wōv mān nē* "like me"

*wōv búŋ nē* "like a donkey"

*Ka o nindaa wenne nintāŋ ne.*

*Kà ò nīn-dáa wēn nē nīntāŋ nē.*

And 3AN eye-face:SG resemble with sun:SG like.

"His face is like the sun." (Rev 10:1, 1996)

*Alazugɔ mɔri ya'am wov wiigi ne...*

*Àlá zùgɔ, m̀rī yā'm wōv wīigí nē...*

Therefore, have sense like snake:PL like...

"Therefore, be wise as serpents ..." (Mt 10:16)

*Wōv*, *wēn wōv*, and *wēn nē* can also be used for "about" with numbers. The object is not followed by the redundant *nē* in this case:

*wōv tūsá àyí* "about 2000"

like thousand:PL NUM:two

The object of a comparison is often a *sī'am* relative clause:

Ò zòt wōv búŋ ò zòt sī'am lā.

**3AN** run:IPFV like donkey:SG **NZ** run:IPFV **INDF.ADV** **ART**.

"He runs like a donkey runs."

With pronoun objects WK has

wōv mān LF mánē

wóv tì

wōv fōn LF fúnē

wóv yà

wōv ɔn<sup>ε</sup>

wóv bà

wóv ò

H toneme again appears before the fixed-L pronouns.

WK permits phrases introduced by *wōv* to be preposed with *kà* [30.2](#), but rejects this construction for *nē* + NP:

Wōv búŋ né kà ò zòt.

Like donkey:SG like and **3AN** run:IPFV.

"Like a donkey, he runs."

but \*Né m̀ nú'ùg kà m̀ sī'ɪs.

With **1SG** hand:SG and **1SG** touch.

is not possible for "With my hand, I touched it."

A clausal object of *wōv* is typically a relative clause with *sī'am* [28.2.2](#), but *wōv* can also be construed with a following content clause, i.e. as a conjunction [24.1.3](#):

*M pian'adi tisidi ya wov ya ane m biis ne.*

M̀ pɪán'adī\_ø tísìdī\_ yá wōv yà á né m̀ bīs nē.

**1SG** speak:IPFV **CAT** give:IPFV **2PL.OB** like **2PL COP FOC 1SG** child:PL like.

"I talk to you as if you were my children." (2 Cor 6:13)

**àséé**<sup>≠</sup> is "except for" (← Hausa *sai*)

àséé Wínà'am

"except for God" (calquing the Twi *gye Nyame*)

For pronoun objects the free forms are used.

**Àséé**<sup>≠</sup> also occurs commonly as a conjunction [24.1.3](#).

***hālí***<sup>+</sup> means "up to and including"; cf Hausa *har*, but this is a word found extremely widely in the savanna and Sahel; it may ultimately derive from Arabic حتى *ḥatta*: (Heath 2005.)

*O daa pun anε ninkuud hali pin'ilugun sa.*

*Ò dāa pún à nē nīn-kúúð hālí pīñ'ilúgū-n sá.*

**3AN TNS** previously **COP FOC** person-killer:**SG** even beginning:**SG-LOC** since.

"He was a murderer from the beginning." (Jn 8:44)

For pronoun objects, the free forms are used.

*Hālí*<sup>+</sup> can also appear as a conjunction [24.1.3](#), before catenator-*n* [23.4](#), and as an Emphatic [30.6](#).

Before a manner-adverb *hālí* means "even" or just "very"

*Lì tẹ hālí bédugū.* "It's very difficult."

**3INAN** be.bitter until much.

The adverb itself may be ellipited:

*Lì tẹ hālí.* "It's very difficult."

*Hālí* in the adverbial sense "even" may be preposed with *kà* [30.2](#):

*Hali ka nidib mɔr ban'adnam na.*

*Hālí kà nīdɪb mɔr bāñ'àd-nàm nā.*

Even and person:**PL** have sick.person-**PL** hither.

"People even brought the sick" (Acts 5:15)

## 18.2 Complex

***Wēn nē*** *X* and ***wēn wūu*** *X* have become prepositional phrases, to the extent that the entire sequence *wēn* + preposition + object can be preposed with *kà* [30.2](#), and a change of polarity can occur before it:

*Da lo ya nindaase, wenne foosug dim la niɲid si'em la.*

*Dā ló yà nīn-dáasē +∅, wēn nē fɔʊsúg díɱ lá\_ ∅*

**NEG.IMP** tie **2PL** eye-face:**PL** **NEG**, resemble with puff:**GER** individual.**PL** **ART** **NZ**

*niɲid sī'əm lā.*

do:**IPFV** **INDF.ADV** **ART**.

"Don't screw up your faces like the hypocrites do." (Mt 6:16, 1976)

The compound preposition **là'am nē** "together with" derives from a VP-chaining construction [23.3.2](#):

*...mōr ya'am yinne la'am nē tēn'esa yinne.*

*... mōr yā'm yīnní là'am nē tēñ'esá yīnní.*

... have sense one together with thought one.

"... had one mind together with one thought." (Acts 4:32)

**Hālí nē** and **hālí là'am nē** are found before *ḥ*-clauses with the meaning "despite, even though":

*hali nē man daa sōbi tisi ya si'em la, m daa pu sōbi li*

*hālí nē mán dāa sōbi\_ø tísì\_yā sī'ə́m lā*

even with **1SG:NZ TNS** write **CAT** give **2PL.OB INDF.ADV ART**

*m̄ dāa pū sōbíl\_lī ...*

**1SG TNS NEG.IND** write **3INAN.OB ...**

"Though I wrote to you like that, I did not write it ..." (2 Cor 7:12)

*Hali la'am nē on daa an yelsum wusa daan la, o da lieb nōḡdaan...*

*Hālí là'am nē ón dāa áñ yēl-súm wūsa dáàn lā,*

Even together with **3AN:NZ TNS COP** matter-goodness all owner:**SG ART**,

*ò dà liəb nōḡ-dáàn...*

**3AN TNS** become poverty-owner:**SG...**

"Although he possessed every blessing, he became poor..." (2 Cor 8:9)

## 19 Verbal predicators

### 19.1 Structure

The core of the Kusaal verb phrase is a verbal predicator, consisting of a verb word along with clitics which, along with verb flexion, mark tense, aspect, mood and polarity. Other clitics which are also phonologically dependent on the VPred are described in this section [19.7](#), although they are not part of the VPred syntactically. They comprise preverbs, a heterogeneous group of words expressing notions like repetition and sequence of events, which immediately precede the verb itself, and enclitic pronouns following the verb, comprising the enclitic 2pl subject pronoun and all the non-contrastive personal pronoun objects.

The VPred is subject to independency marking [19.6](#). This is primarily a tone overlay, but there are associated segmental features: the particle  $yā^+$  after phrase-final perfective forms and the variable-verb imperative flexion  $-m^a$  appear only when the tone overlay is present.

The system cleanly separates tense, marked by proclitic particles, from aspect, primarily marked by verb flexion. As is common cross-linguistically, future reference is marked by *mood*. Negative markers vary with mood. Mood itself is marked primarily by such preverbal particles, but the flexion  $-m^a$  of variable verbs is a portmanteau marker of imperative mood, positive polarity and independency.

The VPred shows no agreement. Apparent number agreement in imperatives is actually due to the incorporation of the postposed 2nd pl subject pronoun  $ya$ .

The VPred thus consists of a single verb word, along with proclitic and enclitic particles which occur in a fixed order:

	Tense		Mood	Preverb		LE1	LE2
<i>lèε</i>	<i>dàa</i>	<i>nàm</i>	$\emptyset \leftrightarrow p\bar{u}$	<i>pòn</i>	VERB	$n^\varepsilon$	$m^a$
	<i>sàa</i>		$\emptyset \leftrightarrow d\bar{a}$	<i>lèm</i>		$ya$	$f^\rho$
	$\emptyset$		$n\grave{a} \leftrightarrow k\grave{u}$	<i>tì</i>			$o$
	<i>pà'</i>			<i>kpèlɪm</i>			$lɪ^+$
	<i>sà</i>			<i>là'am</i>			$tɪ^+$
	<i>dāa</i>			<i>dèŋɪm</i>			$ya^+$
	<i>dà</i>			<i>ñyēε(tɪ)</i>			$ba^+$
				...			

All elements other than the verb are optional; however, the  $\emptyset$  marks places where the absence of any particle from a particular column can be contrastive.

The particles in the column "Mood" also mark polarity: positive  $\leftrightarrow$  negative.

LE1, LE2 are liaison enclitic slots [19.7.3](#).

For *lèè* "but" see [19.7.1](#); for *nàm* "still" see [19.3](#).

Verbs of the majority "variable" type mark aspect by flexion [11.1](#).

Tone Pattern LO verbs have all-M tones in the irrealis mood [7.3](#).

## 19.2 Aspect

Like a great many West African languages, Kusaal has a verbal system dominated by aspect rather than tense. The basic distinction is **perfective** versus **imperfective**, with imperfective further subdivided into **dynamic** and **stative**. Variable verbs distinguish aspects by flexion: the unmarked stem form is perfective, the suffix *\*-da* forms a dynamic (not stative) imperfective, and a form with *\*-ma* is used for imperative when the verb word itself carries the independency-marking tone overlay [11.1 19.6.1.1](#). Invariable verbs have a single form which is either dynamic or stative imperfective as a lexical matter.

Directly following a verb with imperfective aspect, with no words other than liaison enclitics intervening, the **VP focus particle** *nĕ<sup>+/</sup>* [30.1.2](#) may limit the VPred time reference or mark a contrast with another time at which the situation expressed by the verb did not obtain; the meaning might be paraphrased "at the time referred to in particular." With dynamic imperfectives this marks a distinction analogous to the difference between English "progressive" (with *nĕ<sup>+/</sup>*) and "habitual" (without *nĕ<sup>+/</sup>*) aspects. After perfectives which express a change of state in the subject, *nĕ<sup>+/</sup>* typically occurs when there is a **resultative** sense.

The focus particle *nĕ<sup>+/</sup>* may not be used at all in certain syntactic contexts, and may not appear a second time in a temporal sense if it is already present focussing a constituent; the corresponding VPred distinctions are then unmarked [30.1.2.1.1](#). The temporal use of *nĕ<sup>+/</sup>* is possible only with VPreds having positive polarity and indicative mood; otherwise the corresponding meaning differences may occur, but are again unmarked. Passive constructions always have meanings incompatible with the temporal use of *nĕ<sup>+/</sup>*. After perfectives the temporal use of *nĕ<sup>+/</sup>* is only possible if the verb expresses a change of state in the subject. See further [30.1.2.1.2](#).



### 19.2.1 Perfective

The perfective is the least marked and most neutral of the aspects, being appropriate whenever there is no progressive, habitual or stative sense. It is thus not comparable to the marked perfective aspect of Russian, and in particular it is not incompatible with a present tense interpretation. It may correspond to the English "simple present" (when this is not habitual), which is likewise unmarked over against the progressive form. The perfective of verbs which express a change of state in the subject may have a *resultative* meaning. Perfective is the usual aspect found with the irrealis mood to express future events. Nevertheless, in contexts where there is no tense marking, perfective often does have an implication of *completion*, in contrast with the imperfective.

In fact, the perfective often does occur without tense marking, either explicit or implicit from context [19.3.4](#). With most verbs this straightforwardly expresses a completed event or process where the time is unspecified, resembling the English "present perfect." As with the English tense/aspect, this very absence of time specification creates the implication that the event is still currently relevant:

Ò *k̀p̀ì yā.* "She's died."  
 3AN die PFV.

*Sāa dāa ní.* "It rained." (before yesterday.)  
 Rain TNS rain.

*Sāa pá' nì yā.* "It rained." (earlier today.)  
 Rain TNS rain PFV.

but *Sāa ní yā.* "It has rained."  
 Rain rain PFV.  
 The time is unspecified: "Perhaps the grass is still wet, or I am explaining that the area is not really a desert." (WK)

Other events and processes can be conceptualised as being simultaneous with the moment of utterance, so that the perfective is appropriate. This resembles the English use of the simple present as an **instantaneous present**:

Ò *yèl yē ...* "He says ...." (translating for the foreign doctor)  
 3AN say that ...



<i>M̄ géñ nē.</i> 1SG get.tired FOC.	"I'm tired."
<i>M̄ géñ' nē.</i> 1SG get.angry FOC.	"I'm angry."
<i>Bà kòduḡ nē.</i> 3PL grow.old FOC.	"They're old."
<i>Lì b̀̀dɪḡ nē.</i> 3INAN lose FOC.	"It's lost."
<i>Ò wàbilim nē.</i> 3AN lame FOC.	"She's lame."
<i>Ò gèèñm nē.</i> 3AN madden FOC.	"She's mad."
<i>Lì pè'ei nē.</i> 3INAN fill FOC.	"It's full."
<i>Lì ỳ̀ nē.</i> 3INAN close FOC.	"It's closed."
<i>M̄ búḡ nē.</i> 1SG get.drunk FOC.	"I'm drunk." [calque/borrowing of Hausa <i>b̀̀gu</i> ]

There is probably always an implication of a prior change of state, though this is not always clear in WK's glosses, e.g.

<i>Ò l̀̀r nē.</i> 3AN get.ugly FOC.	"He's ugly."
<i>Lì p̀̀lḡ nē.</i> 3INAN whiten FOC.	"It's white."
<i>Lì s̀̀bɪḡ nē.</i> 3INAN blacken FOC.	"It's black."
<i>Lì mù'ə nē.</i> 3INAN redden FOC.	"It's red."

Most verbs expressing a change of state in the subject are intransitives like *kpi*<sup>+</sup> "die" or patientive ambitransitives [20.1](#) like *b̀̀dɪg*<sup>ε</sup> "lose, get lost." The only agentive transitive verbs I have found in this category express putting on clothing:

*M̃ yé fūug.* "I've put a shirt on."  
**1SG** put.on shirt:**SG**.

*M̃ yé nē fūug.* "I'm wearing a shirt."  
**1SG** put.on **FOC** shirt:**SG**.

Only verbs expressing a change of state in the subject can use the perfective in a resultative meaning. After other perfectives, *nē*<sup>+/</sup> cannot have a temporal meaning, and must be interpreted as focussing a VP constituent or the entire VP [30.1.2.1.2](#).

In VP chaining and in complex clauses, the choice of perfective over imperfective implies that the event is complete. Consequently, in VP chaining the order of VPs when the first has perfective aspect is iconic, with constituent order constrained to follow event order [23.1](#). Thus while English might say: "Two men stood with them, dressed in white", Kusaal must have

*Ka dapa ayi' yε fupiela zi'e ba san'an.*  
*Kà dāpá\_ àyí yé fū-píalà\_ ø zì'e bà sā'an.*  
 And man:**PL** **NUM**:two dress shirt-white:**PL** **CAT** stand **3PL** among.  
 "Two men dressed in white were standing with them." (Acts 1:10)

In contrast, an imperfective may be followed by a perfective:

*Ñwāɖsá\_ àtán' kà fù ná mōr bīg lā n kē nā.*  
 Month **NUM**:three and **2SG** **IRR** have child:**SG** **ART** **CAT** come hither.  
 "Bring the child here in three months." ("having the child, come here.")

With absolute clauses as presubject adverbs expressing past "when" the temporal relationship to the main clause is determined by aspect, with a perfective in the absolute clause implying priority and an imperfective simultaneity [28.1.1](#). In the same way, narrative generally features chains of tense-unmarked sequential clauses [25.3.2](#) with perfectives describing events strictly in order.

## 19.2.2 Imperfective

### 19.2.2.1 Dynamic

The imperfective of variable verbs is marked by the flexion *\*-da* [11.1](#); it is normally dynamic. The single finite form of invariable verbs is dynamic imperfective or stative, as a lexical matter in each case [11.2](#).

The dynamic imperfective can be followed by the particle *nē<sup>+/</sup>* in its temporal sense "at the time referred to in particular."

Without *nē<sup>+/</sup>*, this aspect implies that the subject has a propensity to the achievement, accomplishment or activity expressed by the verb (often called "habitual aspect"):

*Ò òñbɪd.* "He chews."  
3AN chew:IPFV.

*Nɪdɪb kpîd.* "People die."  
Person:PL die:IPFV.

*Niigí òñbɪd mɔɔd.* "Cows eat grass."  
Cow:PL chew:IPFV grass:PL.

*Niigí òñbɪd nē mɔɔd.* "Cows eat grass." ("What do cows eat?")  
Cow:PL chew:IPFV FOC grass:PL. Temporal *nē<sup>+/</sup>* is not possible with a generic subject: Constituent focus [30.1.2.2](#).

*Niigí lā óñbɪd mɔɔd.* "The cows eat grass."  
Cow:PL ART chew:IPFV grass:PL.

*Niigí lā óñbɪd mɔɔd lā.*  
Cow:PL ART chew:IPFV grass:PL ART.  
"The cows eat the grass."

*Nā'-síbà óñbɪd mɔɔd.* "Some cows eat grass."  
Cow-INDF.PL chew:IPFV grass:PL.

*Nā'-síbà óñbɪd mɔɔd lā.*  
Cow-INDF.PL chew:IPFV grass:PL ART.  
"Some cows eat the grass."

*Ṃ zĩñ'i.* "I sit."  
**1SG** be.sitting.

*Ṃ záñl dāká lā.* "I carry the box in my hands."  
**1SG** carry.in.hands box:**SG** **ART**.

With *nē<sup>+/</sup>*, the dynamic imperfective typically has a meaning analogous to the English "progressive" or "continuous."

*Ò òñbɪd nē.* "He's chewing."  
**3AN** chew:**IPFV** **FOC**.

*Ṃ zĩñ'i nē.* "I'm sitting."  
**1SG** be.sitting **FOC**.

*Ṃ záñl nē dāká lā.*  
**1SG** carry.in.hands **FOC** box:**SG** **ART**.  
 "I'm carrying the box in my hands."

As with the English progressive, the sense with verbs describing events rather than processes is typically "time-limited habitual." The plural subject without the article *lā<sup>+/</sup>* [16.5](#) contributes to making this the natural interpretation in

*Nīdɪb kpîd nē.* "People are dying."  
 Person:**PL** die:**IPFV** **FOC**.

### 19.2.2.2 Stative

The single imperfective finite form of an **invariable verb** may have stative aspect as a lexical matter [11.2](#).

*Ò gìm.* "She's short."  
**3AN** be.short.

*Lì zùlm.* "It's deep."  
**3INAN** be.deep.

*Ṃ mór pɥ'ā.* "I have a wife."  
**1SG** have wife:**SG**.

*M̄ bɔ́ɔdī f.* "I love you."  
**1SG want 2SG.OB.**

In English, "stative" verbs characteristically do not use the progressive aspect: "I have a car", not \*"I am having a car." Kusaal stative verbs similarly do not usually appear with the particle *nē<sup>+/-</sup>* in its temporal sense:

*M̄ mɔ́r lór.* "I have a car."  
**1SG have car:SG.**  
 not \**M̄ mɔ́r nē lór.*

Stative verbs express abiding/intrinsic relationships or predicative adjectival senses, and by default if the particle *nē<sup>+/-</sup>* follows such a verb it is interpreted as *focussing* either a VP constituent or the VP as a whole; *nē<sup>+/-</sup>* can only be temporal if there is an explicit time reference in the clause itself [30.1.2.1.2](#) or if the following constituent does not permit focussing with *nē<sup>+/-</sup>* [30.1.2.1.3](#).

## 19.3 Tense

### 19.3.1 Preverbal tense particles

Tense particles come first in the VPred, preceded only by *l̄ɛɛ* "but." They are mutually exclusive. The markers are

<i>dàa</i>	"day after tomorrow"
<i>sàa</i>	"tomorrow"
$\emptyset$	present, or unmarked <a href="#">19.3.4</a>
<i>pà'</i>	"earlier today"
<i>sà</i>	"yesterday"
<i>dāa</i>	before yesterday
<i>dà</i>	before the time marked by <i>dāa</i>

The day begins at sunrise. Thus the common morning greeting:

*Fù sá gbìs wēlá<sup>+∅?</sup>* "How did you sleep yesterday?" i.e. "last night"  
**2SG TNS sleep how CQ?**

The future tense markers require irrealis mood, except for cases where the main clause has been ellipted before a subordinate clause of purpose; in this case the verb may have future tense marking with the imperative mood:

Ò *sáa zàb nà'ab lā.* "Let him fight the chief tomorrow."  
**3AN TNS** fight chief:**SG ART**.

The tense particle *dāa* means "before yesterday" but can be used freely for even remote past. Some speakers seem not to use *dà* at all; the NT has numerous parallel passages where the same events are narrated in one passage with *dāa* and in another with *dà*. When both markers occur, *dà* always expresses time prior to *dāa*. ("Pluperfect" meanings also arise with unaltered tense markers in indirect speech [26.3.2](#), and tense marking in *ñ*-clauses within sequential clauses [25.3.2](#).)

The auxiliary tense particle *nàm* means "still" or with a negative "yet." It can occur after the tense marker  $\emptyset$ :

*Tìum lā nám bèε +∅?* "Is there any medicine left?"  
 Medicine **ART** still **EXIST PQ?** ("Does the medicine still exist?")

*dunia nam pu pin'il la*  
*dūnyá\_∅ nàm pō pīñ'il lā*  
 world:**SG NZ** still **NEG.IND** begin **ART**  
 "before the world began" (Mt 25:34) ("The world having not yet begun.")

*M nám zī'\_ ∅ ñyē gbīgimne +∅.*  
**1SG** still **NEG.KNOW CAT** see lion:**SG** **NEG.**  
 "I've never seen a lion." SB (see [23.3](#) on VP-chaining idioms)

### 19.3.2 Discontinuous past

My informants use the **discontinuous-past** marker  $n^E$  to make an earlier-today past with indicative meaning:

*M ãñbidī-n sūmma.* "I was eating groundnuts."  
**1SG** chew:**IPFV-DP** groundnut:**PL**.

This implies "and now I'm not", a sort of anti-current-relevance. Such a "discontinuous" past is proposed for many languages (especially in West Africa) in Plungian and van der Auwera 2006. The clitic  $n^E$  fulfils the authors' criteria well as a typical manifestation of discontinuous past, unlike the preverbal tense particles, which are not "idle" (in their term) but *required*, except in quite well defined syntactic circumstances [19.3.4](#). They note (5.2) that discontinuous-past markers often acquire attenuative, hypothetical or counterfactual senses, and in Kusaal this is much the commonest function of  $n^E$  [27.1.1](#).



### 19.3.3 Periphrastic future constructions

Kusaal does not use tense-unmarked indicative imperfectives for immediate future (like English "I'm going home.") The common expression at leave-taking

*M̐ kúl yā.* equivalent in usage to "I'm going home."  
**1SG return.home PFV.**

instead uses a perfective verb form as an instantaneous present [19.2.1](#).

There are two periphrastic indicative constructions for "to be about to ...":

(a) *bɔ̀ɔd*<sup>a</sup> "want" + gerund. The subject need not be animate.

*Tìɪg lā bɔ̀ɔd līg.* "The tree is about to fall."  
**Tree:SG ART want fall:GER.**

*Yú'ɔɲ bɔ̀ɔd gaadɔg, ka bɛog bɔ̀ɔd nier.*  
*Yú'ɔɲ bɔ̀ɔd gaadùg kà bɛog bɔ̀ɔd níàr.*

Night want pass:GER and morning want appear:GER.

"The night is about to pass and tomorrow is about to appear." (Rom 13:12)

This construction is only possible with gerunds from variable and dynamic-invariable verbs, which can be interpreted as expressing an event or process.

(b) using the construction subject + *yē*-purpose clause. (Compare subject + *yē*-content clause [26.3](#).) This construction does require an animate subject.

*M̐ yé m̐ kɪā sūmma.* "I'm going to hoe groundnuts."  
**1SG say 1SG hoe groundnut:PL.**

*M̐ yé m̐ kɪá nīm.* "I'm going to cut meat"  
**1SG say 1SG cut meat:SG.**

### 19.3.4 Implicit tense marking

Tense markers are frequently absent. As a basic principle, explicit marking is not needed when the time reference is recoverable from the linguistic context. However, the occurrence of tense markers is not arbitrary, and in some contexts the past tense markers contrast with  $\emptyset$ .

Real-world context does not in itself licence omission of tense markers. If there is no other time-referring element in the clause, the absence of any tense particle is meaningful. By default, it naturally simply means that the tense is present:

*Nīdɪb kpîd nē.* "People are dying."  
 Person:PL die:IPFV FOC.

*Nīdɪb kpîd.* "People die."  
 Person:PL die:IPFV.

*Ṁ zĩñ'i nē.* "I'm sitting down."  
 1SG be.sitting FOC.

*Ò gìm.* "She's short."  
 3AN be.short.

*Ṁ mór pụ'ā.* "I have a wife."  
 1SG have wife:SG.

In isolation, it is not possible to construe expressions like these as past. With perfective aspect, similarly, the sense without an explicit context must be resultative present, perfective-present or instantaneous present [19.2.1](#):

*Ò kpì nē.* "She's dead."  
 3AN die FOC.

*Ò kpì yā.* "She's died."  
 3AN die PFV.

*Ò yèl yē ...* "He says ..." (translating for the foreign doctor)  
 3AN say that ...

*Ṁ pú'ùs yā.* "(I) thank you." cf Hausa *Naa goodèe*.  
 1SG greet PFV.

*Ṁ sjàk yā.* "I agree."  
 1SG agree PFV.

*Ṁ ñyé nū'-bíbisá\_ àtáñ'.* "I can see three fingers."  
 1SG see hand-small:PL NUM:three.

*Ṁ téñ'ès kà ...* "I think that ..."  
 1SG think and ...

Tense-markers can, however, be omitted if there is another time reference in the clause itself, such as a time adverb, or with the irrealis mood, or with the today-past usage of discontinuous-past *n<sup>ε</sup>*:

*M̐ sá zàb ná'àb lā sù'ès.*

**1SG TNS** fight chief:**SG ART** yesterday.

and *M̐ záb ná'àb lā sù'ès.*

**1SG** fight chief:**SG ART** yesterday.

both acceptable as "I fought the chief yesterday."

*Fù sáa nà kūl.*

**2SG TNS IRR** return.home.

and *Fù sáa nà kūl bēog.*

**2SG TNS IRR** return.home tomorrow.

and *Fù nà kūl bēog.*

**2SG IRR** return.home tomorrow.

... all acceptable for "You'll go home tomorrow."

cf *Fù ná kūl.*

**2SG IRR** return.home.

"You will go home." (later today, tomorrow, next week ...)

*M̐ pá' òñbídī-n sūmma.*

**1SG TNS** chew:**IPFV-DP** groundnut:**PL**.

and *M̐ óñbídī-n sūmma.*

**1SG** chew:**IPFV-DP** groundnut:**PL**.

"I was eating groundnuts earlier today."

(today-past sense of discontinuous-past *n<sup>ε</sup>*)

Systematic meaningful omission of past tense markers occurs in the sequential clauses characteristic of narrative. In narrative clauses with perfective aspect preceded by *kà*, omission of past tense marking signifies that the event described in the clause follows in temporal sequence from what precedes, and explicit tense marking signals an interruption for asides, flashbacks, descriptions etc [25.3.2](#).

## 19.4 Mood

There are three moods: indicative, imperative and irrealis. The distinction among them is in itself quite straightforward, but the *marking* of mood involves portmanteau morphs which also express polarity, and in the case of the imperative, independency as well.

**Indicative** is the unmarked mood. It uses the negative particle *pō*. It is used for statements and questions about the present and past, and timeless events and states. It can express immediate future in periphrastic constructions [19.3.3](#). It is used instead of the irrealis in clauses with *yà* 'if', though with some exceptions in negative polarity [27.1](#). It is the only mood which permits the use of the particle *nē*<sup>+/</sup> with temporal meaning.

**Imperative** mood is negated by *dā*. With variable verbs carrying the independency-marking tone overlay it shows a special inflection *-m<sup>a</sup>* [19.6.2.2](#) but otherwise the verb word coincides in form with the indicative.

*Ò vùl tìim kà ò nóbìr pō zábē +∅.*

**3AN** swallow medicine and **3AN** leg:SG **NEG.IND** fight **NEG.**

"She took medicine and her leg didn't hurt." WK

*Ò vùl tìim kà ò nóbìr dā zábē +∅.*

**3AN** swallow medicine and **3AN** leg:SG **NEG.IMP** fight **NEG.**

"She took medicine so her leg wouldn't hurt." WK

Note that the clause introducer particle *kà* permits either construction [26.1](#). The *-m<sup>a</sup>* imperative of variable verbs is perfective by default:

*Kòñsım!*

"Cough!"

Imperatives without independency-marking tone overlay make perfective/imperfective distinctions in the usual way by verb flexion:

*Dā kóñsē +∅!*

"Don't cough!"

**NEG.IMP** cough **NEG!**

(To a patient during an eye operation under local anaesthetic, who just has coughed.)

*Dā kóñsídā +∅!*

"Don't cough!"

**NEG.IMP** cough:IPFV **NEG!**

(Explaining before the operation what to avoid throughout)

Whether or not it carries the distinctive *-m<sup>a</sup>*, imperative mood is followed by the enclitic 2pl subject pronoun <sup>ya</sup> in direct commands to several people [25.2.3](#).

The particle *nē<sup>+/</sup>* cannot appear in its temporal sense with the imperative, but *àlá* "thus" after imperatives imposes continuous/progressive meaning:

*Dìm!* "Eat!"  
*Dìmí àlá!* "Carry on eating!"

Informants contract the *-í-à-* in these forms to either *-í-* or *-á-* [dìmíla] [dímala]

*Dìmī-ní\_ àlá!* "Keep ye on eating!" [dìmíníla] [dímínala]  
 Eat:IMP-2PL.SUB ADV:thus!

*Kùəsimī-ní\_ àlá kī n tísídī\_ bá.*  
 Sell:IMP-2PL.SUB ADV:thus millet CAT give:IPFV 3PL.OB.  
 "Keep ye on selling millet to them."

Invariable verbs used as imperatives frequently add *àlá*:

*Dìgí àlá!* "Keep on lying down!" [dìgíla] [dígala]  
*Zì'é àlá!* text *zi'ela* "Be still!" (Jesus to the storm, Mk 4:39, 1976)

*Dìgī-ní\_ àlá!* "Keep (ye) on lying down." [dìgíníla] [dígínala]  
 Be.lying.down-2PL.SUB ADV:thus!

*Āa-ní\_ àlá bāańlím!* "Be (ye) quiet!"  
 COP-2PL.SUB ADV:thus quiet:ABSTR!

*Bēe-ní\_ àlá ànínā!* "Be ye there!"  
 EXIST-2PL.SUB ADV:thus ADV:there!

Imperative mood is used in direct commands and prohibitions and in subordinate clauses expressing purpose. Imperative mood also follows another imperative in VP chaining.

*Gòsim!* "Look!"  
 Look:IMP!

*Gòsimī\_ ∅!* "Look ye!"  
 Look:IMP 2PL.SUB!

<i>Dā</i> <i>gōsɛ</i> +ø! NEG.IMP look NEG!	"Don't look!"
<i>Kèl</i> <i>kà</i> <i>ò</i> <i>gōs!</i> Cause:IMP and 3AN look!	"Let her look!"
<i>Kèm</i> <i>nā</i> <i>n</i> <i>gōs!</i> Come:IMP hither CAT look!	"Come and look!"
<i>Dò!</i> Follow!	"Follow!"
<i>Dòllī</i> <i>ø!</i> Follow 2PL.SUB!	"Follow ye!"
<i>Dòllī</i> <i>m!</i> Follow 1SG.OB!	"Follow me!"
<i>Dòllī-ní</i> <i>m!</i> Follow-2PL.SUB 1SG.OB!	"Follow ye me!"
<i>Mòr</i> <i>nīn-báalìg!</i> Have eye-pity!	"Have pity!"

**Irrealis** mood expresses future statements and questions and has the preverbal mood markers *nà* (positive) *kù* (negative.) Tone Pattern LO verbs show a tone perturbation to all-M tonemes in this mood. [7.3](#).

The irrealis mood distinguishes aspects by verb flexion like the indicative, but temporal *nē*<sup>+/</sup> cannot occur. Perfective aspect occurs much more often than imperfective.

Irrealis mood with past tense markers is *conditional* (not future-in-the-past.)

*Ò* *dāa ná zāb ná'àb lā.*

3AN TNS IRR fight chief:SG ART.

"He would have fought the chief" (but didn't)

For the use of this form in clauses with *yà*' "if" see [27.1](#).

## 19.5 Polarity

VPred negation markers are preverbal particles which combine this function with mood marking. They appear after tense markers but before preverbs. The negation markers induce the appearance of a clause final negative prosodic clitic which causes the clause-final word to appear in Long Form [8.1](#); on the position of the clitic see further [29.3](#).

Temporal use of  $n\bar{e}^{+/-}$  is not compatible with negative polarity [30.1.2.1.2](#).

Indicative mood is negated by  $p\bar{u}$  (for some speakers  $b\bar{u}$ , as in Toende Kusaal.) Imperative mood is negated by  $d\bar{a}$ ; conversely, forms which are negated by  $d\bar{a}$  are imperative. Irrealis mood is negated by  $k\bar{u}$ , which *replaces* the positive irrealis marker  $n\bar{a}$ . Younger speakers sometimes use  $k\bar{u}$  for  $p\bar{u}$ , but none of my informants accepts this.

$\bar{O}$   $z\bar{a}b$   $n\bar{a}'\bar{a}b$   $\bar{l}\bar{a}$ . "He's fought the chief."  
**3AN fight chief:SG ART.**

$\bar{O}$   $p\bar{u}$   $z\bar{a}b$   $n\bar{a}'\bar{a}b$   $\bar{l}\bar{a}a$   $^{+\emptyset}$ .  
**3AN NEG.IND fight chief:SG ART NEG.**  
 "He hasn't fought the chief."

$Z\bar{a}m$   $n\bar{a}'\bar{a}b$   $\bar{l}\bar{a}!$  "Fight the chief!"  
**Fight:IMP chief:SG ART!**

$D\bar{a}$   $z\bar{a}b$   $n\bar{a}'\bar{a}b$   $\bar{l}\bar{a}a$   $^{+\emptyset}!$  "Don't fight the chief!"  
**NEG.IMP fight chief:SG ART NEG!**

$\bar{O}$   $n\bar{a}$   $z\bar{a}b$   $n\bar{a}'\bar{a}b$   $\bar{l}\bar{a}$ . "He'll fight the chief."  
**3AN IRR fight chief:SG ART.**

$\bar{O}$   $k\bar{u}$   $z\bar{a}b$   $n\bar{a}'\bar{a}b$   $\bar{l}\bar{a}a$   $^{+\emptyset}$ .  
**3AN NEG.IRR fight chief:SG ART NEG.**  
 "He won't fight the chief."

There are four negative verbs, which are equivalent to negative particle + positive verb [29.1.1](#)  $m\bar{i}t$  "see that it doesn't happen that...",  $z\bar{i}'^{+}$  "not know",  $k\bar{a}'e^{+}$  "not be, not have", and  $k\bar{a}'as\bar{i}g\bar{e}$  (LF only) "not exist."

## 19.6 Independency marking

The VPred of a main clause [25.1](#) or content clause [26.3](#) is marked as independent. The marking is absent in all subordinate clause types other than content clauses, and all VPs in VP chaining after the first. It is also absent in all clauses introduced by *kà* other than content clauses, regardless of whether they are subordinate or insubordinate [24.2](#). The marker is primarily a tone overlay, but has associated segmental manifestations.

### 19.6.1 Tonal Features

#### 19.6.1.1 Tone overlay

The independency-marking tone overlay is manifested only on VPreds with positive polarity and indicative or imperative mood. It affects only the *first* word in the predicator capable of carrying it: first the preverbal particle *lè* "but" [19.7.1](#), next any preverb, then the verb itself. Preverbal particles which have intrinsic M tonemes (past tense marker *dāa*, preverb *ñyē*) not only remain M themselves but also prevent the overlay from applying to any subsequent words.

The overlay otherwise changes all tonemes in the affected word to L if they were not L already. Affected words, regardless of their intrinsic tones, are always followed by M spreading, and show M toneme on the final vowel mora before liaison (changed as usual to H before liaison words beginning with a fixed-L toneme [8.3.1](#).)

Intrinsic tones after *kà* (with *zàb*<sup>ε</sup> "fight" *gōs*<sup>ε</sup> "look at" *nà'ab*<sup>a</sup> "chief"):

<i>Kà m záb nà'ab lā.</i>	"And I've fought the chief."
<i>Kà ò záb nà'ab lā.</i>	"And he's fought the chief."
<i>Kà m gōs ná'àb lā.</i>	"And I've looked at the chief."
<i>Kà ò gōs ná'àb lā.</i>	"And he's looked at the chief."

Intrinsic tones with preverbal particles having intrinsic M tonemes:

<i>Ò dāa záb nà'ab lā.</i>	"He didn't fight the chief."
<i>Ò dāa gōs ná'àb lā.</i>	"He didn't look at the chief."

Intrinsic tones with negative polarity:

<i>Ò pū záb nà'ab lāa.</i>	"He hasn't fought the chief."
<i>Ò pū gōs ná'àb lāa.</i>	"He hasn't looked at the chief."

This is not simply another case of blocking of the overlay by a preverbal particle with M toneme, because it is also seen for example with the M negative verbs



*kā'ε*<sup>+</sup> "not be, not have" and *zī'*<sup>+</sup> "not know":

*Dāy lā kā' ná'abā* <sup>+∅</sup>. "The man isn't a chief."  
 Man:**SG ART NEG.BE** chief:**SG NEG**.

*Bùŋ-bāñ'ad zī' yē tēŋ túllā* <sup>+∅</sup>.

Donkey-rider:**SG NEG.KNOW** that ground:**SG be.hot NEG**.

"He who rides a donkey does not know the ground is hot." (Proverb)

Intrinsic tones in subordinate clauses, without independency marking:

*Ò yá' zàb nà'ab lā*. "If he fights the chief."

*Ò yá' gōs ná'àb lā*. "If he looks at the chief."

*Ón zàb nà'ab lā*. "He having fought the chief"

*Ón gōs ná'àb lā*. "He having looked at the chief."

Tone overlay manifesting independency marking in main clauses:

*Ì záb ná'àb lā*. "I've fought the chief."

*Ò zàb ná'àb lā*. "He's fought the chief."

*Ì gōs ná'àb lā*. "I've looked at the chief."

*Ò gòs ná'àb lā*. "He's looked at the chief."

*Ò sà zàb ná'àb lā*. "He fought the chief yesterday."

*Ò sà gòs ná'àb lā*. "He looked at the chief yesterday."

Tone overlay in content clauses, which have independency marking [26.3](#):

*Bà yèl yé ò zàb ná'àb lā*.

**3PL** say that **3AN** fight chief:**SG ART**.

"They say he's fought the chief."

*Bùŋ-bāñ'ad zī' yē tēŋ túllā* <sup>+∅</sup>.

Donkey-rider:**SG NEG.KNOW** that ground:**SG be.hot NEG**.

"The donkey-rider doesn't know the ground is hot."

(*Tēŋ túl*. "The ground is hot." *tūl*<sup>la/</sup> "be hot")

Examples for the M of the final host mora before liaison, using the verbs *bòdɪg*<sup>ε</sup> "lose", *yādɪg*<sup>ε/</sup> "scatter" and the clitics *m*<sup>a</sup> "me" *ba*<sup>+</sup> "them":

Intrinsic tones:



<b>M záb</b> ná'àb lā.	"I've fought the chief."
<b>Ò zàb</b> ná'àb lā.	"He's fought the chief."
<b>M gós</b> ná'àb lā.	"I've looked at the chief."
<b>Ò gòs</b> ná'àb lā.	"He's looked at the chief."

The first and second person bound subject pronouns *are* followed by M spreading before a VPred with independency marking, *unless* they are immediately preceded by *yē* "that" (here introducing a content clause [26.3](#)):

Ò tēñ'es kà ò zàb ná'àb lā.  
**3AN** think and **3AN** fight chief:**SG ART**.  
 "He thinks he's fought the chief." WK

Ò tēñ'es kà m záb ná'àb lā.  
**3AN** think and **1SG** fight chief:**SG ART**.  
 "He thinks I've fought the chief."

but Ò yèl yé ò zàb ná'àb lā.  
**3AN** say that **3AN** fight chief:**SG ART**.  
 "He says he's fought the chief."

and Ò yèl yé m zàb ná'àb lā.  
**3AN** say that **1SG** fight chief:**SG ART**.  
 "He says I've fought the chief."

Absence of M spreading after bound subject pronouns is independent of tone overlay and is still seen when tone overlay is absent, e.g. when the VPred has irrealis mood, or there is a preverbal particle carrying a M toneme:

Ò kù zāb ná'àb lāa +∅.  
**3AN NEG.IRR** fight chief:**SG ART NEG**.  
 "He will not fight the chief."

Ò lèè dāa zāb nà'ab lā.  
**3AN** but **TNS** fight chief:**SG ART**.  
 "But he did fight the chief."

Ò yèl yé m nà zāb ná'àb lā.  
**3AN** say that **1SG IRR** fight chief:**SG ART**.  
 "He says I'll fight the chief."



<i>Ò zàb yā.</i> <b>3AN fight PFV.</b>	"She's fought."
<i>Ò gòs yā.</i> <b>3AN look PFV.</b>	"She's looked."
<i>Ò sà zàb yā.</i> <b>3AN TNS fight PFV.</b>	"She fought (yesterday.)"
<i>Ì téñ'ès kà ì lù yā.</i> <b>1SG think and 3INAN fall PFV.</b>	"I think it's fallen down." (content clause)
Non-final:	
<i>Ò zàbī m.</i> <b>3AN fight 1SG.OB.</b>	"He's fought me."
<i>Ò gòsī m.</i> <b>3AN look.at 1SG.OB.</b>	"He's looked at me."
When the independency-marking tone overlay is absent, so is the particle:	
<i>Sāa dāa ní.</i> Rain: <b>SG TNS</b> rain.	"It rained." (M preverbal particle)
<i>Ò nà zāb.</i> <b>3AN IRR</b> fight.	"She'll fight." (irrealis mood)
<i>Ò dāa zāb.</i> <b>3AN TNS</b> fight.	"He fought." (M preverbal particle)
<i>Kà ò zāb.</i> And <b>3AN</b> fight.	"And he fought." (no independency marking)
<i>Kà ò gōs.</i> And <b>3AN</b> look.	"And he looked." (no independency marking)
<i>Ò pō zābē +∅.</i> <b>3AN NEG.IND</b> fight <b>NEG.</b>	"He's not fought." (negative polarity)

Ò p̄ ḡsɛ +∅. "He's not looked." (negative polarity)  
**3AN NEG.IND** look **NEG.**

Stative, not perfective:

Ò ḡim. "She's short."  
 Ò m̄'. "She knows."  
 Ò n̄ɛ. "She loves him." [11.1.1](#)

### 19.6.2.2 Imperative -m<sup>a</sup>

Imperatives of variable verbs carrying the independency-marking tone overlay adopt the flexion -m<sup>a</sup> [11.1](#).

Gòsim! "Look!"

Gòsim̄ m! "Look at me!"  
 Look:IMP 1SG.OB!

Gòsīm. "Look at me!" vowel absorbed [3](#)

Gòsim̄ f̄ n̄ú'ùg! "Look at your hand!"  
 Look:IMP 2SG hand:SG!

Gòsīm f̄ n̄ú'ùg! *id* with *ɪ*-vowel absorbed

Without tone overlay on the verb word:

Dā ḡsɛ +∅! "Don't look!" (negative polarity)  
**NEG.IMP** look **NEG!**

K̄èl k̄à ò ḡs! "Let her look!"  
 Cause:IMP and 3AN look! (No independency marking: subordinate)

K̄èm n̄ā n ḡs! "Come and look!"  
 Come:IMP hither CAT look! (No independency marking after CAT)

With overlay, but not a variable verb:

Dòll̄ m! "Follow me!"  
 Follow 1SG.OB!

<i>Dòllī-ní</i> <sub>└</sub> <i>m!</i>	"Follow ye me!"
Follow:2PL.SUB 1SG.OB!	(-ní- for -ya *ŋa before liaison <a href="#">8.2.1.2</a> )
<i>Dì'əm!</i>	"Receive!"
<i>Dì'əmī</i> <sub>└</sub> <i>ø!</i>	"Receive ye!"
Receive:IMP 2PL.SUB!	
<i>Dì'əmī-ní</i> <sub>└</sub> <i>bā!</i>	"Receive ye them!"
Receive:IMP-2PL.SUB 3PL.OB!	
<i>Dì'əmī-n-ó</i> <sub>└</sub> <i>ø!</i>	"Receive ye her!"
Receive:IMP-2PL.SUB 3AN.OB!	
<i>Dì'əmī-ní</i> <sub>└</sub> <i>àlá!</i>	"Keep ye on receiving!" <a href="#">19.4</a>
Receive:IMP-2PL.SUB ADV:thus!	

## 19.7 Clitics bound to the predicator

Clitic subject pronouns [16.3.1](#) are bound to the predicator, to the extent that they are involved in the tonal manifestations of independency marking [19.6.1.2](#).

### 19.7.1 *LÈE* "but"

*IÈE* "but" precedes even tense particles, but like a preverb, and unlike a post-subject particle [24.1.4](#), it prevents the independency-marking tone overlay from falling on the verb, and is then itself followed by M spreading:

*Kà ò lée dāa zāb nà'ab lā.*

And 3AN but TNS fight chief:SG ART.

"But he fought the chief."

*Ka man pian'ad la lee ku gaade.*

*Kà m̃ pjàñ'ad lā lée kù gāade +ø.*

And 1SG speech ART but NEG.IRR pass NEG.

"But my words will not pass away. (Mt 24:35, 1996)

*Bà lée zāb nà'ab lā.*

"But they've fought the chief." WK

3PL but fight chief:SG ART.

*Kà bà lɛɛ zàb nà'ab lā.* "But they've fought the chief." WK  
 And 3PL but fight chief:SG ART.

*Lɛɛ záb nà'ab lā!* "But fight the chief!" WK  
 But fight chief:SG ART!

NT has the *-m<sup>a</sup>*-imperative, suggesting tone overlay on the verb, in

*Lee iemini o na'am so'olim la...*  
*Lɛɛ ìəmī-ní\_ ò nā'am sù'ulìm lā...*  
 But seek:IMP-2PL.SUB 3AN kingship possession ART...  
 "But seek ye his kingdom ..." (Lk 12:31, 1976)

WK does not accept this, and he corrected e.g.

\**Lɛɛ gósìm ná'àb lā!* attempted: "But look at the chief!"  
 But look.at:IMP chief:SG ART!

to *Lɛɛ gōs ná'àb lā.*  
 But look.at chief:SG ART.

### 19.7.2 Preverbs

Preverbs follow all other preverbal particles. All carry the independency-marking tone overlay in place of the following main verb (cf *lɛɛ* "but" [19.7.1](#).) Those derived from verbs show a suffix *-m-* [13.2.1.4](#).

**pùn** "previously, already"

*Ò pùn záb nà'ab lā.* "He's already fought the chief."  
 3AN already fight chief:SG ART.

*Kà ò pún zàb nà'ab lā.*  
 And 3AN already fight chief:SG ART.  
 "And he's already fought the chief."

**lèm** "again" (cf *lèb<sup>ɛ</sup>* "return")

*Ò lèm záb nà'ab lā.* "He's fought the chief again"  
 3AN again fight chief:SG ART.



*Kà ò lém zàb nà'ab lā.* "And he's fought the chief again."  
 And **3AN** again fight chief:**SG ART**.

*Ò pō lém zàb nà'ab lāa +∅.*  
**3AN NEG.IND** again fight chief:**SG ART NEG**.  
 "He hasn't fought the chief again."

*Ò nà lēm zàb nà'ab lā.* "He'll fight the chief again."  
**3AN IRR** again fight chief:**SG ART**.

*M̄ nīf lém zàbìd nē.* "My eye is hurting again."  
**1SG eye:SG** again fight **FOC**.

*Ka so' kudin ku len nyee li ya'asa.*

*Kà sō' kūdum kú lēm ñyées\_lī yá'asā +∅.*  
 And **INDF.AN** ever **NEG.IRR** again see **3INAN.OB** again **NEG**.  
 "Nobody will ever see it again." (Rev 18:21, 1996)

**kpèlim** "still" with a following imperfective; "immediately afterwards" before a perfective (compare the Latin *continuo* "immediately.") It occurs also as a main verb "remain, still be." KB has the reduced form **kpèn**.

*Ka o kpelim zu'om.*

*Kà ò kpélìm zū'øm.*  
 And **3AN** immediately go.blind.

"Immediately he went blind." (Acts 13:11, 1996: KB *Ka o kpen zu'om.*)

*m biig Josef nan kpen vve.*

*m̄ bīig Josef nán kpèn vūē.*  
**1SG child:SG** Joseph still still be.alive.

"My child Joseph is still alive." (Genesis 45:28)

**là'am** "together" (cf *là'as<sup>ε</sup>* "gather"); as a main verb *là'am<sup>m</sup>* is "associate with."

*ka nidib wusa da la'am kpi ne o.*

*kà nīdīb wūsa dá là'am kpì né ò.*  
 and person:**PL** all **TNS** together die with **3AN**.

"so all people died together with him." (2 Cor 5:14)

**dèŋum** "beforehand" (cf *dèŋ*<sup>ε</sup> "go, do first": *m̀ dèŋī f* "I've got there before you."  
*Dèŋ*<sup>ε</sup> is used with the same meaning in VP chaining [23.3](#).)

*Ka Wina'am pun denjim nye bunsuma ye o tisi ti.*

*Kà Wínà'am pún dèŋum ñyē bŷn-súmà yé ò tísì tī.*

And God already beforehand see thing-good:PL that 3AN give 1PL.OB.

"God previously found good things in advance to give us" (Heb 11:40, 1976)

**màlɔɔm** "again" (cf Toende Kusaal *malig* "do again")

*Amaa man pian'ad la ku maligim gaade.*

*Àmáa m̀ pìàñ'ad lā kú mālɔɔm gáadē +∅.*

But 1SG speech ART NEG.IRR again pass NEG.

"But my words will not pass away. (Mt 24:35)

**ñyēε** or **ñyēε tí** "habitually" NT *nyii ti* KT *ēēñ, ēēñ tí*. The main verb is imperfective.

*Ò ñyēε zàbìd ná'àb lā.*

3AN usually fight:IPFV chief:SG ART.

"He's accustomed to fight the chief." WK

*Ò ñyēε gōsìd ná'àb lā.*

3AN usually look.at:IPFV chief:SG ART.

"He's accustomed to look at the chief." WK

*Ò dāa ñyēε zàbìd ná'àb lā.*

3AN TNS usually fight:IPFV chief:SG ART.

"He was accustomed to fight the chief." WK

*Ò ēēñ tí zàbìd nē ná'àb lā.*

3AN usually fight:IPFV FOC chief:SG ART.

"He's accustomed to fight the chief." KT

*Ò ēēñ tí zìñ'i kpēlā.*

3AN usually be.sitting there.

"She's accustomed to sit there." KT

*Ò ēēñ tí dīgi kpēlā.*

3AN usually be.lying there.

"She's accustomed to lie there." KT

**tì** "afterwards" conveys accomplishment or completion; the main verb is perfective. It occurs often in VP chaining; for *hālí tì pāa ...* "up until" see [28.1.2](#). It is common with the irrealis mood, perhaps in a "future perfect" sense.

*hali ka Herod ti kpi.*

*hālí kà Herod tí kpi.*

Until and Herod afterwards die.

"Until Herod had died." (Mt 2:15)

*Kèm\_ ø tí ñyē dɔ'átà.*

Go:IMP CAT afterwards see doctor:SG.

"Go to see the doctor." SB

*Noraug ku ti kaas zina nwaa, ka fu na ki'isim nɔɔra atan'.*

*N5-dáùg kú tī kāas zīnā ñwāa +ø*

Hen-male:SG NEG.IRR afterwards cry.out today this NEG

*kà fù ná kī'isí\_m nɔɔrá\_ àtáñ'.*

and 2SG IRR deny 1SG.OB occasion:SG NUM:three.

"The cock will not have crowed this day before you deny me three times."

(Lk 22:61)

### 19.7.3 Liaison enclitics

Liaison enclitics precede all other verb phrase complements and also precede the focus particle *nē<sup>+/</sup>* in all its senses. There are two slots, and a predicator may have two successive liaison enclitics.

The first slot may be occupied by one of the two clitics <sup>ya</sup> "2pl subject of direct command" [25.2.3](#) or discontinuous-past *n<sup>ε</sup>* [27.1.1](#); there are no circumstances in which they might occur together, as discontinuous-past *n<sup>ε</sup>* is only found with indicative and irrealis moods.

These two clitics are tonally alike; both always change the toneme of the last preceding host vowel mora to M, and themselves have H toneme.

The second slot for liaison enclitics is for bound object pronouns. There is no formal distinction between direct and indirect objects. Only one clitic object pronoun may occur; cases where a verb has a non-contrastive direct and indirect object pronoun are expressed by ellipsis of a pronoun [20.1](#) or by periphrasis with a VP chain using *tìs<sup>ε</sup>* "give" [23.3](#).

## 20 Verb phrases

A verb phrase consists of a verbal predicator followed by complements and adjuncts.

There is no recursive embedding as with the NP, but verb phrases are frequently concatenated within a single clause by VP chaining [23](#).

"Complement" will be used below to describe all verb core arguments other than the subject. Complements may be NPs, AdvPs, prepositional phrases or clauses.

Verbs vary in the kind of complement they take and in whether the complements are obligatory; the matter is complicated in Kusaal by the fact that "obligatory" complements in fact need not be explicitly present: if they are absent, the gap then represents an anaphoric pronoun.

NP and AdvP complements can be classified as direct and indirect objects, as predicative complements, or as locative complements.

### 20.1 Transitivity and objects

Indirect objects precede direct, and objects precede other complements, except in cases of extraposition or dislocation due to weight [30.3](#). A clitic pronoun before a noun object therefore cannot be the direct object:

*\*M̄ dāa tísi\_lī ná'àb lā.*  
**1SG TNS** give **3INAN.OB** chief:**SG ART**.

Not possible with the intended meaning "I gave it to the chief."

There is otherwise no formal difference between direct and indirect objects. Transitive verbs vary in whether they require a direct object/complement:

*da ku nidaa, da zuuda*  
*dā kō nīdá +∅, dā zūudá +∅...*  
**NEG.IMP** kill person:**SG NEG**, **NEG.IMP** steal:**IPFV NEG...**

"Do not kill [a person] ... do not steal ..." (Lk 18:20, 1996)

**Obligatorily Transitive** verbs may appear without any expressed object, but in such cases the meaning is necessarily **anaphoric**:

*Ò pū zámm +∅.* "She didn't cheat him/her."  
**3AN NEG.IND** cheat **NEG**.

Transitive invariable verbs always require a complement, and again there is necessarily an anaphoric sense if none is explicitly present. Thus with àěñ<sup>a</sup> "be something/somehow":

*Māni* <sub>┘</sub> ∅ *áñ dɥ'átà àmáa fūn pū áñyā* <sup>+∅</sup>.  
**1SG.CNTR CAT COP doctor:SG but 2SG.CNTR NEG.IND COP NEG.**  
 "I'm a doctor but you aren't."

*Māni* <sub>┘</sub> ∅ *áñ dɥ'átà kà fūn mén áěñ*.  
**1SG.CNTR CAT COP doctor:SG and 2SG.CNTR also COP.**  
 "I'm a doctor and you are too."

Particular cases of null anaphora appear with direct objects preposed with *kà* [30.2](#) [28.2.3](#) and with adnominal *kà*-clauses [26.2](#).

In replies to questions and responses to commands, null anaphora of complements may refer to an antecedent in the previous speaker's words:

Q. *Fù mór gbāyη lāa* <sup>+∅?</sup> "Do you have the letter?"  
**2SG have letter:SG ART PQ?**

A. *Ēěñ, m mór*. "Yes, I have it."  
 Yes, **1SG** have.

Q. *Fù bód·ó-o* <sup>+∅?</sup> "Do you love her?"  
**2SG want-3AN.OB PQ?**

A. *Áyì, m pū bódā* <sup>+∅</sup>. "No, I don't love her."  
 No, **1SG NEG.IND** want **NEG**.

**Agentive ambitransitive** verbs appear both with and without an object, with no change in the rôle of the subject, and no anaphoric implication if the object is absent; thus

*banε zuud nidibi gban'ad*  
*bàni zūud nīdibi* <sub>┘</sub> ∅ *gbāñ'ad*  
**REL.PL steal:IPFV person:PL CAT seize:IPFV**  
 "those who steal people by force" (1 Tim 1:10)

*onε daa zuud* "he who used to steal" (Eph 4:28)  
*òni dāa zūud*  
**REL.AN TNS steal:IPFV**

Some verbs only take objects of a very limited type, often expressed with a "cognate accusative" noun formed from the same stem. They may be obligatorily transitive or agentive ambitransitive:

*Fù tùm bó-tùuma* + $\emptyset$ ? "What work do you do?"  
**2SG** work:**IPFV** what-work **CQ?**

*Ka ya ninkuda zaansim zaansima.*

*Kà yà nīn-kúdà zàañsum záañsímà.*

And **2PL** person-old:**PL** dream:**IPFV** dream:**PL**.

"And your old people dream dreams." (Acts 2:17)

**Patientive ambitransitive** verbs can appear transitively with an expressed object, but if there is no object they are normally interpreted as intransitive, with the object of the transitive appearing as the subject. Examples include

<i>yò</i> <sup>+</sup>	"close"	<i>nāe</i> <sup>+/</sup>	"finish"
<i>zà'mis</i> <sup>ε</sup>	"learn/teach"	<i>nā'mis</i> <sup>ε/</sup>	"suffer/make suffer"
<i>bòdig</i> <sup>ε</sup>	"lose, get lost"	<i>bàs</i> <sup>ε</sup>	"go/send away"
<i>dūe</i> <sup>+/</sup>	"raise/rise"	<i>mā'e</i> <sup>+/</sup>	"get cool"

Many, though not all, patientive ambitransitive verbs express a change of state and can use the perfective form in a resultative sense [19.2.1](#):

*Kòlɪŋ lā yó nē.* "The door is closed."  
 Door:**SG** **ART** close **FOC**.

*M̄ náa tūuma lā.* "I've finished the work."  
**1SG** finish work **ART**.

*Tūuma lā náa nē.* "The work is finished."  
 Work **ART** finish **FOC**.

Conversely, most variable verbs capable of forming a resultative are patientive ambitransitive, though there are also some intransitive-only verbs like *kpi*<sup>+</sup> "die."

Almost any verb can potentially take an indirect object expressing benefit, interest etc (this could lead to ambiguity in principle):

*Ò d̀̀̀g̃\_m.* "He cooked (for) me."  
**3AN** cook **1SG.OB**.

*Lì màlīsī m.* "I like it." ("It's sweet for me.")  
**3INAN be.sweet 1SG.OB.**

*Àláafù bée bá.* "They are well." ("Health exists for them.")  
 Health **EXIST 3PL.OB.**

**Ditransitive verbs**, however, *require* an indirect object, which cannot be ellipted unless any direct object is also ellipted, and in which case there is necessarily an anaphoric sense; *tís*<sup>ε</sup> "give" is the prototypical example, along with causatives from transitive verbs like *dìs*<sup>ε</sup> "feed" *nūlvs*<sup>ε/</sup> "give to drink."

*Ṁ tís ná'àb lā dāká.* "I've given the chief a box."  
**1SG give chief:SG ART box:SG.**

*Ṁ tís ná'àb lā.* "I've given it to the chief."  
**1SG give chief:SG ART.**

\**Ṁ tís dāká.* impossible as "I've given him a box", which is  
*Ṁ tís·ō\_∅ dāká.*  
**1SG give 3AN.OB box:SG.**

*Dā tís·ò\_∅ sī'əla +∅.*  
**NEG.IMP give 3AN.OB INDF.INAN NEG.**  
 "Don't give her anything!"

*Dā tísē +∅!* "Don't give it to her!"  
**NEG.IMP give NEG.**

*Ṁ tís yā.* "I've given it to him."  
**1SG give PFV.**

Certain verbs take a fixed direct object as a set idiom after an indirect object which expresses the functional object, e.g. *kàd* X *sàríyà* "judge X", *mōr* X *nīn-báalìg* or *zò* X *nīn-báalìg* "have pity on X", *nìŋ* X *yàddā* "believe X, believe in X", *zò* X *dābìè̄m* "fear X", *sjàk* X *nōɔr* "obey X", *ñwè'* X *nú'ùg* "make an agreement with X."

*Wina'am na kad nidib poten'esua'ada saria.*  
*Wínà'am ná kād nīdīb pú-tèñ'-sū'adá sàríyà.*  
 God **IRR drive person:PL inside-mind-secret:PL judgment.**  
 "God will judge people's secret thoughts." (Rom 2:16, 1996)

*Biise, siakimini ya du'adib nɔya.*

*Bīise* <sup>+∅</sup>, *sjàkımī-ní* <sub>~</sub> *yà dō'adɪb nɔyà.*

Child:PL VOC, agree:IMP-2PL.SUB 2PL parent:PL mouth:PL.

"Children, obey your parents." (Eph 6:1)

*Ò zòt-ō* <sub>~</sub> *∅ nīn-báalìg.*

3AN feel.emotion:IPFV 3AN.OB eye-pity.

"She has pity on him."

*Bà zòt-ō* <sub>~</sub> *∅ dābìəm.*

3PL feel.emotion:IPFV 3AN.OB fear.

"They are afraid of him."

*Bà nìŋ-ō* <sub>~</sub> *∅ yáddā.* "They believed her."

3PL do 3AN.OB assent.

*Ò ñwè' ná'àb lā nù'ùg.* "He made an agreement with the king."

3AN strike king:SG ART hand:SG.

### 20.1.1 Passives

For passive meaning expressed by an empty *bà* "they" as subject see [16.2.3](#).

Transitive verbs expressing a change of state are usually patientive ambitransitives, and thus appear in the same form whether the argument which changes state is subject or object. It is also possible for other transitive verbs, whether obligatory transitives or agentive ambitransitives like *nū*<sup>+</sup> "drink", to be used passively with no formal change:

*Ì nù dāam lā.* "I've drunk the beer."

1SG drink beer ART.

*Dāam lā nù yā.* "The beer has got drunk."

Beer ART drink PFV.

It is not possible to express an agent with passives.

Indirect objects cannot become passive subjects:

*Dāká lā tís yā.* "The box was given."

Box:SG ART give PFV.



but \**Nà'ab lā tís yā.* not possible in sense "The chief was given (it.)"  
 Chief:SG ART give PFV.

Stative verbs cannot be used as passives. Even with dynamic verbs, **passives can only express punctual events** [30.1.2.1.2](#).

The verb *sōb*<sup>ε</sup> "write" is a specialised usage of *sōb*<sup>ε</sup> "make/go dark", and is patientive ambitransitive despite the English translation. It can form a resultative:

*Gbàṽṽ lā sōb yā.* "The letter has been written."  
 Letter:SG ART write PFV.

*Gbàṽṽ lā sōb nē.* "The letter is written."  
 Letter:SG ART write FOC.

The imperfective *sōbid*<sup>a/</sup> seems to accept intransitive use only when some adverbial modification is present:

*Gbàna sōbid zīnā.* "Letters get written today." WK  
 Letter:PL write:IPFV today.

*Gbàṽṽ lā sōbid súṽā.* "The letter is writing well (i.e. easily.)" WK  
 Letter:SG ART write:IPFV good:ADV.

### 20.1.2 Middle uses of intransitives

The assume-stance verbs [13.2.1.1](#), rather than the make-assume-stance series, are often used transitively for parts of one's own body:

*Lìḡiním\_ fù nīf né fù nú'ùḡ.*  
 Cover:IMP 2SG eye:SG with 2SG hand:SG.  
 "Cover your eye with your hand."

Thus *Dìḡiním\_ fù nú'ùḡ.* "Put your hand down."  
 Lie.down:IMP 2SG hand:SG.

is commoner than

*Dìḡilím\_ fù nú'ùḡ.* "Put your hand down."  
 Lay.down:IMP 2SG hand:SG.

Similarly *nìe*<sup>+</sup> "appear" is usually intransitive, corresponding to transitive *nèɛɛ*<sup>ɛ</sup> "reveal", but *nìe*<sup>+</sup> is much more frequent than *nèɛɛ*<sup>ɛ</sup> before *ò mēŋ*<sup>a/</sup> "him/herself" etc.

*Ka o nie o mēŋ Jemes san'an ...*

*Kà ò níe ò mēŋ Jemes sá'àn ...*

And **3AN** appear **3AN** self James among

And he revealed himself to James (1 Cor 15:7)

## 20.2 Predicative complements

Predicative complements may occur after intransitive or transitive verbs; like objects, they may or not be required, in the sense of surface omission necessarily implying anaphora.

As with similar English constructions, predicative complements can have "depictive" or "resultative" meaning; the distinction in Kusaal falls out naturally from the stative or dynamic nature of the verb:

*Kel ka m liebi fu tumtum yinne.*

*Kèl kà m líàbì fù tùm-tùm yīnní.*

Cause:**IMP** and **1SG** become **2SG** work-worker:**SG** one.

"Make me [become] one of your servants" (Lk 15:19); dynamic *liəb*<sup>ɛ</sup>

*M á né fù tùm-tùm.* "I am your servant."; stative *àɛŋ*<sup>a</sup>

**1SG COP FOC 2SG** work-worker:**SG**.

*Àɛŋ*<sup>a</sup> "be something/somehow" [21.2](#) takes a predicative complement:

*Ò à nē bīg.* "She is a child."

**3AN COP FOC** child:**SG**.

*M kā' dɥ'átāa +∅.* "I'm not a doctor."

**1SG NEG.BE** doctor:**SG NEG**.

As with other transitive invariable verbs, the complement is obligatory [20.1](#).

Transitive verbs may have a predicative complement after the direct object.

With verbs are used in the relevant senses, this complement is compulsory.

The verb *pòd*<sup>ɛ</sup> "name, dub" has as first object a NP with the head *yō'or*<sup>ɛ/</sup> "name", and the name itself as second object; this may be introduced by *yē* "that."

*Ka fù na pùd o yù'ur ye Yesu.*

*Kà fù ná pùd ò yù'ur yē Yesu.*

And **2SG IRR** dub **3AN** name:**SG** that Jesus.

"And you will call him Jesus." (Mt 1:21)

*Ka o pùd biig la yù'ur Yesu.*

*Kà ò pùd biig lā yù'ur Yesu.*

And **3AN** dub child:**SG ART** name:**SG** Jesus.

"And he called the child Jesus. " (Mt 1:25)

The verb *bùø*<sup>ε</sup> "call, call out, summon" can be used in the imperfective with an object expressing the person named and the name as a complement, again possibly introduced by *yē*:

*on ka ba buon ye Pita la*

*òn kà bà búèn yē Pita lā*

**REL.AN** and **3PL** call:**IPFV** that Peter **ART**

"who was called Peter" (Mt 10:2)

The verb is often used passively [20.1.1](#) with *yù'ur*<sup>ε/</sup> "name" as subject and the name itself as complement:

*dau sɔ' ka o yù'ur buon Joon.*

*dàù-sɔ' kà ò yù'ur búèn Joon.*

man-**INDF.AN** and **3AN** name:**SG** call:**IPFV** John.

"a man [habitually [30.1.2.1.2](#)] called John." (Jn 1:6)

The verb *màal*<sup>ε</sup> "make" is used with an object and a resultative predicative complement in the 1976 NT in Acts 8:9

*Ka o maal o meṅ nintita'ar.*

*Kà ò máal ò mēṅ nīn-títā'ar.*

And **3AN** make **3AN** self person-great:**SG**.

"He made himself out to be a great man."

The 1996 NT version has instead

*Ka o du'osi o meṅ ye o ane nintita'ar.*

*Kà ò dū'əsí ò mēṅ yé ò à nē nīn-títā'ar.*

And **3AN** elevate **3AN** self that **3AN COP FOC** person-great:**SG**.

"He made himself up that he was a great man."

A resultative predicative *kà*-clause:

*...ka la'am maan gigis ka ba wum ka pia'ad.*

*...kà lá'àm m àan gígìs kà bà wúm kà pjàñ'ad.*

...and together make:IPFV dumb:PL and 3PL hear:IPFV and speak:IPFV.

"...and even makes the dumb hear and speak." (Mk 7:37, 1976)

With a result clause [26.1](#) after its object, *ñyē*<sup>+</sup> "see, find" can have the sense "see as", resulting in a predicative sense:

*M̄ dāa ñyē dāy lá kà ò áñ ná'àb.*

**1SG TNS** see man:SG ART and **3AN COP** chief:SG.

"I saw the man as a chief."

*M̄ dāa pū ñyē dāy lá kà ò áñ ná'abā +∅.*

**1SG TNS NEG.IND** see man:SG ART and **3AN COP** chief:SG **NEG.**

"I didn't see the man as a chief."

### 20.2.1 Manner-adverbs

Manner-adverbs behave syntactically in many respects like abstract mass nouns, and indeed may arise from such noun usages [17.4](#). One such instance is in their common usage as predicative complements.

Kusaal characteristically uses manner proadverbs [17.7](#) as predicative complements in place of pronouns with abstract reference. i.e. the language says "be/do *how*" rather than "be/do *what*."

*Dā níjì àlāa +∅!* "Don't do that!" ("thus")

**NEG.IMP** do **ADV:thus** **NEG.**

*Fv wum ban yet si'em laa?*

*Fù wúm bán yèt sī'em láa +∅?*

**2SG** hear:IPFV **3PL:NZ** say:IPFV **INDF.ADV** **ART** **PQ?**

"Do you hear what they are saying?" (Mt 21:16)

*Tiig wela bigisid on a si'em.*

*Tiig wélà bìgìsid ón àñ sī'em.*

**Tree:SG** fruit:PL show:IPFV **3AN:NZ** **COP** **INDF.ADV.**

"The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

The indefinite proadverb *sīəm*<sup>m</sup> is particularly commonly used in this way as head of a relative clause [28.2.2](#).

The idiom "X *nīŋ wēlá kà ...?*" means "how can X ...?"

*M na niŋ wala ka nyε faangirε?*

*M̄ ná nīŋ wēlá kà ñyē fāaŋgírè +∅?*

**1SG IRR** do how and find salvation **CQ?**

"How can I get saved?" (Acts 16:30)

The verb *àeñ*<sup>a</sup> "be something/somehow" typically has a derived manner-adverb or abstract noun as complement rather than an adjective as NP head [21.2](#):

*Lì à nē zāalím.* "It's empty."

*Lì à nē bōgusígā.* "It's soft."

*Lì à sūŋā.* "It's good."

### 20.3 Locative complements

Locative AdvPs [17.3](#) occur as complements after verbs of position and movement. Some verbs *require* a locative complement, and its absence is anaphoric.

*M̄ yí Bòk.* "I left Bawku."

**1SG** emerge Bawku.

*M̄ yí yā.* "I've left [there]."

**1SG** emerge **PFV**.

Others do not; so with *kēŋ*<sup>ε/</sup> "go, walk" *dìgɪn*<sup>ε</sup> "lie down" *dīgɪ*<sup>ε/</sup> "lay down":

*...ka pu tun'e kenna..*

*...kà pō tūñ'e\_∅ kēnná +∅.*

**3AN NEG.IND** be.able **CAT** go:IPFV **NEG**.

"who couldn't walk." (Acts 14:8)

but *Ò kèŋ Bók.* "She's gone to Bawku."

**3AN** go Bawku.

*Ò dìgɪn yā.* "He's lain down."

**3AN** lie.down **PFV**.

but *Dìgɪnim kpē!* "Lie down here!"  
Lie.down:IMP here!

*Ò dìgɪl gbáɥŋ lā.* "She's put the book down."  
3AN lay.down book:SG ART.

but *Ò dìgɪl gbáɥŋ lā téeβ̀l̄ lā zúg.*  
3AN lay.down book:SG ART table:SG ART upon.  
"She's put the book on the table."

The verb *bè<sup>+</sup>* [21.1](#) without a complement is "exist":

*Wínà'am bé.* "God exists."  
God EXIST.

*Áláaf̀ò bé·o\_∅.* "He's well." ("Health exists for him.")  
Health EXIST 3AN.OB.  
(Indirect object but no complement.)

With a locative complement, *bè<sup>+</sup>* means "be in a place":

*Dāy lā bé nē d́-kàŋā lā púv̄gū-n.*  
Man:SG ART EXIST FOC hut-DEM.DEI.SG ART inside:SG-LOC.  
"The man is inside that hut."

## 20.4 Prepositional phrases as complements

*Wēn*<sup>na/</sup> "resemble" usually takes a phrase introduced by *nē* or *wōv̄* [18.1](#).

*Ka o nindaa wenne nintaŋ ne.*  
*Kà ò nīn-dáa wēn nē nīntāŋ nē.*  
And 3AN eye-face:SG resemble with sun:SG like.  
"His face is like the sun." (Rev 10:1, 1996)

With other verbs it can be difficult to distinguish phrases with *nē* as complements from NP objects or complements preceded by focus-*nē<sup>+</sup>* [30.1.2](#), unless the *nē* occurs in contexts where focus is prohibited like *ñ*-clauses. Thus *yī nē* X occurs in the sense "come from X" and the metaphorical sense "arise from X":

*Ṁ yí nē Bók.* "I come from Bawku." SB  
1SG emerge FOC Bawku.

*Yadda niḡir yitne labaar la wummuḡ ni.*

*Yàddā-niḡir yít nē lābāar lā wúmmùḡ ní.*

Assent-doing emerge:IPFV FOC news ART hearing LOC.

"Faith comes from hearing the news." (Rom 10:17)

However, constructions with the same meaning but within a *ḡ*-clause lack *nē*:

*Meeri one yi Magdala*

"Mary who came from Magdala"

*Meeri ónì yī Magdala*

(Mk 16:9, 1996)

Mary REL.AN emerge Magdala

A probable case of a verb taking a prepositional phrase as complement in a metaphorical sense is *dṣ*<sup>la</sup> "accompany a person in subordinate rôle", which with *nē* means rather "be in accordance with":

*Li dṣIne lin sṓb Wina'am gbaunṣun si'em la ye ...*

*Lì dṣl nē lín sṓb Wínà'am gbáunṣū-n sī'em lā yē ...*

3INAN follow with 3INAN:NZ write God book:SG-LOC INDF.ADV ART that ...

"This is in accordance with what is written in God's book ..." (1 Cor 2:16)

## 20.5 Clausal complements

Certain verbs require a following subordinate clause introduced by a linker particle *kà* or *yē* [26](#). They include like *kē*<sup>+</sup> "let", *mīt* "let not", *nār*<sup>a</sup> "be obliged to." Of these, *kē*<sup>+</sup> does not appear at all without a following *kà*-clause, while if *nār*<sup>a</sup> appears without there is a necessarily anaphoric sense; *mīt* appears with a NP object in the sense "beware of..." [29.1.1](#).

The verb *bṛṛd*<sup>a</sup> "want, love" takes a *yē*-purpose clause in the sense "want to ..."; without any object it has an anaphoric meaning in either sense.

The verb *gūr*<sup>a</sup> "be on guard, watch, wait for" takes a NP headed by a gerund or a *yē*-purpose clause complement to express "waiting for an event."

Verbs of cognition, reporting, and perception have as complement a content clause, a relative clause with *sī'em*, or a postpositional AdvP with *yēlá* "about." Most such verbs have an anaphoric sense without such an object.

The verb *ḡeñ*<sup>a</sup> "be something/somehow", which is uniquely flexible in the variety of different types of argument it may appear with, may take a clause introduced by *yē* as a complement too [21.2](#).

## 20.6 Adjuncts

Adjuncts of all types occur as the last element in the VP. Several VP adjuncts may occur together. Main clauses and content clauses with a VPred may contain clause-level adjuncts preceding the subject [25.1.1](#).

VP adjuncts may be AdvPs, prepositional phrases, or subordinate clauses.

*Bà dìt nē sā'ab d́-kàṅā lā púvǔ-n.*  
**3PL eat:IPFV FOC porridge hut-DEM.DEI.SG ART inside:SG-LOC.**  
 "They're eating porridge in that hut."

A subordinate clause after a verb is most often a complement:

*Fù b́d̀d b́ +∅?* "What do you want?"  
**2SG want what CQ?**

*M̀ b́d̀d yé f̀ k̀l.* "I want you to go home."  
**1SG want that 2SG return.home.**

Content clauses [26.3](#) are always complements:

*B̀ṅ-bāñ'ad zī' yē tēṅ túllā +∅.*  
**Donkey-rider:SG NEG.KNOW that ground:SG be.hot NEG.**  
 "The donkey-rider doesn't know the ground is hot."

## 20.7 Verb-phrase-final particles

The particles *nā* "hither" and *sà* "hence; ago" follow any complements. The verb *kēñ*<sup>+</sup> "come" is invariably used with *nā*; the imperative SF *kèm*, which coincides for *kēñ*<sup>+</sup> "come" and *kēṅ*<sup>ε/</sup> "go", is always disambiguated by the fact that it is followed by *nā* or *sà* respectively: *kèm nā!* "come" *kèm sá!* "go!"

Examples:

*M̀ mór kú'èṃ náa +∅?* "Shall I bring water?" SB  
**1SG have water hither PQ?**

*b̀gúm lā yít yáa ní ná +∅?*  
**Fire ART emerge:IPFV where LOC hither CQ?**  
 "Where is the light coming from?"



*Fù yí yáa ní ná +∅?*

**2SG** emerge where **LOC** hither **CQ?**

"Where have you come from?" WK

*Sà* is often used temporally, for "since" or "ago":

*O daa pun anε ninkuud hali pin'ilugun sa.*

*Ò dāa pún à nē nīn-kúúð hālí pīñ'ilúgū-n sá.*

**3AN TNS** previously **COP FOC** person-killer:**SG** even beginning:**SG-LOC** since.

"He was a murderer from the beginning." (Jn 8:44)

*Fu na ban li nya'an sa.*

*Fù ná bán lì ñyá'an sá.*

**2SG IRR** realise **3INAN** behind since.

"You will come to understand afterwards." (Jn 13:7, 1976)

*Lazarus pun be yaugun la daba anaasi sa.*

*Lazarus pún bè yáugū-n lā dābá\_ànāasí sà.*

Lazarus previously **EXIST** grave:**SG-LOC ART** day:**PL NUM**:four since.

"Lazarus had already been in the grave four days." (Jn 11:17)

The particles are VP-final, not clause-final:

*Kèṃ nā n gōs.* "Come and look!" SB

Come:**IMP** hither **CAT** look.

*Man ya'a pu kεεn na tu'asini ba ...*

*Mān yá' pū kēε-n nā\_ ∅ tú'asī-ní\_bā...*

**1SG.CNTR** if **NEG.IND** come-**DP** hither **CAT** talk-**DP** **3PL.OB...**

"If I had not come to talk to them ..." (Jn 15:22)

*Nā*<sup>+/</sup> and *sà*<sup>+</sup> often follow any article *lā*<sup>+/</sup> ending an *ñ*-clause containing them:

*ba diib n yit na'ateṅ la na zug*

*bà dīṭb ñ yīt ná'-tēṅ lā nā zúg*

**3PL** food **NZ** emerge:**IPFV** king-land:**SG ART** hither upon

"because their food came from the king's land" (Acts 12:20, 1996)

Closely parallel constructions may show either *nā lā* or *lā nā*:

*ñwādug-káni kēn nā lā*  
 month REL.SG come:IPFV hither ART  
 "next month" SB

*dunia kanε ken la na*  
*dūnyá-kàni kēn lā nā*  
 world-REL.SG come:IPFV ART hither  
 "the world which is coming" (Lk 20:35)

*M diib anε ye m tum onε tumi m la na bɔɔdim naae.*  
*M̄ dīb á nē yé m̄ túm òni tùmí m lā nā bɔɔdím̄ ø nāe.*  
 1SG food COP FOC that 1SG work REL.AN send 1SG.OB ART hither will CAT finish.  
 My food is that I do the will of him who sent me completely. (Jn 4:34)

*ti tum onε tum man na la tɔɔma.*  
*tì túm òni tùm mān nā lā tɔɔma*  
 1PL work REL.AN send 1SG.CNTR hither ART work  
 "Let us do the work of him who sent me." (Jn 9:4)

VP-final particles can also follow the *gerund* of a verb which is associated with such a particle, and again may follow the associated article:

*Nidib la daa gur Zakaria yiib na.*  
*Nīdib lā dāa gūr Zakaria yīb nā.*  
 Person:PL ART TNS watch Zechariah emerge:GER hither.  
 The people were watching for Zechariah's coming out. (Lk 1:21)

*Ninsaal Biig la lεbug la na*  
*Nīn-sáàl Bīg lā lεbùg lā nā*  
 Person-smooth:SG Child:SG ART return:GER ART hither  
 "the return of the Son of Man" (Mt 24:27)

## 21 The verbs "to be"

### 21.1 *Bè*<sup>+</sup> "be somewhere, exist"

*Bè*<sup>+</sup> is followed by M spreading even when not carrying the independency-marking tone overlay; it is formally as well as semantically imperfective.

With no associated locative *bè*<sup>+</sup> means simply "exist":

*Wínà'am bé.* "God exists."  
 God        **EXIST.** (Calque of the West African Pidgin *God dey*,  
 implying "It'll all work out in the end.")

*Àláafù bé·o\_ø.* "She's well." ("Health exists for her.")  
 Health **EXIST 3AN.OB.**

*Wāad bé.* "It's cold."  
 Cold.weather **EXIST.**

Before a locative *bè*<sup>+</sup> means "be located in a place" if the locative is a complement [30.1.2.2](#), but "exist in a place" if the locative is a clause adjunct:

*Mam bene moogin.* "I'm in the bush." BNY p8  
*Mām bé nē mōɔgu-n.* (focus on the locative)  
**1SG.CNTR EXIST FOC grass:SG-LOC.**

*Moogin ka mam bé.* "I'm in the bush." BNY p10  
*Mōɔgú-n kà mām bé.* (*kà*-preposed locative)  
 Grass:SG-LOC and **1SG.CNTR EXIST.**

*Dāy lā bé nē dɔ-kàŋā lā púɔgū-n.*  
 Man:SG ART **EXIST FOC** hut-DEM.DEI.SG ART inside:SG-LOC.  
 "The man is inside that hut." (Reply to "Where is that man?"; focus on locative)

*Dày-s' bé dɔ-kàŋā lā púɔgū-n.*  
 Man-INDF.AN **EXIST** hut-DEM.DEI.SG ART inside:SG-LOC.  
 "There's a certain man in that hut." (focus on subject)

*Bè*<sup>+</sup> is common in presentational constructions [30.4](#).

For the corresponding negative *kā'e*<sup>+</sup> see [29.1.1](#). \**pū bé* is not used.

*Bè*<sup>+</sup> plays a rôle analogous to a "passive" to *m̄r*<sup>a/</sup> "have" in constructions like:

*M̄ bīg bɛ́.* "I have a child."; equivalent to  
**1SG child:SG EXIST.**

*M̄ mór bīg.*  
**1SG have child:SG.**

*M̄ bīg k̄ā'e +∅.* "I have no child."; equivalent to  
**1SG child:SG NEG.BE NEG.**

*M̄ k̄ā' bīga +∅.*  
**1SG NEG.HAVE child:SG NEG.**

*Bè<sup>+</sup>* can be used in direct commands:

*Béε̄ ànínā.* "Be (i.e. stay) there!" SB  
**EXIST ADV:there.**

*Bēe-ní̄ àlá ànínā.* "Be ye there!" [bɛ:nala anina]  
**EXIST-2PL.SUB ADV:thus ADV:there.**

## 21.2 Àḡṅ<sup>a</sup> "be something/somewhat"

The ɛ̄ of the SF of àḡṅ<sup>a</sup> is always lost except on the rare occurrence of the word phrase-finally 8.5.3.

*Ò à nē bīg.* "She is a child."  
**3AN COP FOC child:SG.**

*Lì àñ súnā.* "It's good."  
**3INAN COP good:ADV.**

but *Mānī ∅ áñ dɹ'átà kà fūn mén áḡṅ.*  
**1SG.CNTR CAT COP doctor:SG and 2SG.CNTR also COP.**  
 "I'm a doctor and you are too."

The usual negative uses the negative verb *k̄ā'ε̄<sup>+</sup>* "not be":

*M̄ k̄ā' dɹ'átā +∅.* "I'm not a doctor."  
**1SG NEG.BE doctor:SG NEG.**

However, *pū áḡṅ* can occur, for example in contrasts:

*Māni* ∅ *áñ du'átà àmáa fūn pū áñyā* +∅.  
**1SG.CNTR CAT COP doctor:SG but 2SG.CNTR NEG.IND COP NEG.**  
 "I'm a doctor but you aren't."

*Àñ*<sup>a</sup> can be used in direct commands:

*Àñ bāañlím!* "Be quiet!"  
**COP quiet:ABSTR!**

*Āa-ní* ∅ *àlá bāañlím!* "Be (ye) quiet!"  
**COP-2PL.SUB ADV:thus quiet:ABSTR!**

As with English copular clauses, the sense may be ascriptive or specifying (cf CGEL p266.) If it is **ascriptive**, the complement is non-referring, and normally focussed with *nē*<sup>+/</sup> [30.1.2.2](#) if permitted [30.1.2.1.1](#) [30.1.2.1.3](#):

*Ò à nē bīig.* "She is a child."  
**3AN COP FOC child:SG.**

*Ò à nē bīigàa* +∅? "Is she a child?"  
**3AN COP FOC child:SG PQ?**

In **specifying** constructions focus frequently falls on the subject, which usually then has *n*-focus [30.1.1](#):

*Manε an kɔnbkem suŋ la.*  
*Māni* ∅ *áñ kóñb-kìm-sùŋ lā.*  
**1SG.CNTR CAT COP animal-tender-good:SG ART.**  
 "I am the good shepherd." (Jn 10:11)

*Manε a o.* "I am he." (Jn 18:5, 1976) [8.2.1](#).  
*Māni* ∅ *áñ·o* ∅.  
**1SG.CNTR CAT COP 3AN.OB.**

*Nɔbibisi a mam disuŋ.*  
*N5-bíbisi* ∅ *áñ mām dí-sùŋ.*  
**Hen-small:PL CAT COP 1SG.CNTR food-good:SG.**  
 "Chicks are my favourite food." BNY p13

*Nε'εηα an Yesu [...] yaanam yεla.*

*Nē'ηά àñ Yesu [...] yáa-nám yélà.*

**DEM.DEI.INAN COP** Jesus [...] ancestor-**PL** about.

"This is the account of Jesus' ancestors." (Mt 1:1)

When the complement of *àḡñ<sup>a</sup>* is definite, the construction is usually specifying, with the subject in focus:

*M á nē dḡ'átà.*

**1SG COP FOC** doctor:**SG**.

"I'm a doctor." ("What do you do?")

Ascriptive.

but *Māni\_ ∅ áñ dḡ'átà lā.*

**1SG.CNTR CAT COP** doctor:**SG** **ART**.

"I'm the doctor." ("Which one is the doctor?")

Specifying.

However, definite complements may be in focus as "pragmatically non-recoverable" because of their internal structure or other factors: see [30.1.2.2](#).

*Àḡñ<sup>a</sup>* allows a wide range of different types of NP as arguments. It shares with adjectival verbs the ability to take an AdvP of any type as subject [17.5](#):

*Zīnā a nē dá'a.*

Today **COP FOC** market:**SG**.

"Today [time] is market."

*Yīη venl, ka poogin ka'a su'um.*

*Yīη véñl kà pūvgu-n kā' súmm +∅.*

Outside be.beautiful and inside:**SG-LOC** **NEG.BE** good:**ABSTR** **NEG**.

"Outside is beautiful but inside [place] is not good." (Acts 23:3, 1996)

*Man nonji ya si'em la ane bedego.*

*Mán nòηi\_ yā sī'em lā á nē bédugū.*

**1SG:NZ** love **2PL.OB** **INDF.ADV** **ART** **COP FOC** much.

"How much I love you [manner], is a lot." (2 Cor 7:3, 1976)

*Àḡñ<sup>a</sup>* is remarkable in being able to take a complement consisting of an adjective without any noun head. The article *lā<sup>+l</sup>* is permitted, but no other dependents apart from ideophones [16.11.1.3](#).

*Lì à nē píəlìg.*

*Lì à nē píəlìg fáss.*

*Bà à nē píəlà.*

"It's white, a white one."

"It's very white."

"They're white."

Most adjectives do not permit this. All examples in my materials involve adjectives without corresponding adjectival verbs, or having human reference (cf the adjectival use of human-reference nouns [16.11.1.5](#).) More often, compounds with *nīn-* "person" or *būn-* "thing" + adjective [16.10.3.1](#) are used:

*Ò à nē nīn-súŋ.* "She's a good person."  
**3AN COP FOC** person-good:SG.

*Dīlb á nē būn-súŋ.* "Food is a good thing."  
 Food **COP FOC** thing-good:SG.

Even adjectives which may appear without a noun head cannot do so before a postdeterminer pronoun; thus only

*Lì à nē būn-píàl-kàŋā.* "It is this white one."

*Àeñ<sup>a</sup>* often takes a manner-adverb or deadjectival abstract noun as complement [20.2.1](#). Such constructions are ascriptive, using *nē<sup>+/</sup>* where syntactically permissible:

*Lì à nē ná'anā.* "It's easy."  
**3INAN COP FOC** easily.

*Lì à nē zāalím.* "It's empty."  
**3INAN COP FOC** empty:ABSTR.

*Lì à nē bōgusígā.* "It's soft."  
**3INAN COP FOC** soft:ADV.

*Lì àñ súŋā.* "It's good." [30.1.2.1.3](#)  
**3INAN COP** good:ADV.

Possible complements of *àeñ<sup>a</sup>* also include circumstance-AdvPs [28.1](#) and even content clauses:

*M diib ane ye m tum one tumi m la na bōcōdim naae.*

*M̄ dīlb á nē yé m̄ túm ònɪ tùmɪ m̄ lā nā bōcōdīm\_ø nāe.*  
**1SG** food **COP FOC** that **1SG** work **REL.AN** send **1SG.OB ART** hither will **CAT** finish.  
 My food is that I do the will of him who sent me completely. (Jn 4:34)

## 22 Non-verbal predicators

Non-verbal predicators may only occur in main clauses and content clauses. There are four types (X standing for a NP):

X <i>n lā</i> .	"That is X."
X <i>n ñwá</i> .	"This is X."
X <i>n wá nā</i> .	"This here is X."
X <i>lía?</i>	"Where is X?"

The particle *n* in these forms is identical phonologically to catenator-*n* [8.2.2.2](#) and is regarded as a special use of the same particle.

The three forms which are not in themselves questions can be used to make content questions with an interrogative pronoun as "X."

Clauses with a non-verbal predicator cannot include any pre-subject elements other than linker particles, nor any post-subject particles, nor be focussed.

Examples:

*Kòlɪɪ\_ ∅ lā*. "That's a door."  
Door:SG CAT that.

*Bēogv\_ ∅ lā*. "See you tomorrow" ("That's tomorrow.")  
Tomorrow CAT that.

*F̀̀ mà lā lía +∅?*  
2SG mother:SG ART be.where CQ?  
"Where is your mother?" WK

*Ka awai la dia [sic]? +∅?* "But where are the nine?" (Lk 17:17, 1976)  
*Kà àwāę lā lía +∅?*  
And NUM:nine ART be.where CQ?

*B5ɔ\_ ∅ lía +∅?* "What's that?"  
What CAT that CQ?

Non-verbal predicators may have a VP-chaining construction appended to them, or there may be an adnominal *kà*-clause [26.2](#) modifying X; *kà* is used to introduce a subject different from X, VP chaining otherwise. The resulting constructions are variants of *n*-clefting and *kà*-clefting [30.1.1](#) [30.2](#).



*Anɔ'ɔn nwaá yisid nidib tɔumbɛ'edi basida?*

*Ànɔ'ɔn\_∅ ñwáa\_∅ yīsɪd nīdɪb túòm-bē'edi\_∅ básɪdà +∅?*

Who **CAT** this **CAT** expel:IPFV person:PL deed-bad:PL **CAT** throw.out:IPFV **CQ?**

"Who is this who drives people's sins out?" (Lk 7:49)

*Ōni\_∅ lá kà fù dāa ñyēt.*

**3AN.CNTR CAT** that and **2SG TNS** see:IPFV.

"This is he whom you saw." WK

*Ànɔ'ɔnì\_∅ ñwá kà tì ñyētá +∅?*

Who **CAT** this and **1PL** see:IPFV **CQ?**

"Who is this that we can see?"

*Bɔɔ\_∅ lá kà m̀ ñyētá +∅?*

What **CAT** that and **1SG** see:IPFV **CQ?**

"What is that that I can see?"

## 23 Verb phrase chaining

### 23.1 Overview

After an initial VP or non-verbal predicator, a clause often adds further VPs, each preceded by the VP catenator *n*; for the realisation of this particle see 8.2.2.2. Complements, VP adjuncts, and even subordinate clauses may be incorporated within such VP chains.

*Amaa ka Zugsob malek daa keŋ n yo'og sarega doog za'anoor la **yu'uŋ kan**, n more ba n yiis yiŋ.*

*Àmáa kà Zūg-sób máljāk dāa kēŋ n yó'òg sārígá dǒ̀̀g*

But and head-one:SG angel:SG TNS go CAT open prison:SG house:SG

*zá'-nōɔr lā yō'ɔŋ-kán, n mōrí\_bā n yiis yiŋ.*

compound-mouth:SG ART night-DEM.SG, CAT have 3PL.OB CAT extract outside.

"But an angel of the Lord came and opened the gate of the prison **that night** and took them outside ..." (Acts 5:19, 1996)

*Ka dau so' due n zi'e la'asug la nidib sisoogin, n a Parisee nid **ka o yu'ur buon Gamaliel**, n a one pa'an Wina'am wada la yela, ka lem a yu'ur daan nidib sa'an.*

*Kà dà̀̀y-sō' dūe n zí'e lá'asùg lā nīdɪb sí̀̀sù̀̀vgū-n, n áñ*

And man-INDF.AN rise CAT stand assembly:SG ART person:PL among-LOC, CAT COP

*Parisee níd kà ò yō'ur búèn Gamaliel, n áñ ònì pà'an*

Pharisee person:SG and 3AN name:SG call:IPFV Gamaliel, CAT COP REL.AN teach:IPFV

*Wínà'am wádà lā yélà, kà lé̀m àñ yō'ur dáàn nīdɪb sá'àn.*

God law ART about, and again COP name:SG owner:SG person:PL among.

"A man stood up in the assembly, a Pharisee **called Gamaliel**, a teacher of God's law and also reputable among the people." (Acts 5:34, 1976)

Toende Kusaal (like Dagaare, Bodomo 1997) has *zero* throughout corresponding to catenator-*n*, but most other Western Oti-Volta languages show *n*, at least in slow speech. In languages with the zero realisation, these structures have usually been regarded as serial verb constructions, and many uses of VP chaining are indeed closely parallel to uncontroversial serial verb constructions in other languages. However, VP chaining shows greater flexibility than typical serial verb constructions, and there are also similarities to the **catenative** constructions of the CGEL description of English (pp1176ff), suggesting an alternative analysis of *n* as a marker of a following subjectless non-finite clause.

Olawsky's account of Dagbani describes the structure *n*+verb as an "infinitive", presumably meaning that it is used as the citation form, but he gives no examples of

actual usage. (I have not encountered a citation use in Kusaal.) Both Niggli and Zongo describe the same construction in Mooré as an *infinitif*, and Canu, who calls it the "*état neutre*" (p272), confirms that it is used in citation and in one-word answers to questions (p175) and in constructions like *ēm dátā ndī* "je désire manger." Nevertheless, it is difficult to see a firm basis for distinguishing finite from non-finite VPs in Kusaal without circularity, given that there is no subject agreement, and that tense-marking does not play the central rôle in verb morphology that it does in English. It remains possible to regard catenator-*n* as a marker of a subjectless formally subordinate clause; significantly, there is a near-complementary relationship between VP chaining and adnominal *kà*-clauses. The great majority of *kà*-clauses with ellipse of a subject pronoun after *kà* are in subordinate [24.2](#) *main* clauses, and most of the clearly subordinate types can be explained as replacing VP chaining because of a change of polarity (see below.)

Nominaliser-*ñ* [28](#) may be historically related to catenator-*n*. The particles differ tonally, and in Toende Kusaal they are even distinct segmentally: nominaliser-*ñ* is *ne*, whereas catenator-*n* is  $\emptyset$ . However, this might be attributed to the effect of a preceding subject NP, in a way analogous to L spreading in NP structure [8.4](#).

Verbal predicators in a chain each have their own aspect marking, which need not necessarily be the same throughout. Normally only the first VPred carries tense and polarity particles, which apply to the entire chain, but each retains discontinuous-past *n<sup>ε</sup>*, and while initial irrealis mood marking applies to the whole chain, a VPred following an indicative may be in the irrealis, in which case it will be marked itself. The preverb *tì* is often found with non-initial VPs.

Change in polarity within a chain is unusual; if there is a change of polarity the construction is normally replaced by an adnominal *kà*-clause (the only case where an adnominal *kà*-clause can have the same subject as the main clause before it [26.2](#)):

*Ka dau daa zin'i Lystra ni ka pu tun'e kenna.*

*Kà dāy dāa zín'i Lystra ní kà pū tūñ'e\_ ∅ kēnná +∅.*

And man:SG TNS sit Lystra LOC and NEG.IND be.able CAT go:IPFV NEG.

"There was a man in Lystra who could not walk." (Acts 14:8, 1996)

*Ka Joon kena lōd nōr ka pu nuud daam*

*Kà Joon kē nā\_ ∅ lōd nōr kà pū nūud dáamm +∅.*

And John come hither CAT tie:IPFV mouth:SG and NEG.IND drink:IPFV beer NEG.

"John came, fasting and not drinking beer." (Mt 11:18)

Examples of a change from positive to negative polarity do occur:

*Ya sieba be kpela ku kpil asee ba ti nye Wina'am na'am la.*

*Yà sī́aba bé kpēlá\_∅ kú kpī́<sup>+∅</sup>, àséé bà nà tì*

**2PL INDF.PL EXIST** here **CAT NEG.IRR** die **NEG**, except **3PL IRR** afterwards

*ñyè Wínà'am ná'àm lā.*

see God kingdom **ART**.

There are some of you here who will not die before they see the kingdom of God." (Lk 9:27)

This is probably connected with the presentational character of the main VP [30.4](#).

VPs within a chain may be coordinations of component VPs linked by *kà* "and" or *bēé/kūu* "or" [23.2](#).

VP chaining seems always to involve semantic subordination; the equivalent in translation in European languages would often be a participle modifying the main verb subject. However, it may be the *first* VP in a chain which is semantically subordinate; many verbs have characteristic subordinate "auxiliary" rôles in chains, and whether they precede or follow the "main" verb depends on their own semantics. Moreover, in all VP chains the order of events, if they are not simultaneous, must be mirrored in the order of the VPs [19.2.1](#).

A VP chain can be attached after a non-verbal predicator [22](#):

*Anɔ'ɔn nwaá yisid nidib tuumbɛ'edi basida?*

*Ànɔ'ò̀n\_∅ ñwáá\_∅ yīsíd nīdɪb tú̀m-bē'edi\_∅ básídà<sup>+∅?</sup>*

Who **CAT** this **CAT** expel:IPFV person:PL deed-bad:PL **CAT** throw.out:IPFV **CQ?**

"Who is this who drives people's sins out?" (Lk 7:49)

Common patterns with verbs without specialised VP chain uses include

(a) main VP + imperfective VP expressing accompanying events:

*Ka Ninsaál Biig la kena dit ka nuud...*

*Kà Nīn-sáál Bīig kēn nā\_∅ dí́t kà nūud ...*

And Person-smooth:SG child:SG come:IPFV hither **CAT** eat:IPFV and drink:IPFV...

"And the Son of Man comes eating and drinking ..." (Mt 11:19)

(b) perfective VP expressing prior event + main VP

*Ka dapa ayi' ye fupielá zi'e ba san'an.*

*Kà dāpá\_áyí yé fū-píələ\_∅ zì'e bà sā'an.*

And man:PL **NUM**:two dress shirt-white:PL **CAT** stand **3PL** among.

"Two men dressed in white were standing with them." (Acts 1:10)

(c) main VP + perfective VP in irrealis or imperative mood, expressing purpose. The preverb *tì* is commonly seen in the second VP in such cases.

*Amaa m pu m̄r antu'a zugv o yela na s̄bi tis na'atita'ar laa.*

*Àmáa m̄ p̄ m̄r ántù'a zúgú\_ò yēlá\_ø nà s̄bì\_ø tís*

But 1SG NEG.IND have case:SG upon 3AN about CAT IRR write CAT give  
*ná'-tītā'ar láa +ø.*

king-great:SG ART NEG.

"But I have no case about him to write to the Emperor." (Acts 25:26)

*Man ya'a pu k̄en na tu'asini ba ...*

*Mān yá' p̄ k̄ē-n nā\_ø t́'asī-ní\_ bā...*

1SG.CNTR if NEG.IND come-DP hither CAT talk-DP 3PL.OB...

"If I had not come to talk to them ..." (Jn 15:22) Note DP on both verbs.

*K̄em\_ø tí ñyē d̄'átà.*

Go:IMP CAT afterwards see doctor:SG.

"Go and see the doctor."

## 23.2 Coordination

VPs within chains can be coordinated with *kà* "and", *b̄ēē* "or", *k̄ōv* "or"; *b̄ēē* and *k̄ōv* are here synonymous.

*ka keŋ ... n ian'asid ka pian'ad n du'osid Wina'am yu'ur su'uŋa.*

*kà kēŋ ... n j̄āñ'asíd kà p̄j̄āñ'ad n dū'əsíd*

and go ... CAT leap:IPFV and praise:IPFV CAT elevate:IPFV

*Wínà'am yú'ùr súŋā.*

God name:SG good:ADV.

"and went ... leaping and praising the name of God greatly." (Acts 3:8, 1996)

*Sogia so' kae' n tum ka yood o meŋa.*

*Sógjà-s̄' k̄ā'e n túm kà ȳōōd ò mēŋá +ø.*

Soldier-INDF.AN NEG.BE CAT work:IPFV and pay:IPFV 3AN self NEG.

"No soldier works and pays for himself." (1 Cor 9:7, 1976)

## 23.3 Auxiliary verbs in VP chains

Certain verbs have characteristic specialised meanings in VP chaining. Variable verbs of this type agree in aspect with the main VP verb.

### 23.3.1 Preceding the main VP

**bè**<sup>+</sup> "exist, be somewhere" + **àínā** "there" + imperfective "be in the process of ..."

*Ò bē àínā n ñwé'èd bīg lā.*

**3AN EXIST ADV:** there **CAT** beat:**IPFV** child:**SG ART**.

"He's currently beating the child."

**àeñ**<sup>a</sup> "be something/somehow." This construction is parallel to the adnominal *kà*-clause type [26.2](#) but with the subject of the main clause as antecedent. By ellipsis, it gives rise to *n*-focus [30.1.1](#).

*Li anε o sidi sv'oe li.*

*Lì á né ò sīdī\_ ∅ sū'v\_īlī.*

**3INAN COP FOC 3AN** husband:**SG CAT** own **3INAN.OB**.

"It's her husband who owns it." (1 Cor 7:4)

**mī**<sup>+</sup> "know", **zī**<sup>+</sup> "not know": *nàm mī* *n* + perfective "always have X-ed",  
*nàm zī* *n* + perfective "never have X-ed"

*Makir bane buudi paadi ya la nan mi' paae sieba men.*

*Mākír bànī būudi pādī\_ yā lā nám mī\_ ∅ pāe sīēba mén.*

Testing **REL.PL** sort reach:**IPFV 2PL.OB ART** still know **CAT** reach **INDF.PL** also.

"Trials of the kind that have reached you have always reached others too."  
(1 Cor 10:13)

*Ḿ nám zī\_ ∅ ñyē gbīgimne<sup>+</sup>∅.*

**1SG** still **NEG.KNOW CAT** see lion:**SG NEG**.

"I've never seen a lion." SB

**zàṅ**<sup>ε</sup> and **nōk**<sup>ε/</sup> "pick up, take" with object "using" (of a literal object as instrument)

*Ḿ nók sū'ugò\_ ∅ kǐá nīm lā.*

**1SG** pick.up knife:**SG CAT** cut meat:**SG ART**.

"I cut the meat with a knife."

*Ḿ zǎǐ\_ Ḿ nú'ugò\_ ∅ sī'ıs dāká lā.*

**1SG** pick.up **1SG** hand:**SG CAT** touch box:**SG ART**.

"I touched the box with my hand."

(\**Ḿ zǎǐ\_ Ḿ nú'ugò\_ kà sī'ıs dāká lā* "I picked up my hand and touched the box.")

**m̄r<sup>a</sup>** "have" + object "bringing" with motion verbs:

*Dābá\_ àyópòḗ kà fù m̄r-ó\_∅\_ ∅ kē nā.*

Day:PL NUM:seven and 2SG have 3AN.OB CAT come hither.

"Bring her here in a week." WK

**d̄l<sup>a</sup>** "accompany in subordinate rôle, attend"

*Bà d̄ll-ō\_∅\_ ∅ kēḡ Bók.*

3PL follow 3AN.OB CAT go Bawku.

"They went to Bawku with him."

**Beginning** verbs naturally precede:

*Ka Pita pin'ili pa'ali ba*

*Kà Pita pīñ'il\_∅\_ pá'alì\_bā.*

And Peter begin CAT teach 3PL.OB.

"Peter began to tell them." (Acts 11:4)

*Tì déḡì\_∅\_ tís-ò\_∅\_ lór.*

1PL precede CAT give 3AN.OB car.

"We previously gave him a car." (*dēḡ<sup>ε</sup>* "do/go first")

*Ka dau sɔ' duoe zi'en la'asug la svugin ...*

*Kà dàu-sɔ' dūe\_∅\_ zí'èn là'asug lā súugū-n ...*

And man-INDF.AN rise CAT stand.up assembly ART among-LOC ...

"And a man (having risen) stood up in the synagogue ..." (Acts 5:34)

"Come" and "go" can be used similarly as initiators:

*M kēḡì\_∅\_ pīḗ nú'ùs.* "I went and washed my hands."

1SG go CAT wash hand:PL.

**s̄y'ā<sup>a</sup>** "conceal" is used in this construction for "secretly":

*Ka Na'ab Herod su'a buol baḡidib la ...*

*Kà Nà'ab Herod s̄y'ā\_∅\_ búèl bāḡidib lā ...*

And king:SG Herod conceal CAT ask understander:PL ART...

"Herod secretly called for the wise men ..." (Mt 2:7)

**ňyāŋ**<sup>ε/</sup> means "overcome" as a main verb:

*Ka m nyaŋ dunia.* "I have overcome the world." (Jn 16:33)

*Kà m ñyāŋ dūnyā.*

And **1SG** overcome world:**SG**.

As a VP-chain auxiliary it means "carry out successfully, prevail in":

*M̄ pū ñyāŋ∅ záb nà'ab láa +∅.*

**1SG NEG.IND** prevail **CAT** fight chief:**SG ART NEG**.

"I wasn't able to fight the chief."

Unlike English "can", **ňyāŋ**<sup>ε/</sup> expresses events and not states. Thus, to express present ability or inability, the auxiliary is in the irrealis mood:

*M̄ kú ñyāŋ∅ záb nà'ab láa +∅.*

**1SG NEG.IRR** prevail **CAT** fight chief:**SG ART NEG**.

"I can't fight the chief." ("I won't succeed in fighting the chief.")

If the main verb is imperfective the auxiliary is imperfective too:

*wad line nyaŋedin ketin ka nidib voen,*

*wād-línì ñyāŋídī-n ∅ kētí-n kà nīdīb vūv-n*

law-**REL.INAN** prevail:**IPFV-DP CAT** cause:**IPFV-DP** and person:**PL** be.alive-**DP**.

"a law which could make people live." (Gal 3:21, 1996)

**tūñ'e** means "be able"; it almost always occurs as an auxiliary. A rare example of independent use appears in:

*ba daa tis ka li zemisi ba paŋi na tun'e si'em*

*bà dāa tís kà lì zēmísì bā paŋi ∅ nà tūñ'e sī'em*

**3PL TNS** give and **3INAN** become.equal **3PL** strength **NZ IRR** be.able **INDF.ADV**

"They gave as much as their strength would permit" (2 Cor 8:3)

I have no examples of the LF, but there are no imperfective forms in *-d<sup>a</sup>* and **tūñ'e** occurs before both perfective and imperfective main verbs. The verb is thus invariable. Unlike **ňyāŋ**<sup>ε/</sup>, **tūñ'e** expresses a state, and both indicative and irrealis moods can express present ability or inability.



*ka li kv tun'e su'a.*

*kà lì kú tūñ'e\_ ∅ sɥ'āa +∅.*

and **3INAN NEG.IRR** be.able **CAT** hide **NEG.**

"which cannot be hidden" (Mt 5:14)

*Ya na tun'e zin' tejin la ne ti.*

*Yà ná tūñ'e\_ ∅ zín'i tēŋɪ-n lā né tì.*

**2PL IRR** be.able **CAT** be.sitting land:**SG-LOC** **ART** with **1PL.**

"You can dwell in the land with us." (Genesis 34:10)

*Fv tun'e nyet si'ela?*

*Fù túñ'e\_ ∅ ñyēt sí'əlàa +∅?*

**2SG** be.able **CAT** see:**IPFV INDF.INAN** **PQ?**

"Can you see anything?" (Mk 8:23)

*O pv tun'e pian'ada.*

*Ò pō tūñ'e\_ ∅ piāñ'adá +∅.*

**3AN NEG.IND** be.able **CAT** speak:**IPFV** **NEG.**

"He could not speak." (Lk 1:22)

*Tūñ'e* occurs as auxiliary to *ñyāŋ*<sup>ε/</sup> used as a main verb in

*bozugo ba ku tun'e nyaje ba meŋa.*

*bō zúgō bà kù tūñ'e\_ ∅ ñyāŋí\_ bà mēŋá +∅.*

because **3PL NEG.IRR** be.able **CAT** control **3PL** self **NEG.**

"because they cannot control themselves." (1 Cor 7:5, 1996)

### 23.3.2 Following the main VP

**tis**<sup>ε</sup> "give" is used for "to, for"; the meaning may have nothing to do with "giving", and is simply a way of adding an indirect object. This can be used to put an indirect object after a direct, or to have both direct and indirect bound pronoun objects.

*Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Suŋ.*

*Fù pō má' n tìs nīn-sáalā +∅, àmáa fù mà'*

**2SG NEG.IND** lie **CAT** give person-smooth:**SG** **NEG** but **2SG** lie

*n tís nē Wínà'am Sí-sùŋ..*

**CAT** give **FOC** God Spirit-good:**SG.**

"You have not lied to a human being; rather, you have lied to God's Holy Spirit." (Acts 5:4, 1996)

*M̄ dāa kúès b̀̀n̄v\_ ∅ tís d̄y'átà.*

**1SG TNS** sell donkey:**SG** **CAT** give doctor:**SG**.

"I sold a donkey to the doctor."

Not \**M̄ dāa kúès b̀̀n̄v kà tís d̄y'átà.*

**1SG TNS** sell donkey:**SG** and give doctor:**SG**.

("I sold a donkey and gave it to the doctor.")

**gàad**<sup>E</sup> "pass, surpass" can be used in comparisons:

*Isaac kárìm\_ ∅ gát John.*

Isaac read:**IPFV** **CAT** pass:**IPFV** John.

"Isaac reads better than John." SB

*À-Wīn gím\_ ∅ gát À-Būḡv̄r.*

**PERS**-Awini be.short **CAT** pass:**IPFV** **PERS**-Abugri.

"Awini is shorter than Abugri." SB

*Fv sid n̄v̄ mam gat bamaa?*

*F̀̀v̀̀ síd ǹ̀v̄ mām\_ ∅ gát bámmáa +∅?*

**2SG** truly love **1SG** **CAT** pass:**IPFV** **DEM.DEI.PL** **PQ?**

"Do you really love me more than these?" (Jn 21:15)

**gális**<sup>E</sup> "get to be too much" (*Sāa gális yā* "There's too much rain"):

*Ò dì n gális.*

"She's eaten too much."

**3AN** eat **CAT** exceed.

*Dā kárìm gbánà\_ ∅ gálisidā +∅.*

**NEG.IMP** read:**IPFV** book:**PL** **CAT** exceed:**IPFV** **NEG**.

"Don't read books too much."

**bàs**<sup>E</sup> "send/go away" is used for "away, off, out":

*Bà yìis dāy lā\_ ∅ bás.* "They threw the man out."

**3PL** expel man:**SG** **ART** **CAT** throw.out.

*Àn̄v̄'ò̄n̄ n̄wāa yìsid n̄idib tvumb̄e'edi basida?*

*Àn̄v̄'ò̄n̄\_ ∅ ñwāa\_ ∅ yìsid n̄idib túm-bē'edi\_ ∅ básidà +∅?*

Who **CAT** this **CAT** expel:**IPFV** person:**PL** deed-bad:**PL** **CAT** throw.out:**IPFV** **CQ?**

"Who is this who drives people's sins out?" (Lk 7:49)

**Ending** verbs naturally follow the main VP:

Ò dìl\_ø nāe. "He's finished eating."  
 3AN eat CAT finish.

Ò dìl\_ø tíg. "She's eaten to satiety."  
 3AN eat CAT become.satiated.

**Motion** verbs occur here with meanings like local prepositions e.g.

Ò kàt kíkīr-bé'èd-nàm n yīsíd nīdīb.  
 3AN drive:IPFV fairy-bad-PL CAT expel:IPFV person:PL.  
 "He drives evil spirits out of people."

*Jesus ban'ad buŋ n kpen'ed Jerusalem*  
*Jesus\_ø bāñ'ad búŋ n kpéñ'èd Jerusalem*  
 Jesus NZ ride:IPFV donkey:SG CAT enter:IPFV Jerusalem  
 "Jesus riding a donkey into Jerusalem" (picture caption, NT 1976)

Èñrīgim\_ ø páa\_m.  
 Shift.along:IMP CAT reach 1SG.OB.  
 "Shift along up to me." (pāe<sup>+</sup> "reach")

**wēn<sup>na/</sup>** "be like" is very common in VP chaining. **Wēn<sup>na/</sup>** + complement sequences are often treated like prepositional phrases [18.2](#). As a main verb:

*Ka o nindaa wenne nintāŋ ne.*  
*Kà ò nīn-dáa wēn nē nīntāŋ nē.*  
 And 3AN eye-face:SG resemble with sun:SG like.  
 "His face is like the sun." (Rev 10:1, 1996: KB *Ka o nindaa nwene winnig ne*)

**Wēn<sup>na/</sup>** takes a prepositional phrase with **wōv** "like" or **nē** "with" as complement [18.1](#). Any object without the article **lā<sup>+</sup>**, even a pronoun or proper name, must be followed by a meaningless **nē**. Before numbers and measurements **wēn<sup>na/</sup>** means "about, approximately"; numbers when appearing alone are not followed by **nē**:

*Li anε wuv maila ayi' ne.*  
*Lì à nē wōv maila àyí nē.*  
 3INAN COP FOC like mile NUM:two like.  
 "It's about two miles." (Jn 11:18)

but *ka ba kal an wuv kɔbiga ne pisi.*  
*kà bà kāl áñ wūv kóbigā nē pīsí.*  
 and **3PL** number:**SG** **COP** like hundred with twenty  
 "and their number was about 120." (Acts 1:15)

**là'am<sup>m</sup>** "together" is also found as a preverb [19.7.2](#). In *là'am nē* "together with" the expression has become a compound preposition [18.2](#). It appears as a main verb meaning "associate with":

*Bà pū lá'amìd tāabaa +∅.*  
**3PL** **NEG.IND** associate:**IPFV** each.other **NEG.**  
 "They don't associate together."

**yà'as<sup>ε</sup>** or **yà'as<sup>a</sup>** "again" usually lacks *n* and has become effectively an adverb, preposable with *kà* [30.2](#). ILK glosses the word as "repeat", but I have no example of its use as a main verb.

*Ya'as ka m gos ...* "Again I looked ..." (Rev 5:11, 1976)  
*Yà'as kà ñ gōs ...*  
 Again and **1SG** look ...

### 23.4 **Hālí<sup>+</sup>** preceding catenator-*n*

**Hālí<sup>+</sup>** [18.1](#) can precede catenator-*n* in the sense "until":

*...ka keŋ ia arakon' kane bodig la hale n ti nye o?*  
*...kà kēŋ\_∅ íá àdàkóñ'-kàni bòdig lā*  
 ...and go **CAT** seek **NUM:one-REL.SG** get.lost **ART**  
*hālí n tì ñyē-ó-o +∅?*  
 until **CAT** afterwards see-**3AN.OB** **CQ?**  
 "... and go and look for the one which is lost until he finds it?" (Lk 15:4, 1996)

*Ka be mōogin hali ti paae san'kanε ka o yis o meŋ paalu ni Israel dim san'an.*  
*Kà bé mōogv-n hālí\_∅ tì pāe sān-káni*  
 and **EXIST** grass:**SG-LOC** until **CAT** afterwards reach time-**REL.SG**  
*kà ò yís ò mēŋ pāalú nì Israel dím sá'àn.*  
 and **3AN** emerge **3AN** self openly **LOC** Israel individual.**PL** among.  
 "... and remained in the bush until the time when he showed himself openly to the Israelites." (Lk 1:80); 1996 *hale n ti paae*

## 24 Clauses

### 24.1 Structure

Kusaal is strictly SVO; deviations not achieved by *kà*-preposing 30.2 always represent extraposition or dislocation 30.3. Indirect objects precede direct, and objects precede other complements.

Verb phrases can be concatenated by VP chaining 23.

Except in certain special circumstances clauses require a subject NP.

Clause-level particles appear in various positions within the clause structure: clause-linker particles, post-subject particles and emphatics 30.6.

VP adjuncts may follow each VP. Clause-level adjuncts may follow the last VP; it is generally not possible to distinguish these from adjuncts of the last VP itself, unless the VP ends in a VP-final particle 30.3.

Main clauses and content clauses have similar structures. Both display independency marking on the first verbal predicator 19.6, and have structural possibilities not permitted to clauses of any other type: they may contain non-verbal predicators 22 or lack a predicator altogether 25.2.4, they can show clefting or preposing with *kà*, or focus with *nē<sup>+</sup>* 30.1.2, and they may have clause-level adjuncts expressing time or circumstance preceding the clause subject 25.1.1.

#### 24.1.1 Subjects

A VP subject must normally be present; Kusaal is not a pro-drop language, and requires, for example, dummy subject pronouns for impersonal constructions such as

*Lì tòl.* "It [weather] is hot."  
**3INAN** be.hot.

*Lì àñ súnjā.* "It's good."  
**3INAN COP** good:ADV. Contrast Mooré *yaa sōama*, with no pronoun.

*Lì nàr kà fù kūl.* "It's necessary for you to go home."  
**3INAN** must and **2SG** return.home.

The dummy pronoun is 3sg inanimate; animate *ò* is not found. The dummy subject may be omitted in *yà'*-clauses:

*Ya'a ka'anε alaa, m naan ku yεline ya ye ...*  
*Yà' kà'a-ní\_ àlá, m̄ nāan kú yēl̄i-ní\_ yā yē ...*  
 If **NEG.BE-DP** ADV:thus, **1SG** then **NEG.IRR** say-DP **2PL.OB** that...  
 "If it were not so, I would not have told you that ..." (Jn 14:2)



### 24.1.3 Conjunctions

No one group of words in Kusaal corresponds exactly to English conjunctions. The particles *kà* "and" and *yē* "that" are clause-linker particles [24.1.2](#), and some words translatable as English conjunctions are presubject adjuncts [25.1.1](#). The term "conjunction" will here be reserved for forms which either do not occur together with clause-linkers at all, or precede them, whereas presubject adjuncts follow. When there are no clause-linkers, conjunctions precede adjuncts. Thus

<i>kōv</i>	"or" (← Hausa)
<i>bēε</i>	"or"

never appear before or after *kà*, while

<i>àmáa</i>	"but" (cf Arabic <i>أما</i> <i>ʔamma</i> : "as for")
<i>hālí</i>	"until" (cf Arabic <i>حتى</i> <i>ḥatta</i> :); preposition <a href="#">18.1</a>
<i>àsέε</i>	"unless" (cf Hausa <i>sai</i> ); preposition

occur overwhelmingly more often before *kà* than after it. The 1996 NT version has 92 examples of the order *àmáa kà*, 99 of *hālí kà* and 49 of *àsέε kà*; in the KB versions:

*Ka sieba la' o. Amaa ka sieba yeI ye ...*  
*Kà sīāba lá'·o\_∅. Àmáa kà sīāba yeI yē ...*  
 And **INDF.PL** laugh **3AN.OB**. But and **INDF.PL** say that...  
 "Some laughed at him, but others said..." (Acts 17:32)

*... zin'in anina hali ka Herod ti kpi.*  
*... zín'in ànínā, hālí kà Herod tí kpi.*  
 ... sit **ADV**: there, until and Herod afterwards die.  
 "...remaining there until Herod had died." (Mt 2:14)

*Amaa baa yinne ku lu teŋin kpii, asεε ka li aan ya Ba' Wina'am bɔɔdim.*  
*Àmáa báa yīnní kù lū tēŋi-n\_ ∅ kpíi<sup>+</sup>∅, àsέε kà lì*  
 But not.one **NEG.IRR** fall ground:SG-LOC CAT die **NEG**, unless and **3INAN**  
*áañ\_yà Bā' Wínà'am bɔɔdim.*  
**COP 2PL** father:SG God:SG will.

"But not one of them will fall to the ground and die, unless your Father God agrees to it." (Mt 10:29)

The 1996 NT has just one example each of *kà àmáa*, *kà hālí* and *kà àsέε*, e.g.

*Ka na'ab la sunf sa'am, ka amaa on po saam tuon la zug ka o tis noor ye ba tisim bipuŋ la on bood si'el.*

*Kà nà'ab lā sūñf sáñ'àm, kà àmáa ɔ́n pō sáam*

And king:SG ART heart:SG spoil, and but 3AN:NZ swear stranger:PL

*túèn lā zúg kà ò tís nōɔr yé bà tìsɪm bī-púŋ lā*

before ART upon and 3AN give command:SG that 3PL give:IMP child-girl:SG ART

*ɔ́n bòɔd sī'əl.*

3AN:NZ want INDF.INAN.

"The king was sad, but because he had sworn in front of guests he commanded that they give the girl what she wanted." (Mt 14:9, 1996: KB *amaa on po*)

Conjunctions also precede *yē* (both as linker and "resumptive" *yē* 26.3.3):

*Wina'am daa pu gaŋi ti ye ti tum dian'ad tuuma, amaa ye ti be nyain.*

*Wínà'am dāa pō gāŋí tī yé tì túm djā'ad túmà<sup>+</sup>∅,*

God TNS NEG.IND choose 1PL.OB that 1PL work dirt work NEG,

*à máa yé tì bé ñyāe.*

but that 1PL EXIST brightly.

"God did not choose us so that we would do the work of impurity, but so that we would be in cleanliness." (1 Thess 4:7)

Adjuncts appear *after* clause-linking *kà*; any following *kà* is not clause-linking but *kà*-preposing 30.2. Time and circumstance adjuncts are not often *kà*-preposed.

For example, a rough count of the text of the 1996 NT shows with *nannanna nānná-nā<sup>+</sup>* "now" and *lin a si'em la lín à sī'em lā* "as things stand":

	<u>X alone</u>	<u>kà X</u>	<u>X kà</u>
<i>nānná-nā<sup>+</sup></i>	33	28	4
<i>lín à sī'em lā</i>	4	6	0

Similarly *sān-sí'ēn lā* "at one time, once ..." is a presubject AdvP:

*sajsi'en la ya da ka' yinni ne Kiristo*

*sān-sí'ē-n lā, yà dà kā' yīnní nē Kiristo*

time-INDF.IH-LOC ART 2PL TNS NEG.BE one with Christ

"at one time you were not one with Christ." (Eph 2:12, 1996)

*Ka sajsi'en la tinam meŋ da ane zon*

*Kà sān-sí'ē-n lā tīnám mēŋ dá à nē zōn.*

And time-INDF.INAN-LOC ART 1PL.CNTR self TNS COP FOC fool:PL

"and once we ourselves were fools" (Titus 3:3, 1996)



Constructions based on *zùgō* (see [8.1.1](#)), like *dìn zùgō* "therefore" *bō zùgō* "because" are conjunctions like *kōv/bēē* "or" which do not usually occur with clause linkers at all. *Bō zùgō*, though stigmatised as an Anglicism in ILK, is in fact freely used in the NT/KB for "because."

*Police gbáñ'a\_m bō zùgō m ñwé' dāy lā.*

Police seize **1SG.OB** because **1SG** hit man:**SG ART**.

"The police arrested me because I hit the man." (ILK)

However, the corresponding types with apocope, like *àlá zùg* "therefore" *dìn zùg* "therefore", can be used *either* as *kōv/bēē*-type conjunctions or as AdvPs; in the latter case, if they precede the subject they must be *kà*-preposed because they do not express time or circumstance [17.1](#). This results in a characteristic pattern: all combinations with *kà* occur *except* *kà* X (1996 NT again):

	<u>X alone</u>	<u>kà X</u>	<u>X kà</u>	<u>kà X kà</u>
<i>dìn zùgō</i>	208	2	0	0
<i>dìn zùg</i>	39	2	69	17

Unlike the NT, WK also treats *nānná-nā*<sup>+/</sup> "now" in this way:

*Nānná-ná m á nē ná'àb.* "Now I am a chief."

Now-hither **1SG COP FOC** chief:**SG**.

*Nānná-ná kà m áñ ná'àb.* "Now I am a chief."

Now-hither and **1SG COP** chief:**SG**.

*Kà nānná-ná kà m áñ ná'àb.* "And now I am a chief."

And now-hither and **1SG COP** chief:**SG**.

not \**Kà nānná-ná m áñ ná'àb* "And now I am a chief."

\**Kà nānná-ná m á nē ná'àb.* (rejected by WK as ungrammatical)

Conjunctions have no effect the structure of the following clause, and if this is an insubordinate sequential clause or a subordinate clause introduced by *kà*, the linker particle remains in place after the conjunction. Conjunctions do not affect tense marking in narrative [25.3.2](#). However, if a conjunction precedes a content clause [26.3](#), there is no following linker particle; this is the only context in which a conjunction *alone* may behave as a subordinator. The preposition *wōv* "like" [18.1](#) can be used in this way as a conjunction:

*ka tuumbe'ed ku len so'e ti wuu ti aa li yamugo.*

*kà tòum-bē'ed kú lēm sù'v\_tī wōv tì áaň\_lì yàmmugō +∅.*

and work-bad:PL NEG.IRR again own 1PL.OB like 1PL COP 3INAN slave:SG NEG.

"and that sin will not again own us as if we were its slave." (Rom 6:6, 1996)

*M pian'adi tisidi ya wuv ya ane m biis ne.*

*M pjáň'adī\_∅ tísìdī\_ yá wōv yà á né m bīs nē.*

1SG speak:IPFV CAT give:IPFV 2PL.OB like 2PL COP FOC 1SG child:PL like.

"I talk to you as if you were my children." (2 Cor 6:13)

*Àséé* "unless, except for" [18.1](#) can similarly introduce a nominalised *ñ*-clause or a content clause. Clauses introduced by *àséé* without *kà* consistently follow any negative clitic from the preceding clause, probably reflecting the scope of the negation rather than lack of subordination [29.3](#).

*O ku kpīi, aséé o ti nyé Zugsob Kristo la.*

*Ò kù kpīi +∅, àséé ò tì ñyè Zūg-sób Kristo lā.*

3AN NEG.IRR die NEG, unless 3AN afterwards see head-one:SG Christ ART.

"He will not die, without seeing the Lord's Christ." (Lk 2:26)

Interestingly, CGEL (pp1011ff) classifies almost all the subordinating conjunctions of traditional English grammar as prepositions which can take a content clause as complement, distinguishing them from subordinators like "that." In Kusaal, as in English, only a subset of prepositions can behave like this: *nē* "with, and" can only be followed by NPs or AdvPs (including *ñ*-clauses.)

#### 24.1.4 Post-subject particles

Two particles marking nominalised subordinate clause types follow the subject: *yà* "if" [27.1](#) and nominaliser-*ñ* [28](#); *sāduḡím* "since" follows *ñ* [28.1.1](#). Other particles found after the clause subject are

*sìd* "truly"

*Ò sìd à nē zōlvog.*

3AN truly COP FOC fool:SG.

"He really is a fool."

*Ò sìd dāa á nē ná'àb.*

3AN truly TNS COP FOC chief:SG.

"Truly, he was a chief." WK

**kōlum** or **kōdum** "always" (← Hausa) is most often found with negatives:

*Ka so' kudin ku len nyee li ya'asa.*

*Kà sō' kōdum kú lēm ñyées\_lī yá'asā +∅.*

And **INDF.AN** ever **NEG.IRR** again see **3INAN.OB** again **NEG.**

"Nobody will ever see it again." (Rev 18:21, 1996)

**ñyāan** or **nāan** [27.1.2](#) "next, afterwards"

*Ka Yesu tans ne kukɔtita'ar ka nyaan kpi.*

*Kà Yesu táńs nē kúkō-títā'ar kà ñyāan kpí.*

And Jesus shout with voice-great:**SG** and next die.

"Jesus cried out with a loud voice and then died." (Mt 27:50)

**pà' tì** "perhaps", like **yà'**, is followed by indicative mood with future meaning:

*Ya yinni pa'a ti bu'osi m ye ...*

*Yà yīnní pá' tì bŭ'əsí\_m yē...*

**2PL** one perhaps ask **1SG.OB** that...

"One of you will perhaps ask me ..." (Rom 9:19, 1976)

**yū'un** "then, next"

*Manoa yu'un da ban ye o anε Zugsoɓ maliak.*

*Manoa yū'un dá bàn yé ò à nē Zūg-sóɓ máljāk.*

Manoah then **TNS** realise that **3AN COP FOC** head-one:**SG** angel:**SG**.

"Then Manoah realised that he was an angel of the Lord." (Judges 13:12)

### 24.1.5 Ellipsis

Ellipsis is a spectrum. Informal ellipsis may be constantly used by speakers but is liable to be declared incorrect if their attention is drawn to it; it does not affect the meaning of the clause. More systematic ellipsis often implies anaphora or is used to avoid repetition of preceding material. In yet more formalised cases the ellipted type has become an autonomous construction with its own meaning.

Bound words, by definition, can never be left standing alone after ellipsis of the word to which they are bound but must be ellipted along with it.

Cases where I invoke ellipsis as a descriptive and explanatory device are with yes/no questions ending in *kúu*<sup>+</sup> or *bées*<sup>+</sup> [25.2.2](#); indirect commands [26.1](#) [26.3.1](#); ellipsis of complements of verbs [20.1](#); *kà*-preposing and *n*-focus [30.1.1](#) [30.2](#); *hāl*<sup>+</sup> as intensifier [18.1](#); ambiguity with coordinated modifiers and determiners in the NP and

cases where a premodifier applies to a coordinated head [16.7](#); and omission of temporal *nē<sup>+</sup>* in replies to questions [30.1.2.1.2](#). Implicit tense marking [19.3.4](#) could also reasonably be classified as a form of ellipsis.

### 24.1.5.1 Coordination and ellipsis

Ellipsis is involved in many cases of coordination within NPs [16.7](#).

Ellipsis of repeated elements in clause coordination is common, e.g.

*Dāy lā ñyé bī-díbiŋ kōv bī-púŋàa +∅?*

Man:SG ART see child-boy:SG or child-girl:SG PQ?

"Did the man see a boy or a girl?"

The sequence *kà yē* "but in order that ..." is always the result of ellipsis; the two linker particles cannot both occur in a clause, unless the *yē* is "resumptive" [26.3.3](#), in which case it precedes the *kà*. Thus, with *kà yē*, a clause must have been ellipted between the two clause-linker particles:

*M̄ pō t̄sì\_f gbáŋ lā yé fù kúsi\_lú +∅,*  
 1SG NEG.IND give 2SG.OB book:SG ART that 2SG sell 3INAN.OB NEG,  
*kà yé fù kárim.*  
 and that 2SG read.

"I didn't give you the book so you'd sell it, but [I gave it] so you'd read it."

### 24.1.5.2 Null anaphora of subjects

For null anaphora of VP complements see [20.1](#).

Explicit clause subjects are normally required, with cross-linguistically common exceptions like the subjects of direct commands [24.1.1](#). Dummy subject pronouns (always 3sg inanimate) must be used in impersonal constructions like

<i>Lì tòl.</i>	"It (weather) is hot."
<i>Lì à súnā.</i>	"It's good."
<i>Lì nàr kà fù kūl.</i>	"It's necessary for you to go home."

However, subject pronouns are regularly deleted after the clause-linker particle *kà* when they would have the same reference as the subject of the preceding clause. The M spreading that would follow the pronoun remains [8.3](#). Pronouns after *kà* introducing a content clause are not subject to this, and adnominal *kà*-clauses [26.2](#) usually have different subjects from the main clause, so this is characteristic of **sequential clauses** [25.3.2](#). It also occurs in the idiom "*nìŋ wēlā kà ...?*" [26.1](#).

A non-deleted subject pronoun after *kà* thus usually signals a change of subject. A conversation may be reported simply by *Kà ò yél ... kà ò yél ...* with each *ò* marking a switch of speaker.

Kusaal is strict in requiring a pronoun to refer to the last grammatically possible antecedent; with the collapse of gender agreement [16.3.1](#) this can mean any antecedent of the same number, and can trump semantic appropriateness, e.g. (all WK):

*Pṽ'ā lā dá' dāká kà kēṅ Bók.*

Woman:**SG ART** buy box:**SG** and go Bawku.

"The woman bought a box and went to Bawku."

\**Pṽ'ā lā dá' dāká kà ò kēṅ Bók.*

Woman:**SG ART** buy box:**SG** and **3AN** go Bawku.

("The woman bought a box and it went to Bawku")

*Pṽ'ab lā dá' dāká kà kēṅ Bók.*

Woman:**PL ART** buy box:**SG** and go Bawku.

"The women bought a box and went to Bawku."

*Pṽ'ab lā dá' dāká kà bà kēṅ Bók.*

Woman:**PL ART** buy box:**SG** and **3PL** go Bawku.

"The women bought a box and they went to Bawku."

(acceptable, though unusual, with *bà* = *pṽ'ab*)

Occasionally the pronoun after *kà* is ellipted as referring, not to the subject of the preceding clause, but to the subject of a preceding *kà*-preposed absolute clause:

*Ban daa yit la, ka nyε dau ...*

*Bán dāa yīt lā, kà ṅyē dāy ...*

**3PL:NZ TNS** emerge:**IPFV ART**, and see man:**SG**...

"As they were going together, (they) saw a man ..." (Mt 27:32)

*Ban wum nē'εṅa la ka sīn.*

*Bán wùm nē'ṅá lá kà sīn.*

**3PL:NZ** hear **DEM.DEI.INAN ART** and be.silent.

"After they heard this they fell silent." (Acts 11:18)

## 24.2 Clause types

Criteria for describing a clause as **main** or **subordinate** do not always neatly align with each other. They may be semantic or syntactic, and syntactic criteria may in turn relate either to the internal structure of the clause itself or to its placing within larger structures. **Independency marking** of verbal predicators [19.6](#) in principle marks a clause as non-subordinate, but the matter is complicated by **downranking** of main clauses to function as subordinate content clauses without internal alteration, and by the fact that main clauses preceded by the linker particle *kà* "and" in its *coordination* function always lack independency marking.

Historically, *kà* was perhaps once consistently subordinating (compare *nē* "and" connecting NPs, fundamentally identical with the preposition *nē* "with" [16.7](#).) Promotion of subordinate clauses to main-clause function is **insubordination**, defined in [Evans 2009](#) as "the conventionalised main-clause use of what, on prima facie grounds, appear to be formally subordinate clauses." Because even now they lack independency marking, *kà*-clauses which are not subordinate will be specifically called "insubordinate clauses" below [25.3](#).

**Conjunctions** may precede main clauses, sequential clauses, subordinate *kà*-clauses, or content clauses (which then have no clause-linker particle) [24.1.3](#).

	independency-marked	not independency-marked
main or insubordinate	main clauses <a href="#">25</a>	<i>kà</i> sequential clauses <a href="#">25.3.2</a> <i>kà</i> coordinated main clauses <a href="#">25.3.1</a>
subordinate	<i>yē/kà</i> content clauses <a href="#">26.3</a>	<i>yē/kà</i> purpose/necessity/permission and <i>kà</i> result clauses <a href="#">26.1</a> <i>kà</i> adnominal clauses <a href="#">26.2</a>
nominalised-subordinate		<i>ñ</i> absolute/relative clauses <a href="#">28</a> <i>yà'</i> conditional clauses <a href="#">27.1</a>

Main clauses and content clauses, including those coordinated with *kà*, can be statements, questions or commands, and may have non-verbal (or no) predicators. Adjuncts preceding the subject and focus with *nē*<sup>+/</sup> are found only in main clauses, content clauses and sequential clauses. *Kà*-preposing is found only in these clause types and in relative clauses with initial antecedents [28.2.3](#).

Subordinate clause types marked by the post-subject particles *ñ* and *yà'* are downranked to the status of AdvPs or NPs; they are unproblematically subordinate, and always lack independency marking. *Yà'*-clauses are not coordinated; whereas all other clauses, like VPs, are coordinated by *kà*, *ñ*-clauses are coordinated with *nē* like other AdvPs and NPs. These **nominalised** clause types also differ from purpose, result and adnominal clauses in having independent tense marking.

All clauses introduced by the linker particle *yē* "that" are subordinate, but they fall into two different groups with regard to independency marking. **Purpose** clauses, for example [26.1](#), lack independency marking and have VPreds with imperative mood; they show tense marking only if the main clause is ellipted [19.3.1](#).

*M̄ pū bódòd yé fù kēŋ Bókō +∅.*  
**1SG NEG.IND** want that **2SG** go Bawku **NEG.**  
 "I don't want you to go to Bawku."

On the other hand, **content** clauses [26.3](#) are downranked main clauses, showing both independency marking and the full range of possible main clause structures. They function as arguments of verbs of cognition, reporting, and perception:

*Ka o ba' ne o ma pu baŋ ye o kpelim yaa.*  
*Kà ò bā' né ò mà pū bāŋ yé ò kpèlim yāa +∅.*  
 and **3AN** father:SG with **3AN** mother:SG **NEG.IND** realise that **3AN** remain **PFV NEG.**  
 "His father and mother did not realise that he had remained." (Lk 2:43)

Despite the conventional gloss "and" adopted for convenience, the linker particle *kà* is often subordinating. It can, like *yē*, introduce content clauses, which show independency marking as usual:

*M̄ téñ'ès kà nīgí lā ńbìd nē.*  
**1SG** think and cow:PL **ART** chew:IPFV **FOC.**  
 "I think the cows are eating." WK; content clause showing focus marking

All other *subordinate* clauses introduced by *kà* lack independency marking, as expected; like purpose *yē*-clauses, such clauses cannot have focus marking, or tense marking (unless the main clause is ellipted):

*M̄ dāa pū ñyē dāy lá kà ò áñ ná'abā +∅.*  
**1SG TNS NEG.IND** see man:SG **ART** and **3AN COP** chief:SG **NEG.**  
 "I didn't see the man as a chief." KT; **result** clause [26.1](#)

not \**M̄ dāa pū ñyē dāy lá kà ò á nē ná'abā +∅.*  
**1SG TNS NEG.IND** see man:SG **ART** and **3AN COP FOC** chief:SG **NEG.**

nor \**M̄ dāa pū ñyē dāy lá kà ò dāa áñ ná'abā +∅.*  
**1SG TNS NEG.IND** see man:SG **ART** and **3AN TNS COP** chief:SG **NEG.**

**In coordinating function, *kà* is also never followed by independency marking.** This use of *kà* to coordinate semantically and structurally independent clauses is especially characteristic of narrative, where potentially long series of *insubordinated* result clauses, **sequential clauses** [25.3.2](#), are each introduced by *kà* so long as the sequence of events is proceeding in order.

A clause must be subordinate if it precedes clause-final elements belonging to the preceding clause, such as negative prosodic clitics [29.1](#):

*ka pu nar ka ba buolim ye Tumtumma*

*kà pō nár kà bà búòlì\_m yē Túm-tūmma +∅.*

and **NEG.IND** must and **3PL** call **1SG.OB** that work-worker:SG **NEG.**

"and (I) ought not to be called an apostle" (1 Cor 15:9)

However, the converse is not true: with constructions which induce negative raising [29.2](#), if the subordinate clause is, exceptionally, outside the semantic scope of the negation of the main clause, the negative clitic placement is also exceptional, preceding the subordinate clause [29.3](#):

*Ka li pu yuuge ka o pu'a me kena.*

*Kà lì pō yúugē +∅, kà ò pu'ā mé kē nā.*

And **3INAN NEG.IND** delay **NEG**, and **3AN** wife:SG also come hither.

"Not much later, his wife came too." (Acts 5:7)

The structure can also be obscured by extraposition [30.3](#), as with the undoubtedly subordinate *kà*-clause after *kē*<sup>+</sup> "cause" [26.1](#), unexpectedly placed after the phrase-final perfective marker *yā* [19.6.2.1](#) in

*Amaa Wina'am keya ka ya an nōɔr yinne ne Yesu Kristo.*

*Àmáa Wínà'am ké yá kà yà áñ nōɔr yīnní nē Yesu Kristo.*

But God cause **PFV** and **2PL COP** mouth:SG one with Jesus Christ.

"But God has caused you to be in agreement with Jesus Christ." (1 Cor 1:30)

Clauses of the type introduced by linker particles are themselves coordinated with *kà* "and" *kūv/bēē* "or", not *nē* like *ñ*-clauses:

*M̄ bɔ̀d̄ yē dāy lā kēɲ dá'a-n, kà pu'ā lā dōg dīub.*

**1SG** want that man:SG **ART** go market:SG-LOC, and woman:SG **ART** cook food.

"I want the man to go to market and the woman to cook food." WK



## 25 Main clauses

### 25.1 Structure

Main clauses show numerous structural possibilities which are not found in subordinate clauses other than content clauses, which are structurally identical, and regarded as downranked main clauses [26.3](#). Both clause types display characteristic independency marking on the first verbal predicator [19.6](#). They may contain non-verbal predicators [22](#) or even lack a predicator altogether [25.2.4](#). They can be focussed or clefted or prepose elements with *kà*; focus-*nē*<sup>+/</sup> occurs at most once in a main or content clause, following a VPred, before a verb complement or adjunct, or clause-finally [30](#). Main and content clauses may contain time, circumstance or reason-why adjuncts before the subject.

#### 25.1.1 Clause-level adjuncts preceding the subject

Main clauses and content clauses with a verbal predicate may contain adjuncts which precede the subject and follow any clause-linker particle. Such adjuncts may only express time, circumstance or reason, not place or manner. AdvPs expressing place or manner can only be placed before the subject by preposing with *kà* [30.2](#). Thus the AdvP may precede the subject in e.g.

*Bēogú fù ná kūl.*

Tomorrow **2SG IRR** return.home.

"You're going home tomorrow." SB

but not in

\**Mōogú-n mām bē.* for "I'm in the bush."

Grass:**SG-LOC 1SG.CNTR EXIST.**

which is corrected by WK to

*Mōogú-n kà mām bē.* "I'm in the bush."

Grass:**SG-LOC** and **1SG.CNTR EXIST.**

Permissible pre-subject adjunct types may be any AdvPs or clauses expressing time, circumstances, or reason, such as absolute clauses, *sādigim*-clauses [28.1.1](#), AdvPs like *àlá zùg*, *dìn zùg* "therefore"; *lì ñyá'an*<sup>a</sup> "afterwards", *yà*'-clauses "if/when ...", *hālí* + *ñ*-clause "although ...", "even though ...", *yā'a* + NP "as for ...", *lín à sī'am lā* "as things stand", *àsīda* "truly."

Some AdvPs of this kind, like absolute clauses, *lì ñyá'an*<sup>a</sup> or *dìn zúg* may also occur preposed with *kà*; others, like *yà'*-clauses or *sāḍígím*-clauses, may not.

Pre-subject adjuncts are not followed by M spreading [8.3](#).

## 25.2 Main clause types

Main clauses, along with the structurally similar content clauses, can be classified into declarative, interrogative and imperative types. Declarative main clauses are the unmarked default. Interrogatives comprise content and polar question types, and the imperative type are commands. There are also minor clause types with non-verbal predicators or no predicator at all.

### 25.2.1 Content questions

Content questions (except those with *līa* [22](#)) contain an interrogative pronoun or determiner; the final word of the question appears as a LF with a tone perturbation due to the following content-question prosodic clitic [8.1](#).

There is no special interrogative word order; however if the interrogative word is the subject (or part of the subject NP) it is always *n*-focussed [30.1.1](#) when syntactically possible, and other interrogatives are very often also fronted with *kà* [30.2](#), obligatorily so in the case of *b̄5* in the sense "why?" (compare the parallel construction with a demonstrative pronoun expressing a reason in *Din ka Kusaas ye ...* "That is why the Kusaasi say ..." KSS p16.)

*Ánó'ɔ̀nì\_ø ñyē bígà +ø?*

Who CAT see child:SG CQ?

"Who has seen a child?"

*Fù b̄5òd b̄5 +ø?*

2SG want what CQ?

"What do you want?"

*B̄5 kà fù kúmmà +ø?*

What and 2SG weep:IPFV CQ?

"Why are you crying?"

For "which?" the short demonstratives are used:

*Lìnɛ?*

"Which one?"

*Nīf-kánè?*

"Which eye?"

*Nīn-kánè?*

"Which person?"

*Fù b̄5òd línè +ø?*

2SG want DEM.INAN CQ?

"Which do you want?"

Note the *short* final LF vowels [8.1](#); these are content, not polar, questions. Used after a cb, as a dependent pronoun, *b̄*<sup>+</sup> is a determiner: "what?":

<i>nā'-b̄</i>	"what cow?" WK DK (not <i>náaf b̄</i> , only possible in the sense "What, of a cow's?")
<i>b̄-b̄</i>	"what goat?"
<i>dā-b̄</i>	"what beer?"

*B̄-* can be used as a premodifier, querying a description: "what sort of ...?"

*F̄ò túm b̄-t̄uma +∅?*  
2SG work:IPFV what-work CQ?  
"What kind of work do you do?"

*Bo yir ka ya na me' n tis mane?*  
*B̄-yír kà yà ná mē n tís mánè +∅?*  
What-house:SG and 2PL IRR build CAT give 1SG.CNTR CQ?  
"What kind of house will you build for me?" (Acts 7:49, 1996)

The compound *b̄-b̄uudi*<sup>+</sup> "what kind of?" can be used as a postdeterminer:

<i>nā'-b̄-b̄uudi</i>	"what kind of cow?"
<i>dā-b̄-b̄uudi</i>	"what kind of beer?"

Note the idiom:

*F̄ò á nē b̄- b̄uudi +∅?* "What tribe do you belong to?"  
2SG COP FOC what sort CQ?

The focus particle *nē*<sup>+/</sup> may not be used in content questions; this applies also to temporal *nē*<sup>+/</sup>.

*Dāy lā ñyē b̄īg.* "The man has seen a child."  
Man:SG ART see child:SG.

*Ánó'ɔ̀nì\_∅ ñyē b̄ígà +∅?* "Who has seen a child?"  
Who CAT see child:SG CQ?

*Dāy lā ñyé àn'òṅè* +∅? "Whom did the man see?"  
 Man:SG ART see who CQ?

or *Àn'òṅ kà dāy lā ñyéε* +∅?  
 Who and man:SG ART see CQ?  
 "Whom did the man see?"

*Bà kùvd nē bōvs.* "They're killing goats."  
 3PL kill:IPFV FOC goat:PL.

*Àn'òṅì\_∅ kùvd bōvsè* +∅?  
 Who CAT kill:IPFV goat:PL CQ?  
 "Who is killing goats?" Progressive sense without *nē*.

*Àn'òṅ bīgi\_∅ ñwá* +∅? "Whose child is this?"  
 Who child:SG CAT this CQ?

*Bó kà fù kúesìda* +∅? "What are you selling?"  
 What and 2SG sell:IPFV CQ? Progressive sense possible without *nē*.

*Fù bódòd b́* +∅? "What do you want?"  
 2SG want what CQ?

*Fù bódòd nē b́* +∅? "What do you want it with?"  
 2SG want with what CQ? WK confirms that *nē* must be "with" here.

*M á nē dāy.* "I am a man."  
 1SG COP FOC man:SG.

*M áñ b́* +∅? "What am I?"  
 1SG COP what CQ?

*Fù wá'e yáa* +∅? "Where are you going?"  
 2SG go where CQ?

*Bùgúm lā yít yáa ní ná* +∅?  
 Fire ART emerge:IPFV where LOC hither CQ?  
 "Where is the light coming from?"

### 25.2.2 Polar questions

Polar questions are of two types. One is exactly like a statement but with final LF and tone changes due to the polar-question prosodic clitic; in this case the neutralisation of LF-final vowel length is to long [8.1](#). There are no restrictions on focus *nē*. The answer expected is *ēēñ* [25.2.4](#).

*Dāy lā ñyé bígàa +∅?* "Has the man seen a child?"  
 Man:SG ART see child:SG PQ?

*Bà kùvd nē búvsèè +∅?* "Are they killing goats?"  
 3PL kill:IPFV FOC goat:PL PQ?

*Ṁ á nē dáùv +∅?* "Am I a man?"  
 1SG COP FOC man:SG PQ?

*Fò p̄ wúmmàa +∅ +∅?* "Don't you understand?"  
 2SG NEG.IND hear:IPFV NEG PQ? (expects *ēēñ*, here "no")

Note that the negative prosodic clitic **NEG** is effectively lost before the interrogative prosodic clitics **CQ** and **PQ**.

The second type of polar question follows the ordinary statement form with either *béè* (expecting disagreement, with *áyì*) or *kúv* (expecting agreement, with *ēēñ*.) NT rarely uses *kúv* in this way. These are evidently the words for "or", with ellipsis of the rest of a tag question "or isn't it?" etc; such constructions are common in local languages, and indeed "or?" is used like this in local English.

*Dāy lā ñyé bíg kúv +∅?*  
 Man:SG ART see child:SG or PQ?  
 "Has the man seen a child?" (I expect so.)

*Dāy lā ñyé bíg béè +∅?*  
 Man:SG ART see child:SG or PQ?  
 "Has the man seen a child?" (I expect not.)

### 25.2.3 Commands

For indirect commands, see [26.1](#) [26.3.1](#).

In a direct command the subject is 2nd person; in accordance with a cross-linguistically common pattern, a singular pronoun is deleted, and a plural subject pronoun is placed immediately after the verb, in Kusaal assuming the liaison-enclitic form <sup>ya</sup>; for the realisation of <sup>ya</sup> see [8.2.1.2](#). Thus

*Fù gós bīg lā.* "You (sg) have looked at the child."  
**2SG** look.at child:**SG** ART.

*Yà gós bīg lā.* "You (pl) have looked at the child."  
**2PL** look.at child:**SG** ART.

but *Gòsim bīg lā!* "Look (sg) at the child!"  
 Look.at:**IMP** child:**SG** ART!

*Gòsimī\_ ∅ bīg lā!* "Look (pl) at the child!"  
 Look.at:**IMP** **2PL.SUB** child:**SG** ART!

*Gòsim tēŋi-n!* "Look (sg) down!"  
 Look:**IMP** ground:**SG-LOC**!

*Gòsimī\_ ∅ tēŋi-n!* "Look (pl) down!"  
 Look:**IMP** **2PL.SUB** ground:**SG-LOC**!

*Dā gōs tēŋi-né +∅!* "Don't (sg) look down!"  
**NEG.IMP** look ground:**SG-LOC** **NEG**!

*Dā gōsi\_ ∅ tēŋi-né +∅!*  
**NEG.IMP** look **2PL.SUB** ground:**SG-LOC** **NEG**!  
 "Don't (pl) look down!"

*Dā gōsε +∅!* "Don't (sg) look."  
**NEG.IMP** look **NEG**!

*Dā gōsi\_ yá +∅!* "Don't (pl) look."  
**NEG.IMP** look **2PL.SUB** **NEG**!

No pronoun changes occur after presubject elements, e.g *yà*'-clauses [27.1](#):

*Fu ya'a m̄ɔr pu'a, fun da m̄ɔɔd ye fu bas oo.*

*Fù yá' m̄ɔr p̄u'ā, f̄ūn dā m̄ɔɔd yé fù bás-ō-o +∅.*

**2SG** if have wife:**SG**, **2SG NEG.IMP** struggle:**IPFV** that **2SG** abandon-**3AN.OB NEG**.

"If you have a wife, don't try to leave her." (1 Cor 7:27)

Nor do they occur in quoted direct commands within indirect speech [26.3.1](#), even when the addressee is the same as in the original utterance:

*Ò yèl yé bà gòsɪm tēŋɪ-n.*

**3AN** say that **3PL** look:**IMP** ground:**SG-LOC**.

"She said to them: Look down!" WK

*Ò yèl yé fù gòsɪm tēŋɪ-n.*

**3AN** say that **2SG** look:**IMP** ground:**SG-LOC**.

"She said to you **SG**: Look down!"

*Ò yèl yé yà gòsɪm tēŋɪ-n.*

**3AN** say that **2PL** look:**IMP** ground:**SG-LOC**.

"She said to you **PL**: Look down!"

Some speakers still keep the enclitic <sup>y</sup>a after the verb even when there is a pronoun subject before it:

*Ò yèl yé bà gòsɪmī\_ ∅ tēŋɪ-n.*

**3AN** say that **3PL** look:**IMP** **2PL.SUB** ground:**SG-LOC**.

"He said to them: Look down!" WK

In VP chaining, where WK does not repeat <sup>y</sup>a in VPreds after the first:

*Kèmi\_ ∅ nā n gōs!*

Come:**IMP** **2PL.SUB** hither **CAT** look!

"Come (ye) and look!"

such speakers have e.g.

*Kèmi\_ ∅ nā n gōsī\_∅!*

Come:**IMP** **2PL.SUB** hither **CAT** look **2PL.SUB!**

"Come (ye) and look!"

Direct commands which consist only of a verb, or a verb with a following enclitic subject pronoun, occasionally end in a Long Form like that preceding a negative prosodic clitic:

<i>Gòsimā!</i>	"Look!"
<i>Gòsimīyá!</i>	"Look! (plural)"

#### 25.2.4 Clauses without predicators

Some particles and phrases occur characteristically as complete utterances:

<i>Tò.</i>	"OK." (= Hausa <i>tôo</i> )
<i>Báp.</i>	"Wallop!"
<i>N fá!</i>	"Well done!"

Some of these are onomatopoeic; others are widely shared among local languages.

"Yes" is *Ēēñ*; "No" is *áyì*. As in many languages, the reply agrees or disagrees with the question, so that if the question is negative, the usage differs from English:

<i>Lì nàa néε +∅?</i> <b>3INAN finish FOC PQ?</b>	"Is it finished?"
<i>Ēēñ.</i>	"Yes."
<i>Áyì.</i>	"No"
<i>Lì pū nāée +∅ +∅?</i> <b>3INAN NEG.IND finish NEG PQ?</b>	"Isn't it finished?"
<i>Ēēñ.</i>	"No."
<i>Áyì.</i>	"Yes."

**Vocative** phrases usually either precede a main clause, or stand alone.

Vocatives may take the form of NPs followed by the vocative prosodic clitic [8.1](#):

<i>Ì bīga +∅!</i> <b>1SG child:SG VOC!</b>	"My child!"
<i>Ì bīse +∅!</i> <b>1SG child:PL VOC!</b>	"My children!"



*M̄ pu'ā né m̄ bīse +∅!*  
**1SG** wife:**SG** with **1SG** child:**PL** **VOC!**  
 "My wife and my children!"

*M̄ diammā +∅, bó kà fù kúesida +∅?*  
**1SG** parent.in.law:**SG** **VOC**, what and **2SG** sell:**IPFV** **CQ?**  
 "Madam [32.1](#), what are you selling?"

Vocative phrases often end in *ñwà* "this":

<i>Bīs ñwá!</i>	[bi:sa]	"Children!"	<a href="#">8.5.1</a> .
<i>Pu'ā ñwá!</i>	[pʰɔ̃wã]	"Woman!"	
<i>Zōn ñwá</i>	[zɔn:a]	"Fools!"	

This structure is sometimes simply exclamatory:

*Ñwāamis ñwá!* [wã:misa] "Monkeys!" (From a passenger in my car,  
 on suddenly catching sight of some.)

## 25.3 Insubordinate *kà*-clauses

### 25.3.1 Coordination of main clauses

Coordinated main clauses agree in type as declarative, interrogative or imperative. They are coordinated with *kà* "and", *kōv* "or", *bēε* "or". *Kōv* and *bēε* are conjunctions; they are synonymous in this use. The linker particle *kà* can also *follow* conjunctions, though never *kōv* or *bēε* [24.1.3](#). In coordinating function *kà* always introduces a clause *without* independency marking on the VPred [24.2](#).

Coordinating statements outside of narrative, *kà* has much the same sense as English "and", though *kà ... lēε* means "but" [19.7.1](#).

Coordination of commands is most often with *kà*:

*Pò'usim À-Wīn, kà pú'ùs À-Bōgur.*  
 Greet:**IMP** **PERS**-Awini, and greet **PERS**-Abugri.  
 "Greet Awini, and greet Abugri."

Coordination of questions with *kà* is not common. More often, coordination involves alternative questions:

*Fù búg néε +∅? Bēε fù géēñm yā kúv +∅?*  
**2SG** get.drunk **FOC** **PQ?** Or **2SG** go.mad **PFV** or **PQ?**  
 "Are you drunk? Or have you gone mad?"

### 25.3.2 Sequential clauses

Kusaal narrative joins clause after clause with *kà*, corresponding to *zero* in English. As always, there is no independency marking after coordinating *kà* [24.2](#). Within narrative, main clauses *without kà* show tense marking overwhelmingly more often than not unless the clause contains an explicit time expression (which may be an absolute clause, see below); a rough count of the narrative portions of the first 12 chapters of Acts in the 1996 NT version shows over a fivefold excess of tense-marked over unmarked forms. Clauses introduced by *kà*, on the other hand, usually only have tense marking to signal that they disrupt the narrative flow, as with flashbacks or descriptive passages. Kusaal narrative favours long sequences of such **sequential *kà*-clauses** with perfective aspect without tense marking, which carry on the sequence of events narrated in order.

*Ka Yesu daa an yuma pii ne ayi' la, ka ba keŋ maluŋ la wuɔ ban ɛnti niŋid si'em la. Ka maluŋ la dabisa naae la, ka ba leɓidi kun. Ka Yesu kpelim Jerusalem teŋin ka o ba' ne o ma pu baŋ ye o kpelim yaa. Ba daa teŋ'es ye o dɔlnɛ ba teŋ dim la, ka keŋ ...*

*Kà Yesu\_ø dāa áñ yúmà pīi né àyí lā, kà bà kēŋ málùŋ*  
 And Jesus **NZ TNS COP** year:PL ten with **NUM:two ART**, and **3PL** go sacrifice:SG  
*lā wūɔ bán ɛɛñ tí niŋid sī'əm lā. Kà málùŋ lā dábɪsà\_ø*  
**ART** like **3PL:NZ** usually do:IPFV **INDF.ADV ART**. And sacrifice:SG **ART** day:PL **NZ**  
*nāe lā, kà bà léɓidì\_ø kūn. Kà Yesu kpélím Jerusalem*  
 finish **ART**, and **3PL** return:IPFV **CAT** go.home:IPFV. And Jesus remain Jerusalem  
*téŋī-n kà ò bā' né ò mà pū bāŋ yé ò kpèlím*  
 land:SG-LOC and **3AN** father:SG with **3AN** mother:SG **NEG.IND** realise that **3AN** remain  
*yāa +ø. Bà dāa tēñ'es yé ò dɔl né bà tēŋ-dīm lā, kà kēŋ...*  
**PFV NEG. 3PL TNS** think that **3AN** accompany **FOC 3PL** land-person.PL **ART**, and go...  
 "When Jesus **was** twelve years old, they went to Jerusalem to sacrifice as they  
 were accustomed to. When the days of sacrifice were over, they were going  
 home, but Jesus remained behind in Jerusalem, and his father and mother  
 didn't realise that he had stayed. They **thought** that he was accompanying  
 their fellow-countrymen. And they went ..." (Lk 2:42-44)

In the genealogy of Jesus in Luke 3:23ff, which moves backwards in time, there are dozens of consecutive examples in the 1996 version of

*kà X sáàm dá à nē Y* "and X's father **was** Y"  
 and X father:SG **TNS COP FOC** Y

whereas the genealogy in Matthew 1.1ff has dozens of clauses of the pattern

*kà* X *dụ'á* Y "and X beget Y."  
and X beget Y

Note the "aside" *Ò mà dá à nē ...* in

*Ka Jese du'a na'ab David. Ka David du'a Solomon. O ma dá anε Uria pu'a. Ka Solomon du'a Rehoboam.*

*Kà Jese dụ'á ná'áb David. Kà David dụ'á Solomon. Ò mà*  
And Jesse beget king:SG David. And David beget Solomon. 3AN mother:SG  
*dá à nē Uria pu'á. Kà Solomon dụ'á Rehoboam...*

**TNS COP FOC** Uriah wife:SG. And Solomon beget Rehoboam...

"And Jesse beget King David. And David beget Solomon. His mother **was**  
Uriah's wife. And Solomon beget Rehoboam..." (Mt 1:6-7)

Very long series of coordinated "asides" do sometimes drop tense marking; in KB the genealogy of Jesus in Lk 3:23ff shows *ka X saam da anε Y* at the beginning of paragraphs in the text, but *ka X saam an Y* otherwise.

In texts, dynamic imperfectives appear without temporal *nē<sup>+/</sup>* in sequential clauses to express several instances of an event:

*Ka on kpən' la, o yeli ba ye [...]. Ka ba la'ad o.*

*Kà 3n kpèñ' lā, ò yéì\_ bā yē [...]. Kà bà lá'ad\_ō\_ ø.*

And 3AN:NZ enter ART, 3AN say 3PL.OB that ... and 3PL laugh:IPFV 3AN.OB.

"After he came in, he said to them [...]. But they **laughed** at him." (Mk 5:39-40)

*Ñ*-clauses normally mark tense independently, but within sequential clauses they mark tense relative to the narrative timeline:

*3n dāa ñyēt súgā 3n dāa áñ bí-līa lāa +ø?*

**3AN.CNTR TNS** see:IPFV good:ADV 3AN:NZ TNS COP child-baby:SG ART PQ?

"Did he see well when he was a baby?"

but *Ka Pita yū'un tien Yesu n sa yel si'el la ye ...*

*Kà Pita yū'un tiēñ Yesu n sà yèl sī'əl lā yē ...*

And Peter then remember Jesus NZ TNS say INDF.INAN ART that ...

"And Peter then remembered what Jesus had said the day before..." (Mt 26:75)

Most clauses without tense marking in narrative show initial *kà*, but some begin with absolute clauses followed by *kà*. Note these patterns of tense marking

with absolute clauses preceding main clauses (from Mark, Luke, and Acts 1-14, 1976 version):

Tense markers	A, B	A <i>kà</i> B	<i>kà</i> A, B	<i>kà</i> A <i>kà</i> B
A    B				
-    -	7	23	40	85
-    +	2	0	4	2
+    -	0	7	3	17
+    +	11	2	11	0

Absent tense marking in *ḥ*-clauses within narrative is expected, because they mark tense relative to the narrative timeline. Absent tense marking in A-*kà*-B type main clauses shows that even tense-unmarked absolute clauses licence implicit tense marking in main clauses [19.3.4](#). This phenomenon also explains the appearance of temporal *nē*<sup>+/</sup> within what misleadingly resembles a sequential clause, in a case like

*Ka ba due keḡ. Ka ban ken la, Jesus gḃisid ne.*

*Kà bà dūe ∅ kēḡ. Kà bán kēn lā, Jesus gḃisid nē.*

And 3PL arise CAT go. And 3PL:NZ go:IMPF ART, Jesus sleep:IPFV FOC.

"So they started out. As they were travelling, Jesus was sleeping."

(Lk 8:22-23, 1976; no *nē* in the 1996 version.)

A tense-marked interruption in the narrative flow may itself contain clauses coordinated with *kà*; the tense marker of the first such clause is not repeated, but the following *kà*-clauses are not sequential and accordingly can have any aspect:

*Ka siakidib wusa bane be Judea ne Galilee ne Samaria daa mor sumalisim. Ka ba kal paasid. Ka ba yadda niḡir nobugid.*

*Kà sḡākɪɪb wūsa bānì bé Judea nē Galilee nē Samaria*

And believer:PL all REL.PL EXIST Judea with Galilee with Samaria

*dāa mōr sū-máɪsɪm. Kà bà kāl páasɪd. Kà bà*

TNS have heart-sweetness. And 3PL number:SG increase:IPVF. And 3PL

*yàddā-niḡir nōbɪɪd.*

assent-doing grow:IPVF.

"All the believers who were in Judea and Galilee and Samaria were joyful. Their numbers were increasing and their faith was growing." (Acts 9:31, 1976)

*Ba da pu mor biiga, bozugo Elizabet da ane kundu'ar, ka babayi la wusa me kudigne.*

*Bà dà pū mōr bīiga +∅, bōzúgō Elizabet dá à nē*  
**3PL TNS NEG.IND** have child:SG **NEG**, because Elizabeth **TNS COP FOC**  
*kúndù'ar kà bà bàyí lā wōsa mé kùdīg nē.*

barren.woman:SG and **3PL NUM:two ART** all also get.old **FOC**.

"They had no child, because Elizabeth was barren and they were both old."

(Lk 1:7, 1996; no *nē* in the KB *ka babayi' la wusa me kudig hali.*)

Tense marking is not affected by conjunctions [24.1.3](#) or by the "resumptive" *yē* of indirect speech [26.3.3](#), all of which precede the clause linker *kà*. If *kà* is absent, just as with clauses without conjunctions, tense marking is very much commoner than its absence; if *kà* follows the conjunction, tense marking is absent unless the clause marks an interruption in the narrative flow. In other words, conjunctions can precede sequential clauses.

*Amaa ba da zot o nē dabiem, ban da pu niŋ o yadda ye o sid ane nya'andɔl la zug. Amaa ka Barnabas zaŋ Saul n mɔr o keŋ ...*

*Àmáa bà dà zòt.ō ∅ nē dābìèm, bán dà pū níŋ.ò ∅*  
 But **3PL TNS** fear:IPFV **3AN.OB FOC** fear, **3PL:NZ TNS NEG.IND** do **3AN.OB**  
*yáddā yé ò sɪd à nē ñyá'àn-dòl lā zúg. Àmáa kà Barnabas*  
 faith that **3AN** truly **COP FOC** after-follower:SG **ART** upon. But and Barnabas  
*záŋ Saul n mōr.ó ∅ ∅ kēŋ ...*

take Saul **CAT** have **3AN.OB CAT** go ...

"But they were afraid of him, because they did not believe that he was really a disciple. But Barnabas brought Saul ..." (Acts 9:26-27)

The occurrence of pre-subject adjuncts and constituent-focussing *nē<sup>+/</sup>* in sequential clauses shows that they are not only semantically but structurally main rather than subordinate clauses.

The fact that it is specifically the presence of the clause linker *kà* which licenses the dropping of tense marking in main clauses in narrative justifies setting up sequential clauses as a distinct main clause subtype, probably derived from insubordinated result clauses historically [24.2](#). If tense marking could simply be omitted in narrative when it was deducible from context, this would not explain why omission requires a preceding *kà* in the absence of an explicit time expression. Further evidence for a distinct clause type arises from the fact that my informants consistently refused to accept a resultative interpretation of a perfective followed by the particle *nē<sup>+/</sup>* when presented in an isolated *kà*-clause without tense marking. Such clauses were always interpreted as expressing events, with the particle *nē<sup>+/</sup>* necessarily marking constituent focus:





*M̄ yélī f yé fù dā kūlε +∅.*  
**1SG tell 2SG.OB that 2SG NEG.IMP return.home NEG.**  
 "I told you not to go home."

The verb *gūr*<sup>a/</sup> "be on guard, watch, wait for" in the sense of "waiting for an event" may take as complement either a NP headed by gerund, or a purpose clause introduced by *yē*, again with an attenuated sense:

*Nidib la daa gur Zakaria yiib na.*  
*Nīdtb lā dāa gūr Zakaria yīb nā.*  
**Person:PL ART TNS watch Zechariah emerge:GER hither.**  
 The people were watching for Zechariah's coming out. (Lk 1:21)

*... gur ye pu'a la du'a ka o ɔnb biig la.*  
*... gūr yē pu'ā lā du'á kà ò ɔñb biig lā.*  
**watch that woman:SG ART bear and 3AN eat child:SG ART.**  
 "...waiting for the woman to give birth so he could devour her child." (Rev 12:4)

Purpose is also expressed by VP chaining [23](#), often with the preverb *tì* [19.7.2](#).

**Result** clauses have indicative mood, and are always introduced by *kà*. It is unclear whether result clauses can appear as clause adjuncts. Examples are unlikely after a negated VPred, and other candidates may simply contain sequential clauses [25.3.2](#) which happen to lack main-clause features such as pre-subject adjuncts, focus, or *kà*-clefting:

*Ò vùl tīm kà ò nóbùr pō zábē +∅.*  
**3AN swallow medicine and 3AN leg:SG NEG.IND fight NEG.**  
 "She drank medicine and (so) her leg didn't hurt." WK

Unequivocally subordinate *kà*-clauses with indicative mood appear as VP complements, though there may be parallel constructions with the imperative, or the mood may not be determinable because negative raising always occurs [29.2](#).

*Kē*<sup>+</sup> "let, leave off" is used with a subordinate *kà*-clause in the sense "let, cause that." The subordinate clause mood matches the VPred containing the verb *kē*<sup>+</sup>; imperative often replaces irrealis mood in the *kà*-clause.

*Li da ke ka ba pu nyanji kuv o.*  
*Lì dà kè kà bà pō ñyāŋi\_∅ kú·o\_∅ +∅.*  
**3INAN TNS cause and 3PL NEG.IND prevail CAT kill 3AN.OB NEG.**  
 "This caused them not to be able to kill him." (2 Kings 11:2)



*Ba kɔdim niŋidi lin ye li ke ka ba da nyε Kristo kum dapuudir namisug laa.*

*Bà kōdım níŋìdī lí yé lì ké kà bà dā ñyē Kristo kúm*

**3PL** ever do:IPFV **3INAN.OB** that **3INAN** cause and **3PL NEG.IMP** see Christ death

*dà-pōvdír námı̀sòg láa +∅.*

wood-cross:SG suffering **ART NEG.**

"They have always been doing this so that they will not experience the suffering of the cross of the death of Christ." (Gal 6:12)

*dıne na ke ka ba da kpi'ilim.*

*Dīni ∅ ná ké kà bà dā kpī'ılím +∅.*

**3INAN.CNTR** CAT **IRR** cause and **3PL NEG.IMP** finish **NEG.**

"That will cause them not to come to an end." (Genesis 6:20)

The irregular imperative *kèl<sup>a</sup>*, followed by a *kà*-clause with imperative mood, creates a way of expressing indirect commands, including first and third persons:

*Kèl kà ò gōs tēŋı-n.*

Cause:IMP and **3AN** look ground:SG-LOC.

"Let him look down."

*Dā ké kà dābìəm béε +∅!*

**NEG.IMP** cause and fear **EXIST NEG.**

"Don't be afraid." ("Let fear not exist.")

*Kèl [or Kèlí ∅ ] kà tì pú'òs Wínà'am.*

Cause:IMP cause:IMP **2PL.SUB** and **1PL** greet God.

"Let us praise God."

In informal speech *kèl kà ...* is often ellipted [24.1.5](#), leaving the lack of independency marking as the only sign that the clause is an indirect command:

*Ò gōs tēŋı-n.*

**3AN** look ground:SG-LOC.

"Let her look down."

No tone overlay on *gōs*

*Ì gōs nīf lā.*

**1SG** look.at eye:SG ART.

"Let me look at the eye." (Overheard in clinic)

No tone overlay on *gōs*

cf *Ì gós nīf lā.*

**1SG** look.at eye:SG ART.

"I've looked at the eye."

Independency marked: tone overlay on *gós*

*M̄ díginèè +∅?*  
**1SG** lie.down **PQ?**

"Am I to lie down?" (Overheard in clinic)  
 No independency marking: no imp *-m<sup>a</sup>*

*Ò zàb ná'áb lā.*  
**3AN** fight chief:**SG ART.**

"He's fought the chief."  
 Independency; no M spreading after *ò* [19.6.1.2](#)

*Ò záb nà'ab lā.*  
**3AN** fight chief:**SG ART.**

"He should fight the chief."  
 No independency: M spreading after *ò*

*Mìt* is a defective verb used only in the imperative [29.1.1](#). It occasionally appears with an NP object in the meaning "beware of", but much the most common use is with a *kà*-clause complement as "see that it doesn't happen that ...":

*Mid ka ya maali ya tuum suma nidib tuon ye ba gōs.*

*Mìt kà yà máalì yà tùum-sùma nīdib túèñ yé bà gōs.*  
**NEG.LET.IMP** and **2PL** make **2PL** deed-good:**PL** person:**PL** front that **3PL** look.at.  
 "Don't do your good deeds in front of people so they'll look." (Mt 6:1)

The idiom "X *nìj wēlá kà ...?*" means "how can X ...?" with ellipse of the repeated subject after *kà*:

*M na nìj wala ka nyē faangirē?*

*M̄ ná nìj wēlá kà ñyē fāaŋgírè +∅?*  
**1SG** **IRR** do how and find salvation **CQ?**  
 "What must I do to get saved?" (Acts 16:30)

There is a corresponding impersonal expression, with a dummy subject in the main clause and the effective subject in the *kà*-clause:

*Li nìj wala ka o an David yaan̄a?*

*Lì nìj wēlá kà ò áñ David yáàn̄a +∅?*  
**3INAN** do how and **3AN COP** David descendant:**SG CQ?**  
 "How can he be David's descendant?" (Mt 22:45)

Result clauses can occur in a predicative sense [20.2](#). Thus with *ñyē<sup>+</sup>* "see" it is possible to make a construction meaning "see as" (all KT's translations):

*M̄ dāa ñyē dāy lā kà ò áñ ná'áb.*  
**1SG TNS** see man:**SG ART** and **3AN COP** chief:**SG.**  
 "I saw the man as a chief."

*M̄ dāa p̄ ŋyē dāy lá kà ò áñ ná'abā +∅.*

**1SG TNS NEG.IND** see man:**SG ART** and **3AN COP** chief:**SG NEG**.

"I didn't see the man as a chief."

KT would not accept interpretations with the *kà*-clause as adnominal, such as "I saw the man, who was a chief" or "I didn't see the man, who was a chief."

Expressions of **necessity** or **permission** may be followed by subordinate *yē*- or *kà*-clauses; imperative cannot be distinguished from indicative, as the constructions induce negative raising 29.2. Such clauses follow *nār*<sup>a/</sup> "be obliged to" (negated "be obliged not to"); *m̄r s̄er* "be allowed to"; *lì à [nē] t̄lās* "it is necessary":

*Fù p̄ nār yé fù níŋ àláa +∅.*

**2SG NEG.IND** must that **2SG** do **ADV:thus NEG**.

"You're not allowed to do that."

*Yà m̄r s̄er yé yà k̄l.*

**2PL** have way:**SG** that **2PL** go.home.

"You may go home."

*Lì nār yé/kà fù k̄l.*

**3INAN** must that/and **2SG** go.home.

"You must go home."

*Lì p̄ nār yé fù k̄lε +∅.*

**3INAN NEG.IND** must that **2SG** go.home **NEG**.

or *Lì p̄ nār kà fù k̄lε +∅.*

**3INAN NEG.IND** must and **2SG** go.home **NEG**.

"You must not go home."

*S̄er bé yé/kà tì k̄l.*

Way:**SG EXIST** that/and **1PL** go.home.

"We may go home."

(" There's a way that we go home.")

*Li a tilas ye m ken Jerusalem.*

*Lì àñ t̄lās yé m̄ kēŋ Jerusalem.*

**3INAN COP** necessity that **1SG** go Jerusalem.

"I must go to Jerusalem." (Mt 16:21, 1996)

*Li ane tilas ka m niŋid ala.*

*Lì à nē t̄lās kà m̄ níŋid àlá.*

**3INAN COP FOC** necessity and **1SG** do:**IPFV ADV:thus**.

"I must do that." (1 Cor 9:16, 1996)

## 26.2 Adnominal *kà*-clauses

A subordinate *kà*-clause may be **adnominal**, attached to a NP "anchor" which is usually though not invariably the NP directly preceding the *kà*, but in any case not the main clause subject (with one exception discussed below.) The *kà*-clause contains a pronoun referring to this NP, which is ellipped if it is a verb direct object [20.1](#). The sense is usually that of a non-restrictive relative clause:

*Asee line an be'ed ma'aa ka m na tun'e niŋ.*

Àséé líni àñ bē'ed má'aa kà m ná tūñ'e\_∅ níŋ.

Only **REL.INAN COP** bad only and **1SG IRR** be.able **CAT** do.

"It's only that which is bad that I can do." (Rom 7:21)

*Li ane ya taaba bane pu'usid Wina'am ka li nar ka ya kad saria.*

Lì à né yà tāaba bání pù'usid Wínà'am kà lì nár

**3INAN COP FOC 2PL** fellow **REL.PL** greet:**IPFV** God and **3INAN** must

*kà yà kád sàryà.*

and **2PL** drive judgment.

"It is your fellow-worshippers of God whom you must judge." (1 Cor 5:12)

*Dau so' da be Sizerea, ka o yu'ur buon Konelius.*

Dàù-sō' dá bè Sizerea kà ò yū'ur búèn Konelius.

Man-**INDF.AN TNS** **EXIST** Caesarea and **3AN** name:**SG** call:**IPFV** Cornelius.

"There was a man in Caesarea whose name was Cornelius." (Acts 10:1)

*Anina ka o nye dau ka o yu'ur buon Aneas.*

Àníná kà ò ñyē dáy kà ò yū'ur búèn Aneas.

**ADV**:there and **3AN** see man:**SG** and **3AN** name:**SG** call:**IPFV** Aeneas.

"There he found a man whose name was Aeneas." (Acts 9:33)

The main clause may have a non-verbal predicator [22](#):

Ńni\_∅ lá kà fù dāa ñyēt.

**3AN.CNTR** **CAT** that and **2SG TNS** see:**IPFV**.

"This is he whom you saw." WK

Ànó'oni\_∅ ñwá kà tì ñyētá +∅?

Who **CAT** this and **1PL** see:**IPFV** **CQ**?

"Who is this that we can see?"

*B5̄ɔ\_ ∅ lá kà m̄ ñyḗtá +∅?*

What **CAT** that and **1SG** see:**IPFV CQ**?

"What is that that I can see?"

Adnominal *kà*-clauses are the basis of *kà*-clefting and *kà*-preposing [30.2](#).

Adnominal *kà*-clauses are essentially in complementary distribution with VP chaining [23.1](#), replacing this when the subject and/or polarity do not agree with those of the main clause. Polarity change is the only way in which an adnominal *kà*-clause can have the same subject as the main clause:

*Dau sɔ' da bɛ Lystra tengin an pɔn'ɔri zin' o nɔba zug ka pu tun'e kenna.*

*Dàʉ-sɔ' dá bɛ Lystra tɛŋī-n\_ ∅ áñ pɔñ'òri\_ ∅ zín'i ò nɔbá*

Man-**INDF.AN TNS EXIST** Lystra land:**SG-LOC CAT COP** cripple:**SG CAT** sit **3AN** leg:**PL**

*zùg kà pō tūñ'e\_ ∅ kēnná +∅.*

upon and **NEG.IND** be.able **CAT** go:**IPFV NEG**.

"There was a man in Lystra who was crippled and sat on his legs and could not walk." (Acts 14:8)

Compare also *n*-focus versus *kà*-preposing constructions [30.1.1](#) [30.2](#).

### 26.3 Content clauses

For content clauses after prepositions see [24.1.3](#).

*Yē*, and less often *kà*, may introduce clauses displaying independency marking on the verbal predicator [19.6](#). They show all the structural features possible for main clauses, such as focus and foregrounding. They occur very frequently representing passages of indirect speech, but are also found much more generally after verbs of cognition, reporting, and perception as **content clauses**. Kusaal content clauses are thus **downranked** main clauses functioning as subordinate clauses.

Verbs taking content clauses as objects include

<i>yèl<sup>ɛ</sup></i>	"say"	<i>wòm<sup>m</sup></i>	"hear"
<i>ñyē<sup>+</sup></i>	"see"	<i>tēñ'ɛs<sup>ɛ/</sup></i>	"think"
<i>mī<sup>+</sup></i>	"know"	<i>bàŋ<sup>ɛ</sup></i>	"come to know"
<i>pà'al<sup>ɛ</sup></i>	"teach, show"	<i>kàrim<sup>m</sup></i>	"read"
<i>zī<sup>+</sup></i>	"not know"		

Absolute clauses [28.1](#) cannot be used as objects of such verbs, but another possibility apart from content clauses is NP + *yēlá* "about" [17.6](#).

Except in indirect speech [26.3.1](#), content clauses are normally declarative.

The equivalent of an interrogative main clause is a relative clause headed by an indefinite pronoun [28.2.2](#), and the equivalent of an imperative main clause is a subordinate purpose clause [26.1](#).

*Fv wum ban yet si'em laa?*

*Fù wúm bán yèt sī'əm láa +ø?*

**2SG** hear:IPFV **3PL:NZ** say:IPFV **INDF.ADV** **ART** **PQ?**

"Do you hear what ["how"] they are saying?" (Mt 21:16)

*Bà nà yēl·o\_ø ón nà nīŋ sī'əm.*

**3PL** IRR say **3AN.OB** **3AN:NZ** IRR do **INDF.ADV**.

"They will tell him what he is to do."

WK usually has *yē* before content clauses, but he prefers *kà* after *tēñ'ēs<sup>El</sup>* "think"; the structure is otherwise the same. *Kà* + content clause is the only context where *kà* is followed by independency marking, and where *kà* does not delete a following subject pronoun with the same reference as the preceding subject:

*Ò tēñ'ēs kà ò zàb ná'áb lā.*

**3AN** think and **3AN** fight chief:SG **ART**.

"He thinks he's fought the chief." WK

*M̄ tēñ'ēs kà ò à nē d̄u'átà.*

**1SG** think and **3AN** COP **FOC** doctor:SG.

"I think she's a doctor." WK

*M̄ tēñ'ēs kà ò lù yā.*

"I think she's fallen." WK

**1SG** think and **3AN** fall **PFV**.

*M̄ tēñ'ēs kà m̄ lú yā.*

"I think I've fallen" WK

**1SG** think and **1SG** fall **PFV**.

*M̄ tēñ'ēs kà nīgí lā óñbìd.*

**1SG** think and cow:PL **ART** chew:IPFV.

"I think the cows eat." WK

*M̄ tēñ'ēs kà nīgí lā óñbìd nē.*

**1SG** think and cow:PL **ART** chew:IPFV **FOC**.

"I think the cows are eating." WK

KB also has *kà* before content clauses after other verbs, and *yē* after *tēñ'ēs<sup>El</sup>*:

*Ya pun wum ka ba da yel ye...*

*Yà pún wòm kà bà dá yèl yē ...*

**2PL** previously hear and **3PL TNS** say that...

"You previously heard that they had said ..." (Mt 5:43)

*...yanam banjim ka li san'auŋ li'el ya.*

*...yānám bànjım kà lì sàñ'auŋ lí'əl yā.*

...**2PL.CNTR** realise:**IMP** and **3INAN** destruction approach **PFV**.

"Know that its destruction has come near." (Lk 21:20)

*Ka ya ten'es ye m mood ye m ma'e nidib sunf bee?*

*Kà yà tēñ'ès yé m̄ m̄ɔɔd yé m̄ mā'e nīdɪb súnf bɛɛ +∅?*

And **2PL** think that **1SG** strive:**IPFV** that **1SG** cool person:**PL** heart:**SG** or **PQ**?

"And do you think that I am trying to please people?" (Gal 1:10, 1976)

There are a few examples in KB of *nɛ* for *yɛ yē* "that" (cf Mampruli *ni id*):

*Man bɔɔdin nɛ yaname naan aan ma'asiga bɛɛ yaname naan aan tvuliga.*

*Mān bɔɔdī-n nɛ yānámì\_∅ nāan áa-n mā'asígā bɛɛ*

**1SG.CNTR** want-**DP** that **2PL** **NZ** then **COP-DP** cold:**ADV** or

*yānámì\_∅ nāan áa-n t̄vulígā.*

**2PL** **NZ** then **COP-DP** hot:**ADV**.

"I might wish you had been cold or you had been hot." (Rev 3:15)

**Pronouns** are changed throughout in the content clause to reflect its setting, on the same basis as in English "indirect speech."

Free personal pronouns have **logophoric** [26.3.2](#) meaning in content clauses.

Tense and mood marking is always the same as in the equivalent main clause. Pluperfect and future-in-the-past meanings may result:

*Ò dāa yél yé bà dāa k̄l.*

**3AN TNS** say that **3PL TNS** return.home.

"She said that they had gone home."

*Tì dāa tēñ'ès yé ò nà zāb ná'àb lā.*

**1PL TNS** think that **3AN IRR** fight chief:**SG ART**.

"We thought he was going to fight the chief."

Examples of main-clause type structural features within content clauses:

*ban mi' ye biig la kpine la zug*

*bán mī yē bīig lā kpí nē lā zúg*

**3PL:NZ** know that child:**SG ART** die **FOC ART** upon

"because they knew that the child was dead" (Lk 8:53)

where focus-*nē*<sup>+</sup> occurs in a content clause within an absolute clause. (The second article *lā* marks the end of the absolute clause.)

*Bùŋ-bāñ'ad zī' yē tēŋ túllā +∅.*

Donkey-rider:**SG NEG.KNOW** that ground:**SG** be.hot **NEG.**

"The donkey-rider doesn't know the ground is hot."

(*Tēŋ túl.* "Ground is hot."; *tūl*<sup>la/</sup>"be hot")

There is independency-marking tone overlay on *tūl*<sup>la/</sup>; the final LF is induced by the negative prosodic clitic belonging with *zī'*.

### 26.3.1 Direct and indirect speech

After a speech-verb *yē* may introduce the words of the direct speech itself, unaltered except for the presence of "resumptive" *yē* at intervals [26.3.3](#). This is uncommon in the older texts, and in the 1976 NT mostly confined to direct utterances of Jesus. Much more commonly, the original direct speech is downranked to a content clause or series of coordinated content clauses, with personal pronouns altered throughout as in English indirect speech. The free personal pronouns are used logophorically [26.3.2](#) as in all content clauses. All other features of the original main clauses, including tense marking and independency marking, are unchanged as usual. Such passages of indirect speech may be kept up for very long stretches; the 1976 NT version has examples extending over several pages. Later Bible versions consistently replace all indirect speech with direct.

Indirect speech content clauses are distinctive in that they may include direct questions, which are replaced by relative clauses headed by indefinite pronouns elsewhere, or direct commands, elsewhere replaced by purpose clauses.

A direct question in indirect speech:

*Ka Peter bu'os o ye, Ananias, ye bo ka o ke ka Sutaana kpen' o suunrin...*

*Kà Peter bŭ'os-ó\_∅ yē Ananias, yē bó kà ò ké kà Sŭtáanà*

And Peter ask **3AN.OB** that Ananias, that what and **3AN** cause and Satan

*kpèñ' ò sŭuñrí-n ... +∅?*

enter **3AN** heart:**SG-LOC** ... **CQ?**

"Peter asked him: Ananias, why did you let Satan enter your heart ...?"

(Acts 5:3, 1976)



In quoted direct commands the usual deletion of a 2nd sg subject and change of 2pl subject to enclitic *y<sup>a</sup>* does not occur, even if the addressee is the same as in the original utterance and the pronoun remains 2nd person. Some speakers keep the enclitic *y<sup>a</sup>* after the verb even when there is a preceding pronoun subject [25.2.3](#).

Quoting gives an alternative to purpose clauses [26.1](#) for expressing indirect commands; again, the main clause and linker may be ellipped [24.1.5](#) informally:

[*M yél yé*] ò *gòsim tēŋi-n*.  
**1SG** say that **3AN** look:IMP ground:SG-LOC.  
 "[I said] she should look down."

[*M tēñ'ès kà*] tì *pú'vsim Wínà'am*.  
**1SG** think and **1PL** greet:IMP God.  
 "[I think] we should praise God."

A main clause with no predicate can also appear in indirect speech [25.2.4](#):

Ò *yèl yē báp*. "She said *Bap!*"  
**3AN** say that *Bap*.

Pronouns are changed even within a vocative:

*Ka m wum Wina'am kokor ka li yi arazana ni na ye,*  
 • *nidiba, ye ba yimi teng la ni na.*  
*Kà m wúm Wínà'am kúkór kà lì yī áràzàná ní nā yē,*  
 And **1SG** hear God voice:SG and **3INAN** emerge heaven **LOC** hither that  
 ò *nīdibá* <sup>+ø</sup>, *yé bà yīmī* ø *tēŋ lā ní nā.*  
**3AN** person:PL **VOC**, that **3PL** emerge:IMP **2PL.SUB** land:SG **ART LOC** hither.  
 "And I heard God's voice coming from heaven, saying  
 'My people, come out of the land!'" (Rev 18:4, 1976)

### 26.3.2 Logophoric pronouns

Within content clauses personal pronouns are altered throughout as in English indirect speech, except in directly embedded passages of direct speech [26.3.1](#).

The free 3rd person pronouns have **logophoric** sense. In contexts where bound pronouns could have occurred instead (i.e. where they are contrastive [30.5](#)) they refer to the speaker(s), replacing 1st persons of the original utterance. Bound 3rd persons may also have this sense, but the free pronouns are much commoner, especially as subjects, even when no ambiguity would otherwise result.

*Festus tans Paul ye o geem ne ... ka Paul lebis ye on pu geem.*

*Festus táñs Paul yé ò gèèñm nē ... kà Paul lébìs*

Festus shout Paul that **3AN** go.mad **FOC** ... and Paul reply

*yē òn pō gèèñmm +∅.*

that **3AN.CNTR NEG.IND** go.mad **NEG**.

"Festus shouted to Paul that he [Paul] was mad ...

Paul replied that he [Paul] was not mad." (Acts 26:24-25, 1976)

Thus "He<sub>1</sub> said he<sub>1</sub> would kill them." is usually

*Ò yèl yē òn ná kúv bā.*

**3AN** say that **3AN.CNTR IRR** kill **3PL.OB**.

It is possible to say *Ò yèl yé ò nà kúv bā*, but this is much more likely to mean "He<sub>1</sub> said he<sub>2</sub> would kill them."

### 26.3.3 Resumptive *yē*

Passages of direct or indirect speech longer than two or three clauses insert "resumptive" *yē* at intervals of roughly every third clause, after any conjunctions but before clause-linker *kà* (this is the only origin for *yē kà* beside ellipsis [24.1.5.1](#).)

*Ye ka Paul yel ye o bood ye o kpelim sarega ni.*

*Yé kà Paul yél yé ò bòòd yé ò kpélìm sārìgá nī.*

That and Paul say that **3AN** want that **3AN** remain prison:**SG LOC**.

"But Paul said he wanted to remain in prison...(Acts 25:21, 1976)

*amaa ye ba yaanam da pu bood ye ba siak o noore*

*àmáa yé bà yāa-nám dá pō bòòd yé bà sják-ò\_∅ nōcré +∅.*

but that **3PL** ancestor-**PL TNS NEG.IND** want that **3PL** agree **3AN.OB** mouth:**SG NEG**

"But their ancestors did not want to obey him" (Acts 7:39, 1976)

*Amaa ye ka on yeli ba ye ...*

*Àmáa yé kà òn yéì bā yē...*

But that and **3AN.CNTR** say **3PL.OB** that...

"But he [the speaker] had said to them ..." (Acts 25:16, 1976)

*Alazug ye Wina'am sadigim tisi ba piini kan ka o daa tisi ti la...*

*Àlá zùg yē Wínà'am ∅ sādīgím tísì\_bā pīini-kán kà ò dāa*  
Thus that God **NZ** since give **3PL.OB** gift-REL.SG and **3AN TNS**  
*tísì\_tī lā...*

give **1PL.OB ART**.

"Thus, since God had given them the gifts that he had given us ..."

(Acts 11:17, 1976)

*Alazug ye ka on ke ka ba mor o ba sa'an na ...*

*Àlá zùg yé kà ɔn ké kà bà mɔr-ó\_∅ bà sà'an nā ...*  
Thus that and **3AN.CNTR** let and **3PL** have **3AN.OB 3PL** before hither...

"So he [the speaker] had made them bring him [Paul] into their presence..."

(Acts 25:26, 1976)

Resumptive *yē* may be placed between a clause-level presubject adjunct and the subject, or between a vocative NP and the following clause:

*Nanana ye o zuanam, ye o baŋ ye...*

*Nānná-nā yé ò zùà-nàm, yé ò bàŋ yē ...*

Now-hither that **3AN** friend-PL, that **3AN** understand that ...

"Now, his friends should understand that..." (Acts 3:17, 1976)

*Ka nanana ye o niŋi ba Wina'am ne o popielim pia'ad la nu'usin...*

*Kà nānná-nā yé ò niŋī\_bá Wínà'am né ò pù-pìəlim*

And now-hither that **3AN** do **3PL.OB** God with **3AN** inside-whiteness

*pjǎñ'àd lā nú'usī-n...*

speech **ART** hand:PL-LOC...

"And now he committed them to God and the words of his holiness.."

(Acts 20:32, 1976)

*O zuanam ne o saamnama, ye ba kelisim.*

*Ò zùà-nàm né ò sàam-nàmā<sup>+∅</sup>, yé bà kəlɪsɪm!*

**3AN** friend-PL with **3AN** father-PL **VOC** that **3PL** listen:IMP!

"His friends and his fathers should listen." (Acts 7:2, 1976)



*Yà'*-clauses express tense independently of the main clause. Indicative mood, not irrealis, is used for future meaning, but WK accepts negation with *kù* instead of *pō* when the sense is future; so too NT

*So' ya'a ku tum, on da dii.*

*Sō' yá' kù tūm, ɔn dā dí +∅.*

**INDF.AN** if **NEG.IRR** work, **3AN.CNTR NEG.IMP** eat **NEG.**

"If anybody will not work, let him not eat." (2 Thess 3:10, 1976)

Occasionally, the *yà'*-clause appears clause-finally because of dislocation due to weight [30.3](#), notably in constructions meaning "it would be better if ...":

*Li naani so'on ba ya'a nokin neertita'are loon kollin o ningoonr ka zaŋ o lobi bas kolugin, n gati*

*Lì nāani sōñ'ɔ-n, bà yá' nōki-n nēer-títā'aru ∅ lɔɔ-n ∅*

**3INAN** then be.better-**DP 3PL** if take-**DP** millstone-big:**SG CAT** tie-**DP CAT**

*kólī-n ɔn nín-gòɔr kà záŋ-ò ∅ ∅ lɔbɪ*

put.around.neck-**DP 3AN.CNTR** body-neck:**SG** and take **3AN.OB CAT** throw

*∅ bás kɔlugu-n, n gát ...*

**CAT** abandon river:**SG-LOC CAT** pass:**IPFV...**

"It would have been better if they had fastened a big millstone round his neck and thrown him into the river, than ..." (Lk 17:2, 1996)

*Dinzug li naan a su'um ba ya'a pu du'an dau kaŋaa.*

*Dìn-zúg lì nāan áñ súm bà yá' pū dú'ā-n dáy-kàŋáa +∅.*

Thus **3INAN** then **COP** good:**ABSTR 3PL** if **NEG.IND** bear-**DP** man-**DEM.DEI.SG NEG.**

"So it would have been better for that man not to have been born."

(Mk 14:21, 1996)

### 27.1.1 Discontinuous-past *n<sup>ε</sup>*

Discontinuous-past *n<sup>ε</sup>* [19.3.2](#) can attach to any verb form in indicative or irrealis mood; it is not compatible with the imperative. In VP chaining, if *n<sup>ε</sup>* is found in the first predicator it is repeated in all [23.1](#).

In much its commonest function, the particle has a meaning analogous to the modal remoteness expressed by the use of the English preterite in non-temporal usage (CGEL pp148ff.) It expresses a hypothetical or unlikely state of affairs; it is frequently accompanied by the post-subject particle *nāan(ɪ)* [27.1.2](#), which creates a contrary-to-fact interpretation. It is most often seen, without *nāan(ɪ)*, in *yà'*-clauses, and with or without *nāan(ɪ)* in apodoses, but also appears both with and without *nāan(ɪ)* in other main and subordinate clause types.

In main clauses, *n<sup>ɛ</sup>* without *nāan(ɪ)* is most often seen in *bòwdīn* "might wish":

*m pa'ati nye ka ya pu wenne wuu man boodin ye ya aan si'em laa.*

*m̀ pá' tì ñyé kà yà pū wēn nē*

**1SG** perhaps see and **2PL NEG.IND** resemble with

*w̄ũ mán bòwdī-n yé yà áa-n s̄'əm láa +∅.*

like **1SG:NZ** want-**DP** that **2PL COP-DP INDF.ADV ART NEG.**

"I will perhaps find you not as I might wish." (2 Cor 12:20, 1996)

*Man bòwdin nε yaname naan aan ma'asiga bεε yaname naan aan tuuliga.*

*Mān bòwdī-n nē yānámì\_∅ nāan áa-n mā'asígā bēε*

**1SG.CNTR** want-**DP** that **2PL NZ** then **COP-DP** cold:**ADV** or

*yānámì\_∅ nāan áa-n tūlígā.*

**2PL NZ** then **COP-DP** hot:**ADV.**

"I might wish you had been cold or you had been hot." (Rev 3:15)

The modal sense, though it occurs much more frequently, is probably secondary to this temporal function.

### 27.1.2 *Nāan(ɪ)* "in that case"

The post-subject particle *nāan(ɪ)* is distinct from *ñyāan* "next, afterwards, then", but *nāan* (never *nāani*) occurs commonly in the same sense as *ñyāan*. Thus in the parallel NT passages from the 1996 version:

*Fu na ki'is noor atan' ye, fu zi' ma, ka noraug nyaan kaas.*

*Fù ná kī'ɪs nɔ́ɔr àtáń' yé fù zí'ɪ\_ mā +∅,*

**2SG IRR** deny occasion:**SG NUM**:three that **2SG NEG.KNOW 1SG.OB NEG,**

*kà nɔ́-dáùg ñyāan kāas.*

and hen-male:**SG** next cry.

"You will deny three times that you know me before the cock crows."

(Mt 26:75, 1996)

*Fu na ki'is man noor atan' ka noraug naan kaas noor ayi.*

*Fù ná kī'ɪs mān nɔ́ɔr àtáń' kà nɔ́-dáùg*

**2SG IRR** deny **1SG.CNTR** occasion:**SG NUM**:three and hen-male:**SG**

*nāan kāas nɔ́ɔr àyí.*

next cry occasion:**SG NUM**:two.

"You will deny me three times before the cock crows twice."

(Mk 14:30, 1996: KB *nyaan*)

The particle *ňyāan* is probably a form of *ňyá'an*<sup>a</sup> "behind, after" with loss of glottalisation and assimilation of the final nasal because of its proclitic status [4.2.2](#) [8.5.1](#). The particle *nāan(i)* itself seems to have a core locative and logical sense "be(ing) there/thus, in that case" which has presumably broadened for speakers who use it in the sense of *ňyāan* to temporal "then", unless the falling-together of the forms is simply phonological or dialectal.

There are examples in NT/KB of *nāan(i)* used as an auxiliary verb with its own locative complement in both VP chaining and in adnominal *kà*-clauses:

*M nye ka Sutaana naane arazana ni n lu wenne saa yiti iank si'em la.*  
*M̄ ñyé kà Sūtáanà nāaní\_ ∅ àrazánà ní n lù\_∅ wēn nē*  
 1SG see and Satan be.there CAT sky LOC CAT fall CAT resemble FOC  
*sáa\_ ∅ yīti\_ ∅ jāñk sī'əm lā.*  
 rain:SG NZ emerge:IPFV CAT leap INDF.ADV ART.

"I saw Satan [being] in heaven fall like lightning." (Lk 10:18, 1996)

*dap banε gur ye ba zugdaan naan pu'adiir di'ema zin'igin kul na*  
*dàp-bànı gūr yé bà zūg-dáàn nāan pu'á-dīr dí'əmà*  
 man-REL.PL wait that 3PL head-owner:SG be.there wife-taking:SG feast:PL  
*zín'igī-n\_ ∅ kūl nā*  
 place:SG-LOC CAT return.home hither.

"men who are waiting for their lord [being] at a wedding feast to return ..."  
 (Lk 12:36)

*yinni piiga wusa puugin ka li naan o yaab Abraham nu'usin*  
*yīnní pīiga wūsa púvgú-n kà lì nāan ò yáab Abraham*  
 one ten all inside:SG-LOC and 3INAN be.there 3AN ancestor:SG Abraham  
*nú'usī-n*  
 hand:PL-LOC

"the tithe which was in his ancestor Abraham's hands" (Heb 7:9, 1996)

*Ka nwadbibis na naan agpla lit tenjin na.*  
*Kà ñwād-bíbìs ná nāan àgólà\_ ∅ lít tēŋı-n nā.*  
 And moon-small:PL IRR be.there ADV:above CAT fall:IPFV ground:SG-LOC hither.  
 "And the stars [being] above will fall to earth." (Mk 13:25)

The form *nāani* thus evidently originated in *nāan* followed by catenator-*n*, but I will omit **CAT** in the interlinear glossing henceforward for simplicity.

In main clause statements *nāan(i)* without *n<sup>ε</sup>* is most often a by-form of *ňyāan* as described above. By far the most cases of modal *nāan(i)* appear in the apodoses of conditional clauses [27.3](#). Elsewhere the meaning is "in that case, matters being thus",

and has a contrary-to-fact implication when discontinuous-past  $n^{\epsilon}$  is also present. Especially in absolute clauses, *nāan(t)* without  $n^{\epsilon}$  may be effectively equivalent to *yà* "if/when."

In non-conditional main clause contexts it appears most often in the NT/KB with *bóɔd*<sup>a</sup> "want, wish" to convey a hypothetical "might have wished":

*M naan bóɔdin ye ya sid aan na'anam.*

*M̄ nāan bóɔdī-n yé yà s̄id āa-n ná'-nàm.*

**1SG** then want-**DP** that **2PL** truly **COP-DP** king-**PL**.

"I might have wished you really were kings." (1 Cor 4:8)

Other examples do occur, in both main clauses and content clauses:

*Ka so' naam mori [sic] pe'is kobuga ka yinni bodige?*

*Kà s̄ō' nāan m̄r pē'ēs kóbɪgá kà yīnní b̄dɪgɛ +∅?*

And **INDF.AN** then have sheep:**PL** hundred and one get.lost **PQ**?

"If someone had a hundred sheep and one got lost?" (Mt 18:12 1976)

*Li an sum ye dau yinne naan kpi nidib la yela gaad ...*

*Lì àñ s̄úm yē dāy yīnní nāan kpí n̄dɪb lā yélà\_∅ ḡaad ...*

**3INAN COP** good that man:**SG** one then die person:**PL ART** about **CAT** pass ...

"It is better if one man should die for the people than ..." (Jn 11:50)

*Nāan(t)* also appears in subordinate clauses. Examples are uncommon in KB, which usually simply shows the irrealis marker *nà* where older versions have *nāan*. Subordinate clauses introduced by *yē* or *kà*:

*Ka m bood ye li naani pun niyin sa.*

*Kà m̄ bóɔd yé lì nāanɪ pún n̄iŋī-n sá.*

And **1SG** want that **3INAN** then already do-**DP** hence.

"I wish it had happened already." (Lk 12:49, 1976)

*Li su'm ka fu daa naan zanin m ligidi n su'an banki ni.*

*Lì s̄ù'm kà fù dāa nāan zání-n\_ m̄ līgɪdɪ n s̄ū'a-n b̄ánkì ní.*

**3INAN** be.good and **2SG TNS** then take-**DP** **1SG** money **CAT** hide-**DP** bank:**SG LOC**.

"You should have put my money in the bank." (Mt 25:27, 1976)



*N̄*-clauses:

*M daa pu bood ye nimbane naan tisini m sumalisim la keen ka m moren susa'aŋa.*

*M̄ dāa pū bódòd yē nīn-báni nāan tísī-ní\_m*

**1SG TNS NEG.IND** want that person-**REL.PL** then give-**DP 1SG.OB**

*sū-málsìm lā kēε-n kà m̄ mōrɪ-n sū-sáñ'àŋā +∅.*

heart-sweetness **ART** cause-**DP** and **1SG** have-**DP** heart-spoiling **NEG**.

"I did not want those who should have given me joy to give me sorrow."

(2 Cor 2:3, 1996)

*... fun di'em o wuv fun naan di'enim si'em la.*

*... fūn dī'əm·ō\_ ∅ wōv fún nāan dī'ə-ní\_m m̄ sī'əm lā.*

**... 2SG.CNTR** receive:**IMP 3AN.OB** like **2SG:NZ** then receive-**DP 1SG.OB INDF.ADV ART**.

"Welcome him as if you were welcoming me." (Philemon 1:17)

*Hale baa m meŋi naani moren suekane na keen ka m nwe' nyo'og ne saalib yela laa.*

*Hālí báa m̄ mēŋí\_∅ nāani mōrɪ-n sūā-káni nà kēε-n*

Even not **1SG** self **NZ** then have-**DP** way-**REL.SG IRR** cause-**DP**

*kà m̄ ñwé' ñyō'ɔg nē sáalib yéla láa +∅.*

and **1SG** beat chest:**SG** with human:**PL** about **ART NEG**.

"Although I myself might have had reason to boast in human terms."

(Phil 3:4, 1996)

*Fun naani tum be'ed ka ba sigis uf ne kpisiŋkpil ka fu sin ka mor suguru, li su'um a bo?*

*Fún nāani túm bē'ed kà bà sīgísú\_ f nē kpísìŋkpìl*

**2SG:NZ** then do bad and **3PL** put.down **2SG.OB** with fist:**SG**

*kà fù sín kà mōr sūgurú, lì sòm áñ bó +∅?*

and **2SG** be.silent and have forbearance, **3INAN** good:**ABSTR COP** what **CQ?**

"If you do evil and they down you with fists and you are silent and forbear,

what is the good of it?" (1 Pet 2:20, 1996)

*Ningbiŋ naan be ka siig kae' ka li a zaalim la, ala men ...*

*Nìn-gbíŋ\_ ∅ nāan bé kà sīg kā'e kà lì áñ zāalím lā,*

Body-skin:**SG NZ** then **EXIST** and spirit:**SG NEG.BE** and **3INAN COP** empty:**ABSTR ART**,

*àlá mèn ...*

**ADV:**thus also...

"As a body with no spirit is empty, so too ..." (Jas 2:26, 1996)

*Amaa da ke ka ya so' namisid tuum bamanaminee, on naani a ninkuud ...*

Àmáa dā ké kà yà sō' nā'mísíd túùm-bàmmā nāmī-né +∅,  
But **NEG.IMP** cause and **2PL INDF.AN** suffer:IPFV deed-**DEM.DEI.PL PL-LOC** **NEG**,  
ón nāani áñ nīn-kúùd ...

**3AN:NZ** then **COP** person-killer:SG.

"But do not let any of you suffer for acts like these, whether as a murderer ..."  
(1 Pet 4:15, 1996)

*Noŋir lem kae' gaad nidi naan kpi o zuanam zugo.*

Nòŋir léem kā'e\_ ∅ gáàd nīdī\_ ∅ nāan kpí ò zuà-nàm zúgō +∅.

Love again **NEG.BE CAT** pass person:SG **NZ** then die **3AN** friend-**PL** upon **NEG**.

"There is no love greater than if a person dies for his friends." (Jn 15:13, 1996)

*wenne wuu saa naani iank ya nya'aŋ n ti paae ya tuona la*

wēn nē wūw sáa\_ ∅ nāani jáñk yà ñyá'aŋ

resemble with like rain:SG **NZ** then jump **2PL** behind

n tí páe\_ yà tùona lā

**CAT** afterwards reach **2PL** before.**ADV ART**

"like when lightning leaps from East to West" (Mt 24:27, 1996)

*Ba wenne zunzoŋ naani ve'ed zunzoŋ ne.*

Bà wēn nē zúnzòŋ\_ ∅ nāani vē'ed zúnzòŋ nē.

**3PL** resemble with blind.person:SG **NZ** then lead:IPFV blind.person:SG like.

"They are like when a blind person leads a blind person." (Mt 15:14, 1996)

*Ka namisug ne'eŋa wenne po'a naani sa'a ye o du'a ne.*

Kà nā'mísúg nē'ŋá wēn nē pɔ'á\_ ∅ nāani sá'

And suffering **DEM.DEI:INAN** resemble with woman:SG **NZ** then strain

yé ò dɔ'á nē.

that **3AN** bear like.

"This suffering is like when a woman labours to give birth." (Mt 24:8, 1996)

*wuu kunduna naan lusi ba meŋ ne pe'es gbana n kpen' pe'esin.*

wūw kúndùna\_ ∅ nāan lūsí\_ bà mēŋ nē pē'es gbánà

like jackal:PL **NZ** then wrap **3PL** self with sheep:PL skin:PL

n kpèñ'es pē'esí-n.

**CAT** enter sheep:PL-**LOC**.

"Like when jackals wrap themselves in sheepskins to go among sheep."  
(Mt 7:15, 1996)

## 27.2 Open

Conditional clauses without discontinuous-past *n<sup>ε</sup>* or *nāan(ɪ)* express "if", and also "when" with a main clause with present or future reference. With main clauses with past reference, *yà'* is only used for conditionals; for the meaning "when", an absolute clause with time reference is used as a pre-subject adjunct [28.1](#). In a *yà'*-clause, indicative mood is consistently used instead of irrealis in positive polarity, and usually though not invariably in the negative.

*Nid ya'a tum tuuma, o di'ed yɔɔd.*

*Nīd yá' tùm tūuma, ò dī'əd yɔɔd.*

Person:SG if work:IPFV work, 3AN receive:IPFV pay.

"If a person works, he gets pay." (Rom 4:4)

*Ka Kristo ya'a da pu vu'ug kumine, alaa ti labasuŋ la mɔɔlug la anɛ zaalim.*

*Kà Kristo yá' dà pū vū'ug kūmɪ-né<sup>+</sup>∅, àláa tì làba-sùŋ*

And Christ if TNS NEG.IND come.alive death-LOC NEG, ADV:thus 1PL news-good:SG

*lā mɔɔlùg lā á nē zāalím.*

ART proclamation ART COP FOC empty:ABSTR.

"If Christ did not rise from death, our preaching is empty." (1 Cor 15:14)

*Bɛog ya'a nie fu na wum o pian'ad.*

*Bēog yá' niè, fù ná wúm ò pjàñ'ad.*

Tomorrow if appear, 2SG IRR hear 3AN speech.

"When tomorrow comes, you will hear his words." (Acts 25:22)

Cf Hausa *ìdan gàrii yaa waayèè zaa mù tàfi* "When dawn comes we'll go." (Jaggar p608), where *ìdan* is likewise "if/when."

*Fù yá' sjàk, tì ná dīgílí f.*

2SG if agree, 1PL IRR lay.down 2SG.OB.

"If you agree, we'll put you to bed. [i.e. admit you to hospital]"

*Būn-píàlìg bé fù nīf lā púugū-n. Fù yá' bɔɔd, tì ná*

Thing-white:SG EXIST 2SG eye:SG ART inside:SG-LOC. 2SG if want, 1PL IRR

*yīis, kà fù ná ñyē súŋā yá'às.*

extract, and 2SG IRR see good:ADV again.

"There is a white thing [i.e. cataract] inside your eye. If you want, we'll take it out and you'll see well again."

Negative polarity with non-past reference in the *yà'*-clause:

*M ya'a pu keŋε, Sɔŋid la ku keɛn ya ni naa.*

*M̄ yá' p̄ kēŋé<sup>+</sup>∅, sōŋid lā kú kéeñ<sub>—</sub>yà nī náa<sup>+</sup>∅.*

**1SG if NEG.IND go NEG, helper:SG ART NEG.IRR come 2PL LOC hither NEG.**

"If I do not go, the Helper will not come here to you." (Jn 16:7)

*So' ya'a ku tum, on da dii.*

*S̄' yá' kù t̄m, ɔn dā dí<sup>+</sup>∅.*

**INDEF.AN if NEG.IRR work, 3AN.CNTR NEG.IMP eat NEG.**

"If anybody will not work, let him not eat." (2 Thess 3:10, 1976)

### 27.3 Hypothetical

If discontinuous-past *n<sup>ε</sup>* occurs in the *yà'*-clause, it also occurs in the main clause. Here *n<sup>ε</sup>* has an effect similar to the non-temporal use of the preterite in English conditional constructions.

The particle *nāan(i)* does not occur in a *yà'*-clause. If it is also absent in the main clause, there is no contrary-to-fact implication; such main clauses usually have irrealis mood.

*Wief ya'a sigin li ni, li zuluŋ na paaen o salabir.*

*Wiəf yá' sīgí-n lì nī, lì zùluŋ ná páa-n ò sàlibir.*

**Horse:SG if descend-DP 3INAN LOC, 3INAN depth IRR reach-DP 3AN bridle:SG.**

"If a horse went down in it, its depth would reach its bridle." (Rev 14:20, 1976)

*Ya ya'a aan zunzoos, ya pu morin taale.*

*Yà yá' āa-n zúnzòǒŋs, yà p̄ m̄ri-n táallē<sup>+</sup>∅.*

**2PL if COP-DP blind.person:PL, 2PL NEG.IND have-DP fault:SG NEG.**

"If you were blind, you wouldn't be guilty ." (Jn 9:41, 1976; 1996 *ya ku moren*)

*Nobir ya'a yelin ye, on pu a nu'ug la zug, o ka' ningbiŋ nii, lin ku nyanjin keen ka o ka' ningbiŋ nii.*

*Nóbìr yá' yèlī-n yē, ɔn p̄ áñ nú'ùg lā zúg,*

**Leg:SG if say-DP that 3AN:NZ NEG.IND COP hand:SG ART upon,**

*ò k̄a' nín-gbīŋ ní<sup>+</sup>∅, līn kú ñyāŋi-n<sub>—</sub> ∅*

**3AN NEG.BE body-skin:SG LOC NEG, DEM.INAN NEG.IRR accomplish-DP CAT**

*kēε-n kà ò k̄a' nín-gbīŋ ní<sup>+</sup>∅.*

**cause-DP and 3AN NEG.BE body-skin:SG LOC NEG.**

"If the leg were to say, because it is not a hand, it is not in the body, that would not cause it not to be in the body." (1 Cor 12:15, 1976)

## 27.4 Contrary-to-fact

If the main clause has *nāan(ɪ)* there is a contrary-to-fact implication:

*Man ya'a pu kɛɛn na tu'asini ba, ba naan ku mɔrin taale.*

*Mān yá' pū kɛɛ-n nā\_ ∅ tú'asī-ní\_ bā, bā nāan kú*  
**1SG.CNTR** if **NEG.IND** come-DP hither **CAT** talk-DP **3PL.OB, 3PL** then **NEG.IRR**  
*mōri-n táallē +∅.*  
 have-DP fault:SG **NEG.**

"If I had not come to speak to them, they would not have been guilty."  
 (Jn 15:22)

*Ba ya'a daa mi'inɛ li, ba naan ku kpa'an Zugsoɓ one an na'atita'ar la dapuudir zugɔ.*

*Bà yá' dāa mī'i-ní\_ lī, bā nāan kú kpā'a-n Zūg-sóɓ ɔ̀nì*  
**3PL** if **TNS** know-DP **3INAN.OB, 3PL** then **NEG.IRR** fasten-DP head-one:SG **REL:AN**  
*àñ ná'-tītā'ar lā dá-pūvdá zùgō +∅.*  
**COP** king-great:SG **ART** wood-cross:SG upon **NEG.**

"If they had known it, they would not have fastened the Lord, who was a great king, to a cross." (1 Cor 2:8)

*Ya ya'a mi'in linɛ na tisi ya sumbugusum zina nwa, li naan aan so'um!*

*Yà yá' mī'i-n línì nà tīsɪ\_ yá súmbūgusím zíná ñwá,*  
**2PL** if know-DP **REL.INAN** **IRR** give **2PL.OB** peace today this,  
*lì nāan āa-n súm!*  
**3INAN** then **COP-DP** good:ABSTR.

"If you had known this day what would have brought you peace, that would have been good." (Lk 19:42)

*Ya'a ka'anɛ alaa, m naan ku yɛlinɛ ya ye ...*

*Yà' kā'a-ní\_ àlá, m̄ nāan kú yēlɪ-ní\_ yā yē ...*  
 If **NEG.BE-DP** **ADV:thus**, **1SG** then **NEG.IRR** say-DP **2PL.OB** that...  
 "If it were not so, I would not have told you that ..." (Jn 14:2)

*Ya ya'a siakin Moses ya naan siakin man mɛn.*

*Yà yá' sjákī-n Moses, yà nāanɪ sjákī-n mān mɛn.*  
**2PL** if believe-DP Moses, **2PL** then believe-DP **1SG.CNTR** also.

"If you had believed Moses you'd have believed me too." (Jn 5:46)

*Li ya'a aane m meŋ gaŋir ka m tummin tuum kaŋa, m naani di'edin nyood.*

*Lì yá' āa-ní\_ m̄ mēŋ gáŋìr kà m̄ túmmī-n túòm-kàŋā,*

**3INAN** if **COP-DP 1SG** self choice and **1SG** work:IPFV-DP work-DEM.DEI.SG,

*m̄ nāani dī'edi-n ñyōɔd.*

**1SG** then receive:IPFV-DP pay.

"If it had been my own choice that I did this work, I would be getting pay."

(1 Cor 9:17, 1976)

Contrary-to-fact conditions in the past are also sometimes marked by combining the irrealis mood with preverbal past tense markers:

*Bɔzugɔ Josua ya'a da tisini ba vu'usum zin'ig, Wina'am da ku lem pian' dabis-si'a yela ya'ase.*

*Bɔ zúgɔ Josua yá' dà tìsī-ní\_ bā vū'usím zín'ìg, Wínà'am dá kù*

Because Joshua if **TNS** give-DP **3PL.OB** resting place:SG, God **TNS NEG.IRR**

*lēm pīāñ' dábìs-sī'a yélà yà'asē +∅.*

again speak day-INDF.INAN about again **NEG**.

"For if Joshua had given them a resting place, God would not subsequently have spoken of a certain day." (Heb 4:8)

Similarly, but without a *yà'*-clause:

*Ò dāa ná zāb ná'àb lā.*

**3AN TNS IRR** fight chief:SG ART.

"He would have fought the chief" (but didn't)

WK confirmed this meaning, as against "He was going to fight the chief."

## 28 Ñ-clauses

Kusaal transforms complete clauses into AdvPs or NPs by inserting the post-subject particle *ñ*. (For the realisation of the particle, see [8.2.2.1](#).) The *ñ* by itself is a nominaliser, which turns the original clause "X" into an absolute clause [28.1](#) signifying "it being the fact that X." Ñ-clauses also form the basis of Kusaal relative clauses, though in the commonest type the nominaliser particle has fused with a preceding demonstrative pronoun to create what is synchronically simply a relative pronoun [28.2.3](#).

Nominaliser-*ñ* may be historically related to the VP catenator *n* [23.1](#).

All types of *ñ*-clause have independent tense marking (but relative to the narrative timeline within a series of sequential clauses [25.3.2](#).)

They cannot use the imperative mood; irrealis appears instead:

*Yaname na m̄ɔr sam si'a anɛ ye ya nɔŋ taaba.*

*Yānámì\_∅ nà m̄ɔr sām-sí'a á nē yé yà nɔŋ tāaba.*

**2PL** **NZ IRR** have debt-**INDF.INAN COP FOC** that **2PL** love each.other

"Any debt which you are to have is to love each other." (Rom 13:8)

Ñ-clauses cannot have any pre-subject elements or be *n*-focussed, but relative pronouns are often preposed with *kà* [28.2.3](#).

If the *ñ*-clause has a negative VPred, it only shows a final LF if the *ñ*-clause is itself clause-final in the superordinate clause:

*Nīn-báni p̄ɔ díť ná kpī.*

Person-**REL.PL NEG.IND** eat:**IPFV IRR** die.

"People who don't eat will die." WK

*M̄ ñyé nīn-báni p̄ɔ díťā +∅.*

**1SG** see person-**REL.PL NEG.IND** eat:**IPFV NEG**.

"I've seen some people who don't eat."

Ñ-clauses can contain other *ñ*-clauses, VP-chaining constructions and subordinate clauses:

*ban mi' ye biig la kpine la zug*

*bán mī yē bīig lā kpí nē lā zúg*

**3PL:NZ** know that child:**SG ART** die **FOC ART** upon

"because they knew that the child was dead" (Lk 8:53)

*Paul n sob gbauŋ si'a n tis Efesus dim la nwa.*

*Paul ñ sōb gbáuy-sī'a n tís Efesus díṃ lā\_ø ñwá.*

Paul **NZ** write book-**INDF.INAN CAT** give Ephesus individual.**PL ART CAT** this.  
"This is the letter Paul wrote to the Ephesians." (1996 NT heading)

*Ka m tuuma lin ka m tum n tis Zugsob la ke ka yanam a yadda niñidib.*

*Kà m̄ tūma lín kà m̄ túm n tìs Zūg-sób lā*

And **1SG** work **REL.INAN** and **1SG** work **CAT** give head-one:**SG ART**

*ké kà yānám áñ yáddā-níñidib.*

cause and **2PL.CNTR COP** assent-doer:**PL**.

"My actions which I did for the Lord led to you being believers."

(1 Cor 9:1, 1996)

*dàyu-kàni\_ bōɔd yé ò záb nà'ab lā*

man-**REL.SG** want that **3AN** fight chief:**SG ART**

"the man who wants to fight the chief"

*Ba mi' on daa tum si'em, on daa be ba sa'an sansa wusa,*

*daadin [sic] ka o daa paae Asia so'olim la na sa.*

*Bà mī' ón dāa túm sī'əm ón dāa bé bà sā'an*

**3PL** know **3AN:NZ TNS** work:**IPFV INDF.ADV 3AN:NZ TNS** **EXIST 3PL** presence

*sānsá wūsa, dāa-lìn kà ò dāa pāe Asia sú'ulim lā nā sá.*

time:**PL** all, day-**REL.INAN** and **3AN TNS** reach Asia realm **ART** hither ago.

"They knew what he'd been doing all the time he'd been with them

since the day he had arrived in the province of Asia" (Acts 20:18, 1976)

They can contain coordinated clauses and verb phrases:

*dāy lā ñ dāa kēŋ dá'a-n, kà pu'ā lā dāa kēŋ*

Man:**SG ART NZ TNS** go market:**SG-LOC** and woman:**SG ART TNS** go

*pōɔg lā zúg*

field:**SG ART** upon

"because the man went to market and the woman went to the farm" WK

*mam pu sa'amidi ba la'ad, ka mε pu diti ba ki la.*

*mán pū sáñ'amídí\_ bà lā'ad, kà mé pū dítí\_*

**1SG:NZ NEG.IND** spoil:**IPFV 3PL** goods:**PL** and also **NEG.IND** eat:**IPFV**

*bà kī lāa +ø.*

**3PL** millet **ART NEG**.

"that I don't spoil their property or eat their millet" BNY p20



Ñ-clauses are NPs or AdvPs and may take the article *lā*<sup>+/</sup>, but they cannot take modifiers or postdeterminer pronouns. They can participate in forming larger NPs or AdvPs as predeterminers, and may also themselves have predeterminers:

*ba diib n yit na'ateŋ la na zug*

*bà dīib ñ yīt ná'-tēŋ lā nā zúg*

**3PL food NZ emerge:IPFV king-land:SG ART hither upon**

"because their food came from the king's land" (Acts 12:20, 1996)

*Pa'alimi ti nidiba ayi' nwa fun gaŋ sɔ'*

*Pà'alīmī tí nīdibá\_ àyí ñwá fún gāŋ sɔ'*

**Teach:IMP 1PL.OB person:PL NUM:two this 2SG:NZ choose INDF.AN**

"Tell us which of these two people you have chosen" (Acts 1:24)

The article *lā*<sup>+/</sup> is not repeated a second time after an ñ-clause which ends in a NP with *lā*<sup>+/</sup>.

If the clause contains the VP-final particles *nā*<sup>+/</sup> "hither" *sà*<sup>+</sup> "hence" these may follow an article *lā*<sup>+/</sup> belonging to the ñ-clause [20.7](#).

Ñ-clauses, like other NPs/AdvPs, are coordinated with *nē* "and" *kūu/bēē* "or."

*... pa'ali ba on daa nye Zugsoɔb la suorin, ka o pian' tis o si'em,*

*nē Saul n mɔɔl Yesu yela nē sunkpi'eun Damaskus teŋin si'em.*

*... pá'alì\_ bā ún dāa ñyē Zūg-sóɔb lā sūrī-n, kà ò*

**...teach 3PL.OB 3AN:NZ TNS see head-one:SG ART road:SG-LOC and 3AN**

*pjāñ'\_ø tís-ò\_ø sī'em, nē Saul n mɔɔl Yesu yélà*

**speak CAT give 3AN.OB INDF.ADV with Saul NZ proclaim Jesus about**

*nē sūñ-kpí'òŋ Damaskus téŋī-n sī'em.*

**with heart-strength Damascus land:SG-LOC INDF.ADV**

"...informing them how he had seen the Lord on the road and He had spoken to him, and how Saul had preached boldly about Jesus in Damascus."

(Acts 9:27)

The first ñ-clause itself contains two subclauses linked by *kà*.

## 28.1 Absolute clauses

N̄-clauses which do not contain relative pronouns or determiners as heads are **absolute clauses** meaning "it being the fact that X", where "X" is the clause prior to the insertion of *n̄*:

*Dāy lā dāa záb nà'ab lā.*

Man:SG ART TNS fight chief:SG ART

"The man fought the chief."

*dāy lá\_∅ dāa záb nà'ab lā*

Man:SG ART NZ TNS fight chief:SG ART

"the man having fought the chief"

Absolute clauses always take the article *lā*<sup>+/</sup>.

The most characteristic use of absolute clauses is as **AdvPs** of circumstance or time. Like other AdvPs, they have limited use as verb arguments, most often as the complement of *àñ*<sup>a</sup> "be", though occasionally as subjects:

*Dine ke ka m a saalbiis zua la ane*

*mam pu sa'amidi ba la'ad ka me pu diti ba ki la.*

*Dìni ké kà m àñ sàal-biis zuyá lā á nē mán*

REL.SG cause and 1SG COP smooth-child:PL friend:SG ART COP FOC 1SG:NZ

*pū sán'amídí\_ bā lā'ad kà mé pū dítí\_ bā kī lāa +∅.*

NEG.IND spoil:IPFV 3PL goods:PL and also NEG.IND eat:IPFV 3PL millet ART NEG.

"What makes me a friend of human beings is

that I don't spoil their property or eat their millet." BNY p20

*Kristo da kp̄ii ti yela la ke ka ti baŋ n̄ŋilim an si'em.*

*Kristo\_∅ dà kp̄ii\_ tì yēlá lā ké kà tì bāŋ*

Christ NZ TNS die 1PL about ART cause and 1PL realise

*n̄ŋilim\_∅ àñ sī'em.*

love NZ COP INDF.ADV

"Christ dying for us makes us understand what love is like." (1 Jn 3:16)

Absolute clauses are accordingly not used as objects of verbs of perception or communication; either relative clauses with indefinite pronouns as relatives [28.2.2](#) or content clauses [26.3](#) appear in this function.

### 28.1.1 Time/circumstance adjuncts

Absolute clauses are the usual way of expressing past "when." They may occur as adjuncts in the pre-subject position of main clauses [25.1.1](#), or preposed with *kà* [30.2](#), or less commonly as adjuncts clause-finally. Kusaal is stricter than English in requiring constituent order to reflect event order (cf VP chaining [23.1](#)), so the clause-final position is usually confined to cases where the absolute clause expresses a state of affairs rather than a single event:

*Ǫn dāa ñyēt súṅā, Ǫn dāa áñ bí-līa lāa +∅?*  
**3AN.CNTR TNS** see:IPFV good:ADV, **3AN:NZ TNS COP** child-baby:SG ART PQ?  
 "Did she see well when she was a baby?"

Tense markers in an absolute clause are the same as in the main clause; the main clause markers may be omitted if the absolute clause precedes. It is thus not possible to manipulate the time relationship with tense particles; instead, this is determined by aspect, with a perfective in the absolute clause implying a prior event and imperfective a simultaneous one, setting the temporal scene for the main clause.

*Ka ban dit la, Yesu yeli ba ...*  
*Kà bán dīt lā, Yesu yéì\_ bā ...*  
 And **3PL:NZ** eat:IPFV ART, Jesus say **3PL.OB**  
 "As they were eating, Jesus said to them ..." (Mt 26:21)

*Ka ban yi la, ka Zugsob malek nie o meṅ ...*  
*Kà bán yī lā, kà Zūg-sób máljāk níe ò mēṅ ...*  
 And **3PL:NZ** emerge ART and head-one:SG angel:SG appear **3AN** self  
 "After they had left, an angel of the Lord showed himself ..." (Mt 2:13, 1996)

Absolute clauses with *sādigím* "since, because" immediately following nominaliser-*ñ* occur in the pre-subject adjunct position of a main clause and express "reason why":

*Tinamε sagidim aan o biis la, ti da ten'εs ...*  
*Tīnámì\_∅ sādigím áañ\_ò biīs lā, tì dā tēñ'εs ...*  
**1PL NZ** since **COP** **3AN** child:PL ART, **1PL NEG.IMP** think ...  
 "Since we are his children, we should not think ..." (Acts 17:29)

*Wina'am Siig Suŋ sadigim tisi ti vum paal la, keli ka ti beilim dolne o boodim la.*

*Wínà'am Sí-sùŋ* ∅ *sādı́ım tísì* *tī* *vōm-páàl* *lā*,

God spirit-good:SG NZ since give 1PL.OB life-new:SG ART

*kèlí* ∅ *kà* *tì* *bèllım* *dōl* *né* *ò* *bòodım* *lā*.

cause 2PL.SUB and 1PL existence follow with 3AN will ART

"Since God's Holy Spirit has given us new life,

let our lives be in accord with his will." (Gal 5:25, 1996)

*On sadigim niŋ ala la, o sid na tisi ti si'el mekama wusa la'am ne o.*

*Ón* *sādı́ım nīŋ* *á**l**á* *lā*, *ò* *sìd* *nà* *tīsì* *tí* *sī'əl*

3AN:NZ since do ADV:thus ART, 3AN truly IRR give 1PL.OB INDF.INAN

*mékàma* *wōsa* *l**á**à**m* *né* *ò*.

altogether all together with 3AN

"Since he has done this, he will certainly give us everything together with him."

(Rom 8:32, 1976)

For absolute clauses with post-subject *nāan(ɪ)* see [27.1.2](#).

### 28.1.2 With prepositions and postpositions

Absolute clauses occur after *hālí nē* or *hālí là'am nē* "although"

*Hali la'am ne on daa an yelsum wusa daan la*

*Hālí là'am nē* *ón* *dāa* *á**n**ŋ* *yēl-súm* *wōsa* *dáàn* *lā*

Even together with 3AN:NZ TNS COP matter-goodness:SG all possessor ART

"though he was the possessor of every blessing" (2 Cor 8:9)

Similarly after *hālí n tì pāa ...* "up until the time when ..." [23.3](#)

*hālí n tì* *pāa* *tīnámì* ∅ *kūl* *lā*

Up.to CAT afterwards reach 1PL NZ return.home ART

"Until we'd returned home."

Before the postposition *zūg<sup>ɔ</sup>* "on account of", absolute clauses form reason-why AdvPs used as adjuncts:

*Ka ba la'as taaba n denji nye Blestus one a na'ab Herod samanna'ab la n maal suer ye o nwe' na'ab nu'ug, ba diib n yit na'atej la na zug.*

*Kà bà lá'às tāaba n déjì\_ø ñyē Blestus*

And **3PL** gather each.other **CAT** do.first **CAT** see Blastus

*ónì àñ ná'àb Herod sāmán-nà'ab lā n máàl sūer*

**REL.AN COP** king:**SG** Herod courtyard-chief:**SG** **ART CAT** make way:**SG**

*yé ò ñwé' nà'ab nú'ùg, bà dīib ò yīt ná'-tēj*

that **3AN** strike king:**SG** hand:**SG**, **3PL** food **NZ** emerge:**IPFV** king-country:**SG**

*lā nā zúg.*

**ART** hither upon

"They gathered together after first seeing Blastus, king Herod's chamberlain, to get him to make an agreement with the king, because their food came from the king's land." (Acts 12:20, 1996)

When they contain perfective forms, such absolute clauses may need to be preposed with *kà* [30.2](#) to match the word order to event order [19.2.1](#):

*Mán ñwè' dāy lā zúg kà police gbáñ'a\_m.*

**1SG:NZ** strike man:**SG** **ART** upon and police seize **1SG.OB.**

"Because I struck the man the police arrested me."

It is commoner for causation to be simply implied by a pre-subject absolute clause or by a result clause:

*Mán ñwè' dāy lā, kà police gbáñ'a\_m.*

**1SG:NZ** strike man:**SG** **ART** and police seize **1SG.OB.**

"I having struck the man, the police arrested me."

*M̀ ñwé' dāy lā, kà police gbáñ'a\_m.*

**1SG** strike man:**SG** **ART** and police seize **1SG.OB.**

"I struck the man and the police arrested me."

*yēlá*<sup>+</sup> "concerning" appears after an absolute clause in section headings in the NT:

*Jesus n kpen' Jerusalem la yela*

*Jesus ò kpèñ' Jerusalem lā yéla*

Jesus **NZ** enter Jerusalem **ART** about

"[about] Jesus entering into Jerusalem."

The NT favours absolute clauses alone as picture captions:

*Ban meed yir* "A house being built"  
*Bán m̀èéd yīr*  
 3PL:NZ build:IPFV house:SG

*Paul n sobid gboŋ nwa* "Paul writing this letter"  
*Paul ñ s̀obid gbáŋ ñwá*  
 Paul NZ write:IPFV letter:SG this

## 28.2 Relative clauses

Relative clauses are usually restrictive in meaning, except when the construction is appositional [28.2.4](#). Compare [26.2](#) on adnominal *kà*-clauses, used typically with a non-restrictive relative meaning.

### 28.2.1 Structure

Structurally, Kusaal relative clauses are of two distinct types: those which use relative pronouns, and those which use indefinite pronouns in the rôle of relatives. The relative clause subject is followed by *ñ* in the indefinite pronoun type; diachronically, the unitary relative pronouns have arisen from fusion of a clause-initial short demonstrative pronoun [16.3.2](#) with a following *ñ*.

Relative clauses using indefinite pronouns as relatives are **internally headed**. The pronoun may occur as a head, functioning as the clause antecedent, or as a postdeterminer pronoun after a cb which is then the clause antecedent; in either case it remains *in situ* within the relative clause. The pronoun is thus followed not only by the article belonging to the whole clause, but by any adverbial elements, chained VPreds, and subordinate clauses:

*ye Wina'am nodi'esidib n daa yel si'el n sob Wina'am gbauŋin la, ane ameŋa.*  
*yē Wínà'am nɔ́-dí'èsidib n dāa yél sī'əl n sɔ́b*  
 That God mouth-receiver:PL NZ TNS say INDF.INAN CAT write  
*Wínà'am gbáŋŋū-n lā á né àmēŋá.*  
 God book:SG-LOC ART COP FOC truly.  
 "So that what God's prophets said and wrote in God's book is true."  
 (Mt 26:56, 1996)

Instead of analysing these clauses as internally headed, one might try to take such trailing elements as modifying the relative clause; however, this cannot explain cases where the pronoun appears in a subordinate clause within the relative clause, or is itself a predeterminer within a NP:

*Fun bɔɔd ye fu ku dau sɔ' la ya'a kpi...*

*Fún bòɔd yé fù kù dáɣ-sɔ' lā yá' kpi...*

**2SG:NZ** want that **2SG** kill man-**INDF.AN ART** if die...

"If the man you are seeking to kill dies ..." (2 Samuel 17:3)

*M na tumi m Ba' zi'el nɔɔr sɔ' yela la tisi ya*

*M̄ ná tūmí\_ m̄ B́á' ø zì'əl nɔɔr sɔ' yé'la\_ ø tísì\_ yā.*

**1SG IRR** send **1SG** father:**SG NZ** stand mouth:**SG INDF.INAN** about **CAT** give **2PL.OB.**

"I will send whom my Father made a promise about to you." (Lk 24:49)

The indefinite pronoun or noun-pronoun compound usually follows a VPred directly, but this is not invariable:

*... fun yelim fun niŋ li si'el.*

*... fūn yélím fún niŋì\_ lī sī'əl.*

... **2SG.CNTR** say:**IMP 2SG:NZ** do **3INAN INDF.INAN.**

"... that you tell me where you have put it." (Jn 20:15)

The commonest type of relative clause begins with a relative pronoun or an NP with a relative pronoun as a postdeterminer. In origin, these pronouns are short demonstrative pronouns followed by ñ. When the head is the subject of the relative clause, this produces the forms ñni kàni òni bàni (always written *one kanε linε banε* in KB) where the final -i is due to liaison before the nominaliser, which is itself invariably realised ø in this case.

*M ñyé dáɣ-kàni\_ ø zàb nà'ab lā.*

**1SG** see man-**DEM.SG NZ** fight chief:**SG ART**

"I saw the man who fought the chief."

When the pronoun is not the subject of the relative clause, but is either another constituent preposed by kà, or belongs to a predeterminer of the subject, one might expect the ñ to be absent and the pronoun to have the normal SF form. This indeed the case for WK, and commonly in the older NT versions too:

*bàn kà nà'ab lā zàb lā*

**DEM.PL** and chief:**SG ART** fight **ART**

"those whom the chief fought."

*yikan ka mam Paul be la*

*yī-kán kà mām Paul bé lā*

house-**DEM.SG** and **1SG.CNTR** Paul **EXIST ART**

"the house where I, Paul, am" (Rom 16:23, 1976)

*on buudi ka Jew dim kis*

*òn būudí kà Jew díḿ kīs*

**DEM.AN** tribe:**SG** and Jew individual.**PL** hate

"whose tribe the Jews hate" (Lk 10:33, 1996)

However, frequently even in older written materials, and almost invariably in KB, the pre-liaison forms are generalised to these cases too:

*gbauḡ kanε ka dau la sōb la*

for *gbàḡ-kan kà dāḡ lā sōb lā*

letter-**REL.SG** and man:**SG ART** write **ART**

"the letter which the man has written"

In *dau kanε yadda niḡiri pu zu'oe*

*dāḡ-kànı yaddā-niḡiri\_ ∅ pū zú'e lā*

man-**REL.SG** assent-doing:**SG NZ NEG.IND** become.great **ART**

"a man whose faith is not great..." (Mt 14:31)

the nominaliser occurs after the actual relative clause subject.

In view of all this, it seems best to regard the forms *ònı kànı lìnı bànı* synchronically as subordinating relative pronouns rather than demonstrative + nominaliser combinations, and where sources use the historically expected forms *òn kàn lìn bàn* in heads of relative clauses they will be regarded as allomorphs of the relative pronouns in that context. Accordingly, elsewhere I will write e.g.

*Ḿ ñyé dāḡ-kànı zàb nà'ab lā.*

**1SG** see man-**REL.SG** fight chief:**SG ART**

"I saw the man who fought the chief."

*bàn(ı) kà nà'ab lā záb lā*

**REL.PL** and chief:**SG ART** fight **ART**

"those whom the chief fought."

Toende Kusaal shows the same development. Nominaliser-*ñ* is *ne* in Toende; thus Abubakari 2011 (using her orthography):



*N sa nye buraa kanne da da'a gbana la.*

"I saw the man who bought the book."

With *ne* before *ka* in relative clauses:

*Buraa kanne ka fo bor la kiŋ tuma.*

"The man you are looking for is gone to work"

*N sa nye buraa kanne ka Ayi da nye la.*

"I saw the man that Ayi saw."

As a *cb* before a relative pronoun is a word in its own right rather than a word fragment, and compounded forms are not necessarily bound tighter than un-compounded forms syntactically [16.9](#), there is no need to regard the pronoun-initial type of relative clause as internally-headed.

A relative clause introduced by a relative pronoun may contain indefinite pronouns with their normal meaning, and a relative clause with an indefinite pronoun as relative may contain other indefinite pronouns in their normal function so long as they precede the pronoun which appears with the relative meaning:

*Wina'am one gaad si'el wusa la*

*Wínà'am ónì gàad sī'əl wōsa lā*

God REL.AN pass INDF.INAN all ART

"God who surpasses everything." (Lk 1:35)

*wuv baŋi gban'ad si'el si'em la*

*wūv bāŋí\_ø gbāñ'ad sī'əl sī'əm lā*

like trap:SG NZ seize:IPFV INDF.INAN INDF.ADV ART

"like a trap seizes something" (Lk 21:35)

Short demonstrative pronouns are never relatives when non-initial, and long demonstratives [16.3.2](#) are never relative pronouns at all:

*O pa'al ne'enam nyain tis sɔ' wusa on vu'ug ninkan kumin la zug.*

*Ò pà'al nē'-nám ñyāe\_ø tís sō' wōsa ón vū'ug nīn-kán*

3AN show DEM.INAN-PL clearly CAT give INDF.AN all 3AN:NZ revive person-DEM.SG

*kūmı-n lā zúg.*

death-LOC ART upon

"He has shown this clearly to everyone because he has raised that person from death." (Acts 17:31)

*o na tum tumnyalima gaad dau kaŋa tum si'el laa?*

ò nà tūm túm-ñyālimá\_ ∅ gāad dàu-kàŋá\_ ∅ tùm sī'əl lāa +∅?  
**3AN** **IRR** work work-marvellous:**PL** **CAT** pass man-**DEM.DEI** **NZ** work **INDF.INAN** **ART** **PQ?**

"Will he do miracles greater than this man has?" (Jn 7:31)

### 28.2.2 Using indefinite pronouns

The antecedents of this type of relative clause can be direct objects, VP complements or adjuncts:

Ón yèl sī'əl lā kā' sídāa +∅.

**3AN:NZ** say **INDF.INAN** **ART** **NEG.BE** truth **NEG.**

"**What** he says is not true" SB

*on gaŋ dau sɔ' la*

ón gāŋ dáu-sɔ' lā

**3AN:NZ** choose man-**INDF.AN** **ART**

"**the man** whom he has chosen" (Numbers 16:5)

*M mi' man gaŋ sieba la.*

M̄ mí' mán gāŋ sīəba lā.

**1SG** know **1SG:NZ** choose **INDF.PL** **ART.**

"I know those whom I have chosen." (Jn 13:18)

*Ka ban tum sɔ' la ku gaad one tum o la.*

Kà bán tùm sɔ' lā kú gāad ónì tùm·o\_∅ lāa +∅.

And **3PL:NZ** send **INDF.AN** **ART** **NEG.IRR** surpass **REL.AN** send **3AN.OB** **ART** **NEG.**

"**The one** who was sent does not surpass the one who sent him." (Jn 13:16)

*Paul n sob gbauŋ si'a n tis Efesus dim la*

Paul ñ sōb gbáuŋ-sī'a n tís Efesus dím lā

Paul **NZ** write letter- **INDF.INAN** **CAT** give Ephesus individual.**PL** **ART**

"**the letter** which Paul wrote to the Ephesians" (NT heading)

*Man mi' si'el nan ane bi'ela.*

Mán mī' sī'əl nān á nē bī'elá.

**1SG:NZ** know **INDF.INAN** now **COP** **FOC** small.**ADV**

"**What** I know now is small." (1 Cor 13:12)

It is possible for the head to be part of a subordinate clause within the relative clause, or for the indefinite pronoun to be a predeterminer; all cases which I have found involve the pronoun *s̄*<sup>+</sup>:

*Fun b̄c̄c̄d ye fu ku dau s̄' la ya'a kpi...*

*Fún b̀̀c̀c̀d yé fù kù dáy-s̄' lā yá' k̀̀p̀ì...*

**2SG:NZ** want that **2SG** kill man-**INDF.AN** **ART** if die...

"If the man you are seeking to kill dies ..." (2 Samuel 17:3)

*ya na baŋ man yeI ye m an s̄' la.*

*yà ná bāŋ mán yeI yé m̄ àñ s̄' lā.*

**2PL** **IRR** understand **1SG:NZ** say that **1SG** **COP** **INDF.AN** **ART**.

"you will understand who I say that I am." (Jn 8:28)

*Ḡosim ye fu na baŋ la'abama an s̄' bunn̄εε?*

*G̀̀osim yé fù ná bāŋ lá'-bàmmá\_ ø àñ s̄' búnn̄εε +ø?*

Look:**IMP** that **2SG** **IRR** understand item-**DEM.DEI.PL** **NZ** **COP** **INDF.AN** thing:**SG** **PQ**?

"Can you see if you can find out whose property these things are?"

(Genesis 38:25)

*Alaa mam me ku yeI ya mam nye n̄c̄r la s̄' san'an̄ε.*

*Àlāa mām mé kù yēI\_ yá mán ñyē n̄c̄r lā*

Thus **1SG.CNTR** also **NEG.IRR** say **2PL.OB** **1SG:NZ** see mouth:**SG** **ART**

*s̄' sá'an̄ε +ø.*

**INDF.INAN** among **NEG**.

"Thus I too will not tell you from whom I derived the authority." (Mt 21:27)

*M na tumi m Ba' zi'el n̄c̄r s̄' yela la tisi ya*

*M̄ ná tūmí\_ m̄ B́́' zì'el n̄c̄r s̄' yéIà\_ ø tísì\_ yā.*

**1SG** **IRR** send **1SG** father:**SG** **NZ** stand mouth:**SG** **INDF.INAN** about **CAT** give **2PL.OB**.

"I will send whom my Father made a promise about to you." (Lk 24:49)

Relative clauses with an indefinite pronoun as a postdeterminer are comparatively uncommon. Only one case occurs in the 1996 NT of *s̄*<sup>+</sup> or *s̄iba*<sup>+</sup> in a relative clause preceded by a cb, but KB has several examples:

*Nidib la da wum Yesu n tum tuum sieba ...*

*N̄̀d̄̀b lā dá wòm Yesu n tùm tùm-s̄iba ...*

Person:**PL** **ART** **TNS** hear Jesus **NZ** work work-**INDF.PL** ...

"The people heard of the deeds that Jesus had performed..." (Mk 3:7, 1996)

*Ban da ku ninsieba da ka' bi'elaa.*

*Bán dà kù nīn-síabà dá ká' bī'eláa +∅.*

**3PL:NZ TNS** kill person-**INDF.PL TNS NEG.BE** few **NEG.**

"Those they had killed were not few." (1 Samuel 4:10)

*ka ban ne ban tum ninsieba la dɔl taaba keŋ David san'an...*

*kà bān nē bán tùm nīn-síabà lā dɔl tāaba\_ ∅*

and **3PL.CNTR** with **3PL:NZ** send person-**INDF.PL ART** accompany each.other **CAT**

*kēŋ David sá'àn...*

go David among ...

"They and those whom had been sent went together with David" (1 Sam 25:42)

*Kem tu'us Samaria na'abi tum ninsieba la na ...*

*Kēm\_ ∅ tū'us Samaria ná'abí\_ ∅ tùm nīn-síabà lā nā ...*

Go:**IMP CAT** greet Samaria king:**SG NZ** send person-**INDF.PL ART** hither ...

"Go and greet the men sent by the king of Samaria ..." (2 Kings 1:3)

The postdeterminer-only pronoun *sī'a*<sup>+</sup> appears quite commonly in relative clauses in the 1996 NT, but of 56 examples, 27 involve *zīñ'-sī'a*<sup>+</sup> "somewhere", as in

*M Zugsoḃa, ti zi' fun ken zin'isi'a la.*

*M̄ Zūg-sóḃā +∅, tì zī' fún kēn zīñ'-sī'a lāa +∅.*

**1SG** Head-one:**SG VOC, 1PL NEG.KNOW 2SG:NZ** go:**IPFV** place-**INDF.INAN ART NEG.**

"My Lord, we don't know where you are going." (Jn 14:5, 1996)

A further six examples involve cbs of other nouns referring to places, four with *tēŋ*<sup>a</sup> "land", and one each with *sō'ulím*<sup>m</sup> "kingdom, country" and *dòɔŋ*<sup>ɔ</sup> "house":

*Ka bugum nie on be doog si'a la ni.*

*Kà bùgúm níe ɔn bè dɔ-sī'a lā ní.*

And fire appear **3SG:NZ EXIST** room-**INDF.INAN ART LOC.**

"And fire illuminated the room where he was." (Acts 12:7, 1996)

Nine cases involve *sān-sí'a*<sup>+</sup> "sometime", e.g.

*Abraham da nan kae' sanjsi'a la, ka man pun be.*

*Abraham dá nām kā'ẹ sān-sí'a lā, kà mān pún bè.*

Abraham **TNS** still **NEG.BE** time-**INDF.INAN ART**, and **1SG.CNTR** already **EXIST.**

"When Abraham still did not exist, I already existed." (Jn 8:58, 1996)

There remain 14 other examples in the 1992 NT. As expected, the antecedents cannot have human reference, but they may be abstract or concrete, and as with *sō*<sup>+</sup> and *sīaba*<sup>+</sup>, need not have an indefinite-specific meaning:

*Nannanna, yaname daa sob gbauḡ si'a la ka m ye m sob lebisi ya.*

*Nānná-nā, yānámì\_ø dāa sōb gbáḡ-sī'a lá kà m yé*

Now, 2PL NZ TNS write letter-INDF.INAN ART and 1SG that

*m sōb\_ø lébìsì\_yā.*

1SG write CAT answer 2PL.OB.

"Now, it's the letter you wrote that I'm going to write back to you about."

(1 Cor 7:1, 1996)

*Ka bugum n dit teḡtita'ar si'a la nyo'os dut ne agol saḡa dine ka' benne.*

*Kà bùgúm\_n dīt téḡ-tītá'-sī'a lā ñyó'òs dùt né*

And fire NZ eat:IPFV land-big-INDF.INAN ART smoke ascend:IPFV FOC

*àgól sāḡá dìnì ká' bēnne +ø.*

ADV:upwards time:SG REL.INAN NEG.HAVE end:SG NEG.

"The smoke of **that great city** which fire is consuming is going up for time without end." (Rev 19:3), referencing the ongoing topic of the previous chapter *Babilon teḡ tita'ar* "the great city of Babylon" (Rev 18:21, 1996)

*ka fun gban'e zīḡ si'a yiiga la, fun ya'ami o noor*

*kà fún gbāñ'e zīm-sí'a yīgá lā, fūn yá'amí\_ò nōor.*

And 2SG:NZ grab fish-INDF.INAN firstly ART, 2SG.CNTR open:IMP 3AN mouth:SG.

"The first fish that you catch, open its mouth ..." (Mt 17:27, 1996)

*... li pu nar ye m zaḡ Zugsob la tisi m paḡ si'a la n tum ne sutoogo.*

*... lì pū nār yé m zāḡ Zūḡ-sób lá\_ø tìsì\_m*

... 3INAN NEG.IND be.necessary that 1SG pick.up Head-one:SG ART NZ give 1SG.OB

*páḡ-sī'a lā n túm nē sūñ-tóḡḡ +ø.*

power-INDF.INAN ART CAT work with heart-bitterness NEG.

"... it's not necessary that I use the power which the Lord gave me in acting with harshness." (2 Cor 13:10, 1996)

*Yaname na mor sam si'a ane ye ya noḡ taaba.*

*Yānámì\_ø nà mōr sām-sí'a á nē yé yà nóḡ tāaba.*

2PL NZ IRR have debt-INDF.INAN COP FOC that 2PL love each.other

"**Any debt** which you are to have is to love each other." (Rom 13:8, 1996)

Some cases are of the "subordinate interrogative clause" type described below:

*Tiig wela bigisid lin a tisi'a.*

*Tiig wélà\_ø bigisid lín àñ tí-sī'a.*

Tree:SG fruit:PL CAT show:IMPF 3INAN:NZ COP tree-INDF.INAN.

"It's the fruit of the tree that shows **what tree** it is." (Mt 12:33, 1996)

When an indefinite pronoun is itself the head of a relative clause it usually keeps the indefinite-specific sense of indefinite pronouns in other contexts [16.3.3](#) (the main exceptions are a sequence in Rev 2-3 of *man nye so' la* "the one I saw.") In the 1996 NT, out of 33 examples of *s̄*<sup>+</sup> used in this way, 20 involve constructions where the relative clause is the complement of a verb of cognition, reporting, or perception. Relative clauses with indefinite pronouns as relatives are strongly preferred in clauses which correspond to what CGEL calls "subordinate interrogative clauses" (pp1070ff, pp972ff), and may be obligatory when such a clause follows a VPred as its complement and the pronoun is not the subject of the subordinate clause. Such cases account for the great majority of relative clauses with uncompounded indefinite pronouns:

*o naan banjin po'a kane si'is o la a so'*

*ò nāan bāñī-n pɥ'á-kàni s̄'is-ó\_ø lá\_ø àñ s̄'.*

3AN then realise-DP woman-REL.SG touch 3AN.OB ART NZ COP INDF.AN.

"He would know what [kind of] woman it is **who** touched him" (Lk 7:39, 1996)

*m na pa'ali ya on wen so'.*

*m̄ ná pā'alí\_ýá ́n wēn s̄'.*

1SG IRR teach 2PL.OB 3AN:NZ resemble INDF.AN.

"I will teach you what he is like." (Lk 6:47, 1996)

*M mi' fun a so'.*

"I know **who** you are." (Lk 4:34, 1996)

*M̄ m̄' fún àñ s̄'.*

1SG know 2SG:NZ COP INDF.AN

Similarly, the 2016 Bible has

*David da tum so' ye o bu'osi ban pu'a la an so'.*

*David dá tùm s̄' yé ò bŭ'osi\_ø báj*

David TNS send INDF.AN that 3AN ask CAT understand

*pɥ'ā lá\_ø àñ s̄'.*

woman:SG ART NZ COP INDF.AN.

"David sent someone to ask and find out **who** the woman was." (2 Samuel 11:3)

... *baŋi ba yaaname an sieba*

... *báŋì̀ bà yāa-námì̀ ∅ àñ sī́ba*

... understand **3PL ancestor-PL NZ COP INDF.PL**

"... discover **who** their ancestors were." (Ezra 2:61)

Relative clauses headed by the independent inanimate indefinite pronoun *sī́əl*<sup>a</sup> are very frequent, and actually account for most occurrences of *sī́əl*<sup>a</sup> in the 1996 NT. The majority of examples (75 out of 130 in Matthew, Mark, Luke and John in the 1995 NT) again appear where either *sī́əl*<sup>a</sup> or the entire relative clause (or both) is the object or complement of a verb of cognition, reporting, or perception, and represents the (abstract, uncountable) information transmitted:

*Mam mi' si'el ane ye, m daa ane zu'om ka yu'un nyet.*

*Mán mī́ sī́əl á nē yē, m̄ dā́ á nē zū'om, kà yū'un ñyēt.*

**1SG:NZ know INDF.INAN COP FOC that, 1SG TNS COP FOC blind:SG, and after see:IPFV.**

"What I know is, that I was blind and now I see." (Jn 9:25, 1996)

*Kem yeli Joon yanam wum ka nye si'el.*

*Kèm ∅ yēli ∅ Joon yānám ∅ wòm kà ñyē sī́əl.*

**Go:IMP CAT say 2PL.SUB John 2PL NZ hear and see INDF.INAN.**

"Go and tell John what you have heard and seen." (Mt 11:4, 1996)

*Ya baŋ man niŋ si'el laa?*

*Yà báŋ mán niŋ sī́əl láa +∅?*

**2PL understand 1SG:NZ do INDF.INAN ART CQ?**

"Do you understand what I have done?" (Jn 13:12, 1996)

Of the remaining 55 examples, 22 have *sī́əl*<sup>a</sup> in a locative meaning "where, whither"; neither the pronoun nor the relative clause have the locative particle in such cases:

*Bozugo ya araza'ase be si'el la, ya potenda me bene anina.*

*Bō zúgú yà àrazà'así ∅ bē sī́əl lā, yà pù-tēnda mé bē né àní nā.*

**Because 2PL treasure NZ EXIST INDF.INAN ART, 2PL mind:PL too EXIST FOC there.**

"For where your treasure is, your mind is too." (Mt 6:21, 1996)

*One keŋ likin zi' on ken si'ela.*

*Ōni kēŋ líkì-n zī' ón kēn sī́əla +∅,*

**REL.AN go darkness-LOC NEG.KNOW 3AN:NZ go:IPFV INDF.INAN NEG.**

"He who walks in darkness does not know where he is going." (Jn 12:35, 1996)

In the remaining 33 examples, *sī'əl*<sup>a</sup> consistently has an abstract uncountable meaning, often shading into "whatever":

*Ka o niŋ on tun'e si'el.*

*Kà ò níŋ ón tūñ'e sī'əl.*

And **3AN** do **3AN:NZ** be.able **INDF.INAN**.

"She has done what she could." (Mk 14:8, 1996)

In 14 of these cases it is followed by *wōsa*<sup>+</sup> "all":

*M na tis uf fun bood si'el wusa.*

*M̃ ná tīs<sub>f</sub> fún bòod sī'əl wōsa.*

**1SG** IRR give **2SG.OB** **2SG:NZ** want **INDF.INAN** all.

"I will give you anything you want." (Mk 6:23, 1996)

*Sī'am*<sup>m</sup>, the form of the indefinite pronoun system with the mass *m*<sup>m</sup> class suffix, is frequent in adverbial use as "somehow" and also as indefinite quantifier "some amount." Kusaal frequently uses manner-adverbs as predicative complements [20.2.1](#). Accordingly, relative clauses with *sī'am* are, once again, common as objects of verbs of cognition, reporting, and perception:

*Kristo da kp̄ii ti yela la ke ka ti baŋ n̄ŋilim an si'em.*

*Kristo\_ø dà kp̄ii\_ tì yēlá lā ké kà tì báŋ n̄ŋilim\_ø àñ sī'am.*

Christ **NZ** **TNS** die **1PL** about **ART** cause and **1PL** realise love **NZ** **COP** **INDF.ADV**

"Christ dying for us makes us understand what love is like." (1 Jn 3:16)

The article *lā*<sup>+/</sup> has its usual function with *sī'am*-relative clauses:

*M̃ mí' mán nà nīŋ sī'am.*

**1SG** know **1SG:NZ** IRR do **INDF.ADV**.

"I know what to do."

*M̃ mí' mán nà nīŋ sī'am lā.*

**1SG** know **1SG:NZ** IRR do **INDF.ADV** **ART**.

"I know what I'm to do" (WK: "You explained the plan earlier; this is my reply when you ask if I remember it")

In the 1976 NT almost all relative clauses with *sī'am* and past tense marking have *lā*<sup>+/</sup>; 75% lacking *lā*<sup>+/</sup> have irrealis mood. Cf the two standing expressions





*Bà nìṅ ́n yèlú\_bā sī'am lā.*

**3PL** do **3AN:NZ** tell **3PL.OB INDF.ADV ART**.

"They did as he'd told them."

Like other AdvPs *sī'am*-relative clauses can be verb subjects:

*Man nonṅi ya si'em la ane bedego.*

*Mán nòṅlú\_yā sī'am lā á nē bédugū.*

**1SG:NZ** love **2PL.OB INDF.ADV ART COP FOC** much.

"How much I love you, is a lot." (2 Cor 7:3, 1976)

*Sī'am*-relative clauses occur often as objects of *wōv* "like", *wēn*<sup>na/</sup> "resemble"

*Ò zòt wōv búṅù\_ ø zòt sī'am lā.*

**3AN** run:IPFV like donkey:SG **NZ** run:IPFV **INDF.ADV ART**

"He runs like a donkey (runs.)"

*...ka ya na ke ka nidib dɔl man wov ziingba'adibi gban'ad zimi si'em la.*

*...kà yà ná ké kà nīdɪb dɔl mān wōv zīīṅ-gbāñ'adìb\_ø*

...and **3PL IRR** cause and person:PL follow **1SG.CNTR** like fish-catcher:PL **NZ**

*gbāñ'ad zīmí sī'am lā.*

catch:IPFV fish:PL **INDF.ADV ART**

"... you will make people follow me like fishermen catch fish." (Mt 4:19)

*Hālí (là'am) nē* "although", alongside its use with absolute clauses [28.1.2](#) can take a *sī'am*-relative clause in the sense "despite how...":

*hali ne man daa sɔbi tisi ya si'em la*

*hālí nē mán dāa sōbɪ\_ø tísì\_yā sī'am lā*

even with **1SG:NZ TNS** write **CAT** give **2PL.OB INDF.ADV ART**

"despite how I wrote to you" (2 Cor 7:12)

Indefinite pronouns as relatives may be omitted before ordinal expressions:

*ka fun gban'e ziiṅ si'a yiiga la, fun ya'am o nɔɔr ...*

*kà fún gbāñ'e zīīṅ-sí'a yīīgá lā, fūn yá'àm ò nōɔr ...*

and **2SG:NZ** catch fish-**INDF.INAN** firstly **ART**, **2SG.CNTR** open:IMP **3AN** mouth:SG

"and the first fish you catch, open its mouth..."(Mt 17:27)

but *Paul n sob gbaun yiiga daan n tis Korint dim la nwa.*

*Paul ñ sōb gbáun yīgá dāan n tís Korint díṃ lā\_∅ ñwá.*

Paul **NZ** write letter:**SG** firstly owner:**SG CAT** give Corinth one.**PL ART CAT** this.

"This is **the first letter** which Paul wrote to the Corinthians." (NT heading)

Perhaps parallel, but with the deictic *ñwà*<sup>+</sup> "this" instead of a determiner, is

*Zugsɔb yel ye, Hali ne man vve nwa...*

*Zūg-sób yél yē, Hālí nē mán vūḡ ñwá ...*

head-one:**SG** say that even with **1SG:NZ** be.alive this ...

"The Lord says: As I live .." (Rom 14:11)

### 28.2.3 Using relative pronouns

If the antecedent is the subject within a relative clause, or a premodifier of the subject, a relative pronoun must be used:

*bàni zàb nà'ab lā*

"**those** who fought the chief"

**REL.PL** fight chief:**SG ART**

*M ñyé dáy-kàni zàb nà'ab lā.*

**1SG** see man-**REL.SG** fight chief:**SG ART**

"I saw **the man who** fought the chief."

*nimbane yuda sɔb Pɛbil la gbaunɔn line an nyɔvupaal dim gbaun la*

*nīn-báni yūdá sōb Pē'-bíl lā gbáun̄-n línì*

person-**REL.PL** name:**PL** write Lamb:**SG ART** book:**SG-LOC REL.INAN**

*àñ ñyó-vū-páal díṃ gbáun lā*

**COP** breath-alive-new:**SG** individual.**PL** book:**SG ART**

"**those whose** names are written in the Lamb's book of new life" (Rev 21:27)

A relative pronoun can also relativise a direct or indirect object, a complement or adjunct, or an antecedent extracted from a prepositional phrase or from a subordinate clause. The antecedent is preposed with *kà* and a resumptive pronoun is placed in the corresponding gap within the relative clause if it has been extracted from a phrase or clause, or is an indirect object. Occasionally there is a resumptive pronoun corresponding to a *human* direct object. There is no focus or foregrounding sense with *kà*-preposing in relative clauses; *kà*-preposing in subordinate clauses is seen in only this construction.

*Gbauŋ kane ka Jerusalem kpeenmnam daa sob la nwa.*

*Gbàuy-kàni kà Jerusalem kpéěñm-nàm dāa sōb lā\_∅ ñwá.*

Letter-**REL.SG** and Jerusalem elder-**PL TNS** write **ART CAT** this.

"This is the letter that the elders of Jerusalem wrote."

(heading, Acts 15:23, 1996)

*nà'-kàn kà dāy lā záb lā*

chief-**REL.SG** and man:**SG ART** fight **ART**

"the chief whom the man fought"

*bàn kà nà'ab lā záb lā* "those whom the chief fought."

**REL.PL** and chief:**SG ART** fight **ART**

*m antu'a line [1996 lin] ka ba mōr na*

*m̄ àntù'a lìnì kà bà mōr nā*

**1SG** case **REL.INAN** and **3PL** have hither

"the charge they are bringing against me" (Acts 25:11)

*yēltōōd ayōpōē bane ka maliaknama ayōpōē mōr la*

*yēl-tōōd àyōpōē bānì kà màljāk-námá\_ àyōpōē mōr lā*

matter-bitter:**PL NUM:seven REL.PL** and angel-**PL NUM:seven** have **ART**

"the seven plagues which the seven angels have" (Rev 15:8)

*sān-kán kà nà'ab lā kpí lā*

time-**REL.SG** and chief:**SG ART** die **ART**

"at the time the chief died"

*nij Kane [1996 nijkan] ka ba gban'e o la*

*nīn-kānì kà bà gbáñ'·o\_∅ lā*

person-**REL.SG** and **3PL** seize **3AN.OB ART**

"a person **whom** they have seized" (Acts 25:16) (human VP object)

*Onē ka ba tis o ka li zu'oe, ba mē mōr pūten'er ye o na lēbis line zu'oe.*

*Ònì kà bà tís·ò\_∅ kà lì zú'e, bà mē mōr*

**REL.AN** and **3PL** give **3AN.OB** and **3INAN** become.much, **3PL** also have

*pú-tēñ'er yé ò nà lēbis línì zù'e.*

inside-mind:**SG** that **3AN IRR** return **REL.INAN** become.much.

"**Whom** they have given much **to**, they expect he will return much." (Lk 12:48)

*Búraa sǒ dāa bě ànīa, ǒn kà mǎn néǒn dāa túm lā.*

*Bōrǎ-sǒ' dāa bé ànínā, ǎn kà mǎn nē ǎn dāa túm lā.*

Man-INDF.AN TNS EXIST ADV:there, REL.AN and 1SG with 3AN TNS work:IPFV ART  
 "There was a man there **whom** I used to work **with**." ILK

*ninkanε ka Na'ab Aretus ke ka o sǔ'oe Damaskus la*

*nīn-kání kà nà'ab Aretus ké kà ò sǔ'e Damaskus lā*

person-REL.SG and king:SG Aretus cause and 3AN own Damascus ART

"the person **whom** King Aretus had caused to possess Damascus" (2 Cor 11:32)

*nimbane ka ya ten'es ye ba anε tuongatib la*

*nīn-bání kà yà tēñ'es yé bà à nē túen-gātíb lā*

person-REL.PL and 2PL think that 3PL COP FOC ahead-passer:PL ART

"those **whom** you consider to be leaders" (Gal 2:6)

*linε [1996 lin] ka Kristo bǔǔd ye ti pian' la*

*línɿ kà Kristo bǔǔd yé tì pǎñ' lā*

REL.INAN and Christ want that 1PL speak ART

"**what** Christ wishes us to say" (2 Cor 12:19)

If the antecedent is a predeterminer in an NP which is not the subject, that entire NP is *kà*-preposed, but obviously no resumptive pronoun is needed:

*Samaritan nid (on buudi ka Jew dim kis)*

*Samaritan níd, ǎn būudí kà Jew dím kīs*

Samaritan person:SG REL.AN tribe:SG and Jew individual.PL hate

"a Samaritan, **whose** tribe the Jews hate" (Lk 10:33, 1996)

*bikane [1996 biig kan] pǔǔg ka o mǔr la*

*bì-kánɿ pǔǔg kà ò mǔr lā*

child-REL.SG belly:SG and 3AN have ART

"the child **which** she is pregnant with" (Mt 1:20)

("child whose pregnancy she has")

In cases where either would be permissible, constructions with non-initial antecedents other than *sīʔəl*<sup>a</sup> and *sīʔəm*<sup>m</sup> are less common than those with relative pronouns and *kà*, but the non-initial type is usual when the clause corresponds to an English "subordinate interrogative clause", and is then perhaps required if the pronoun is not the subject within its clause. However, antecedents *compounded* with indefinite pronouns need not be indefinite-specific, and the meanings can be parallel to those of clauses with relative pronouns [28.2.2](#).

Relative clauses with locative reference using relative pronouns, like those using indefinite pronouns, do not take the locative *nī*<sup>+/</sup> [17.3](#):

*yikan ka mam Paul be la yidaan*

*yī-kán kà mām Paul bé lā yí-dáàn*

house-REL.SG and 1SG.CNTR Paul EXIST ART house-owner:SG

"the owner of the house where I, Paul, am" (Rom 16:23, 1976)

#### 28.2.4 Uncompounded antecedents

Written materials frequently show a human-reference NP followed by a relative clause introduced by *onε* or *banε*. Before *onε*, the preceding word is never a cb, and with human-reference heads (as elsewhere [16.8](#) [16.11.1.5](#)) the construction is **appositional**. Unequivocally appositional cases are usually non-restrictive:

*o sid onε da be ne o la*

*ò sīd ónì dà bè né ò lā*

3AN husband:SG REL.AN TNS EXIST with 3AN ART

"her husband, who was there with her" (Genesis 3:6)

In KB, appositional relative *onε* most often occurs after proper names.

Relative pronouns cannot be compounded with coordinate structures, demonstratives, quantifiers [16.3.2](#) or locatives; such cases are not confined to human-reference, and are simply parallel in usage to compounded constructions:

***Mam Paul ne Timoti banε an Yesu Kristo tumtumnib la sɔbid gbaun kaŋa***

*Mām Paul nē Timoti bánì àñ Yesu Kristo túm-tūmníb*

1SG.CNTR Paul with Timothy REL.PL COP Jesus Christ work-worker:PL

*lā sɔbɪd gbáʊŋ-kàŋā...*

ART write:IPFV letter-DEM.DEI.SG ...

"I, Paul, and Timothy, servants of Jesus Christ, are writing this letter." (Phil 1:1)

*sanlima laas ayɔpɔi linε ka Wina'am onε be saŋa linε ka' ben la sunpεen*

*pε'eli ba la*

*sālma láàs àyɔpɔɛ línì kà Wínà'am ónì bè*

gold vessel:PL NUM:seven REL.INAN and God REL.AN EXIST

*sāŋá lìni kā' bēn lā súñ-péèn pé'elì\_bā lā*

time:SG REL.INAN NEG.HAVE end:SG ART heart-whiteness fill 3PL.OB ART

"the seven gold bowls filled with the anger of God who exists for time without end" (Rev 15:7)

*kokor kaŋa lini yi arazana ni la na*

*kùkõr-káŋā línì yí àrazánà ní lā nā*

voice-DEM.DEI.SG REL.INAN emerge sky:SG LOC ART hither

"this voice which came from heaven" (2 Pet 1:18, 1976)

*nimbane yuda sob Pēbil la gbaunon line an nyovupaal dim gbaun la*

*nīn-bánì yūdā sōb PĒ'-bíl lā gbáunō-n línì*

person-REL.PL name:PL write Lamb:SG ART book:SG-LOC REL.INAN

*añ ñyó-vū-páàl dím gbáun lā*

COP breath-alive-new:SG individual.PL book:SG ART

"those whose names are written in the Lamb's book of those with new life"  
(Rev 21:27)

*Ka Yesu keŋ Nazaret, ban da ugus o teŋ si'a la.*

*Kà Yesu kēŋ Nazaret bán dà ūgus-ó\_ø tēŋ-sī'a lā.*

And Jesus go Nazareth 3PL:NZ TNS raise 3AN.OB land-INDF.INAN ART.

"And Jesus went to Nazareth, where he was raised." (Lk 4:16)

### 28.2.5 The article with relative clauses

With relative pronouns other than *sī'am* the function of the **article** after a relative clause is similar to its usage elsewhere [16.5](#). Absence of the article after a relative clause with a relative pronoun does duty for what with nouns is expressed by indefinite postdeterminer pronouns.

*Ōn sōb á nē dáŷ-kàni sà kē nā sú'ès lā.*

3AN.CNTR individual.SG COP FOC man-REL.SG TNS come hither yesterday ART

"That one's the man who came yesterday."

*Dàp-bàni bòod yé bà ñyéé\_f ké nā.*

Man-REL.PL want that 3PL see 2SG.OB come hither

"Some men who want to see you have come."

*onε du'a nε Siig*

"someone born of the Spirit" (Jn 3:8)

*òni dŷ'à nē Sīg*

REL.AN bear with spirit:SG

*onε tumi m la na*

"he who sent me hither" (Mk 9:37)

*òni tùmì\_m lā nā*

(òni = REL.AN; contrast òni 3SG:NZ)

REL.AN send 1SG.OB ART hither

## 29 Negation

### 29.1 Negation of clauses

Negation of clauses is achieved by using a negative particle in the VPred [19.5](#) along with a clause-final negative prosodic clitic [8.1](#).

*Ti pu bɔɔd ye dau kaŋa aan ti na'aba.*

*Tì pō bɔ̀̀d yē dáɣ-kàŋā áañ tì nà'abā +∅.*

**1PL NEG.IND** want that man-**DEM.DEI.SG COP 1PL king:SG NEG.**

"We don't want this man to be our king." (Lk 19:14)

*Pō* negates the indicative mood, as above; imperative is negated with *dā*:

*Dìm nē Wīn, dā tú'às nē Wīnné +∅.*

**Eat:IMP** with God:**SG, NEG.IMP** talk with God:**SG NEG.**

"Eat with God, don't talk with God."

The negative particle *ku* replaces the positive irrealis mood marker *nà*:

*Amaa man pian'ad la ku maligim gaade.*

*Àmáa m̀ pjàñ'ad lā kú mālɣim gáadē +∅.*

**But 1SG speech ART NEG.IRR** again pass **NEG.**

"But my words will not pass away. (Mt 24:35)

#### 29.1.1 Negative verbs

There are four negative verbs, functionally equivalent to negative particle + verb: they are followed by a clause-final negative prosodic clitic, and they do not carry the independency-marking tone overlay [19.6.1.1](#).

**Mit** (always imperative) "see that it doesn't happen that ..." is construed with a following subordinate *kà*-clause [26.1](#). In address to more than one person it may or may not have the usual postposed 2pl subject enclitic <sup>ya</sup>: *mitī*.

*Mit ka ya maal ya tuumsuma nidib tuon ye ba gosi yaa.*

*Mìt kà yà máàl yà tùum-sùma nīdīb túòn*

**NEG.LET.IMP** and **2PL** do **2PL deed-good:PL person:PL** before

*yé bà gōsì\_ yáa +∅.*

that **3PL** look.at **2PL.OB NEG.**

"See that you don't do your good deeds in front of people so they'll look at you." (Mt 6:1, 1976)



In KB, this word appears throughout as invariant *mid*, without a following negative clitic: *Mid ka ya maali ya tuum suma nidib tuon ye ba gɔs.*

*Mit̃* also appears with a NP object in the sense "beware of ..."; it is not followed by the negative prosodic clitic in that case:

*Miti ziri nodi'esidib bane kene ya sa'an na la.*

*Mit̃* ∅ *zírí nò-dí'əsìdɪb* *báni kēnní* *yà sà'an nā lā.*

Beware **2PL.SUB** lie mouth-receiver:**PL REL.PL** come:**IPFV 2PL** among hither **ART**.

"Beware of false prophets who come among you." (Mt 7:15, 1996)

*Zi'*+ "not know" normally replaces negative particle + *mī*:

*Bòŋ-bāñ'ad* *zī'* *yē tēŋ* *túllā* +∅.

Donkey-rider:**SG NEG.KNOW** that ground:**SG** be.hot **NEG**.

"He who rides a donkey does not know the ground is hot." (Proverb)

Instances of *mī* with negative particles do occur:

*M biig Solomon anɛ dasaŋ , ka pu mi' wuv lin nar si'em.*

*M̃* *bīig* *Solomon á nē dá-sāŋ,* *kà pū mī'i*

**1SG** child:**SG** Solomon **FOC COP** young.man:**SG**, and **NEG.IND** know

*wūv lín nār sī'əmm* +∅.

how **3INAN:NZ** be.proper **INDF.ADV NEG**.

"My son Solomon is young, and does not know how things ought to be."

(1 Chronicles 22:5)

A clause-final LF *zi'isigɛ* appears in KB, NT (e.g. Lk 12:40); cf *kà'asigē* below.

*Kā'e*+ "not be, not have" appears as *kā'* in close connexion with a following word 8.5.3. It is the negative to both "be" verbs, *àɛŋ*<sup>a</sup> "be something/somehow" and *bè*+ "be somewhere, exist" and also to *mōr*<sup>a/</sup> "have." \**Pū bɛ* is not found, but *pū mōr* is quite common; *pū áɛŋ* is rare but can be found in contrastive contexts like

*Māni* ∅ *áñ du'átà àmáa fōn* *pū áñyā* +∅.

**1SG.CNTR CAT COP** doctor:**SG** but **2SG.CNTR NEG.IND COP** **NEG**.

"I'm a doctor, but you're not."

Examples:

*Dāy lā kā' dɔ́ɔgū-n lāa +∅.*

Man:SG ART NEG.BE room:SG-LOC ART NEG.

"The man is not in the room."

*Dāy lā kā' bīiga +∅.*

Man:SG ART NEG.HAVE child:SG NEG.

"The man hasn't got a child."

*Dāy lā kā' ná'abā +∅.* "The man isn't a chief."

Man:SG ART NEG.BE chief:SG NEG.

*Dāy lā kā'e +∅.* "The man isn't there."

Man:SG ART NEG.BE NEG.

*Dāy kā'ẹ́ dɔ́ɔgū-n lāa +∅.*

Man:SG NEG.BE room:SG-LOC ART NEG.

"There's no man in the room."

*Pụ'ā lā mór bīig àmáa dāy lā kā'e +∅.*

Woman:SG ART have child:SG but man:SG ART NEG.HAVE NEG.

"The woman has a child but the man hasn't."

**Kà'asigē** (LF always, as the word only appears clause finally) "not exist"

*Ò bīig ká'asigē +∅.* "She has no child."

3AN child NEG.EXIST NEG.

## 29.2 Negative raising

Negative raising occurs in a way generally analogous to negative raising in English. It appears in result clauses and in expressions of necessity and permission [26.1](#), but not in adnominal *kà*-clauses [26.2](#):

*Li pu nar ye fu di fu ba'abiig po'a Herodiase.*

*Lì pū nār yé fù dí fù bā'-bīg pụ'á Herodiase +∅.*

3INAN NEG.IND must that 2SG take 2SG father-child:SG wife:SG Herodias NEG.

"It's not right for you to marry your brother's wife Herodias." (Mt 14:4, 1996)

With purpose clauses, it occurs after *bòɔd*<sup>a</sup> "want", but not e.g. *yèl*<sup>ε</sup> "tell":

*Ti pu bɔɔd ye dau kaŋa aan ti na'aba.*

*Tì pō bɔ̀̀d yē dáu-kàŋā áaň tì nà'abā +∅.*

**1PL NEG.IND** want that man-**DEM.DEI.SG COP 1PL king:SG NEG.**

"We don't want this man to be our king." (Lk 19:14)

With content clauses, negative raising is found with some main verbs but not others, much as in English; thus it occurs following *tēñ'εs<sup>ε/</sup>* "think":

*Tiname sagidim aan o biis la, ti da ten'εs ye Wina'am bellim nweε bada banε ka ninsaal nɔk sanlima bεε anzurifa bεε kuga, ten'esi maal ne o nu'usε.*

*Tínámì\_∅ sādígím áaň\_ò bīis lā, tì dā tēñ'εs yē Wínà'am*

**1PL NZ** since **COP 3AN child:PL ART 1PL NEG.IMP** think that God

*béllím wēn nē bádà bànì kà nīn-sáàl nōk sālma*

existence resemble with idol:**PL REL.PL** and person-smooth:**SG** take gold

*bēε ānzúrifa bēε kūgá\_∅ tēñ'esi\_∅ máàl né ò nú'usē +∅.*

or silver or stone:**PL CAT** think **CAT** make with **3AN hand:PL NEG.**

"Since we are his children, we should not think that God's existence resembles idols which a human being thinks to make by hand using gold or silver or stone." (Acts 17:29)

It does not occur with *mī<sup>+</sup>* "know", *bàŋ<sup>ε</sup>* "realise":

*Bùŋ-bāň'ad zī' yē tēŋ túllā +∅.*

Donkey-rider:**SG NEG.KNOW** that ground:**SG** be.hot **NEG.**

"He who rides a donkey does not know the ground is hot."

*ka o lεε pu baŋ ye li anε onε.*

*kà ò léε pō báj yé lì à nē ōnε +∅.*

And **3AN** but **NEG.IND** realise that **3INAN COP FOC 3AN.CNTR NEG.**

"but she didn't realise it was him." (Jn 20:14)

It does not occur after existence verbs; so in constituent negation [29.4](#)

*Di len ka' fun yel si'el la zug, ka ti niŋ o yadda.*

*Lì lēm kā' fún yél sī'əl lā zúg kà*

**3INAN** again **NEG.BE 2SG:NZ** say **INDF.INAN ART** upon and

*tì níŋ\_ò\_∅ yáddáa +∅.*

**1PL** do **3AN.OB** assent **NEG.**

"It is no longer because of what you said that we believe in him." (Jn 4:42)

### 29.3 Position of the negative prosodic clitic

The negative prosodic clitic [8.1](#) normally appears at the end of the clause containing the negated verb, passing over all subordinate clauses:

*Ti pu bɔɔd ye dau kaŋa aan ti na'aba.*

*Tì pō bɔ̀ɔ̀d yē dáɣ-kàŋā áañ tì nà'abā +∅.*

**1PL NEG.IND** want that man-**DEM.DEI.SG COP** **1PL** king:**SG NEG**.

"We don't want this man to be our king." (Lk 19:14)

To exclude a subordinate clause from the scope of negation in a construction which induces negative raising [29.2](#), the negative prosodic clitic must be placed *before* it:

*Nidib be ka pu tum si'ela ye ba a popielim dim, ka kudun niŋ Wina'am  
one ke ka tuumbe'ed dim lieb popielim dim o tuon la yadda.*

*Nīdīb bē kà pō túm sī'ēla +∅ yé bà áñ*

person:**PL EXIST** and **NEG.IND** work:**IPFV INDF.INAN NEG** that **3PL COP**

*pù-pìəlīm dílm, kà kūdīm níŋ Wínà'am*

inside-whiteness individual.**PL** and ever do God

*ónì ké kà tùm-bē'ed dílm líàb*

**REL.AN** cause and work-bad:**PL** individual.**PL** become

*pù-pìəlīm dílm ò tūen lā yáddā.*

inside-whiteness individual.**PL** **3AN** before **ART** assent.

"There are people who haven't done anything that they become blessed, but have believed in the God who causes sinners to become blessed before him."  
(Rom 4:5, 1976)

*on nye ka Yesu pu pie o nu'use ka nyaan di la.*

*ón ñyē kà Yesu pō píe ò nú'usé +∅ kà ñyāan dí lā*

**3AN:NZ** see and Jesus **NEG.IND** wash **3AN** hand:**PL NEG** and then eat **ART**

"when he saw that Jesus didn't wash his hands before eating"

(Lk 11:38, 1996: KB *on nye ka Yesu pu pie o nu'us ka nyaan di la.*)

The negative clitic is dropped after *ñ*-clauses containing a negative unless they are themselves clause final in the main clause, and before the article *lā*<sup>+/</sup>:

*m bi'emnam banε pu bɔɔd ye m an na'abi su'oe ba la*

*m̀ bì'əm-nàm bánì pō bɔ̀ɔ̀d yē m̀ áñ ná'abì\_∅ sù'v\_bā lā*

**1SG** enemy-**PL REL.PL NEG.IND** want that **1SG COP** king:**SG CAT** own **3PL.OB ART**

"my enemies who do not want me to be king over them" (Lk 19:27)

Clauses with *yà'* "if" keep their own negative clitics:

*Ba ya'a pu niŋ si'ela, o pu'usim dɔɔg la na lieb zaalim.*

*Bà yá' pū níŋ sī'əla +∅, ò pù'usim dɔ̀̀g lā*

**3PL if NEG.IND do INDF.INAN NEG 3AN worship house:SG ART**

*ná līəb zāalím.*

**IRR become empty:ABSTR.**

"If they don't do anything, her temple will become of no account." (Acts 19:27)

Apparent exceptions in the NT probably all involve *yà'*-clauses ending in words with final vowels or final *-m*, and do in fact end with a negative clitic.

With clauses with two VPs coordinated with *bēε/kūυ* "or", if the first VP is negated with the scope extending over both VPs, the negative clitic ends the whole clause and may optionally precede the *bēε/kūυ* also.

## 29.4 Constituent negation

Clefting is the usual way of achieving constituent negation, using the patterns

*Lì kā' X kà ... /Lì kā' X n ...* "It's not X that ..."

*X ká'ε kà ... /X ká'ε n ...* "There's no X that ..."

*Sɔ' kae na nyanji dɔl zugdaannam ayi'...*

*Sɔ' ká'e\_∅ ná ñyāŋi\_∅ dɔl zūg-dáàn-nàm àyí ...*

**INDF.AN NEG.BE CAT IRR prevail CAT follow head-owner:PL NUM:two ...**

"Nobody can serve two masters." (Mt 6:24)

*Sogia so' kae' n tum ka yood o meŋa.*

*Sóǵjà-sɔ' ká'e n túm kà yɔ̀ɔd ò mēŋá +∅.*

**Soldier-INDF.AN NEG.BE CAT work:IPFV and pay:IPFV 3AN self NEG.**

"No soldier works and pays for himself." (1 Cor 9:7, 1976)

*Lì kā' mān bīg kà fù ñwé'ε +∅.*

**3INAN NEG.BE 1SG.CNTR child:SG and 2SG beat NEG.**

"It's not my child that you've beaten."

The particle *báa* (Hausa *bâa* "not exist") appears in *báa bī'əlá*<sup>+</sup> "not at all", *báa yīnní*<sup>+</sup> "not one", which are both used with a negative VPred. *Báa yīnní*<sup>+</sup> can be used as a NP head, or as a postdependent.

*Da tumi si'el baa bi'elaa.*

*Dā túmī\_∅ sī'əl bāa bī'elāa +∅.*

**NEG.IMP** work **2PL.SUB INDF.INAN** at.all **NEG.**

"Do no work at all." (Leviticus 23:31)

*Amaa ba pu nyaŋi nye line tu'al baa yinne.*

*Àmáa bà pū ñyāŋi\_∅ ñyē línì tò'al [+∅] bāa yīnní.*

But **3PL NEG.IND** prevail **CAT** find **REL.INAN** condemn [**NEG**] not one.

"But they couldn't find anything condemning, not one thing." (Mt 26:60)

*Ka nid baa yinne pu yel ye on mɔr si'el la, one su'oe lii.*

*Kà nīd bāa yīnní pū yél yē ón mɔr*

and person:**SG** not one **NEG.IND** say that **3AN:NZ** have

*sī'əl lā, ōni\_∅ sū'u\_lí +∅.*

**INDF.INAN ART 3AN.CNTR CAT OWN 3INAN.OB NEG.**

"Not one person said that what he had, he owned." (Acts 4:32)

*Fu du'adib baa yinne kae ka o yu'ur buon alaa.*

*Fù dū'adib bāa yīnní kā'é kà ò yū'ur búèn àlāa +∅.*

**2SG** relative:**PL** not one **NEG.BE** and **3AN** name:**SG** call:**IPFV ADV:thus NEG.**

"Not one of your relatives is named thus." (Lk 1:61)

Relative clauses can be used for constituent negation:

*Da mɔr nɔɔr yinne ne banε ka' yadda niŋidib la ye ya niŋ si'ela.*

*Dā mɔr nɔɔr yīnní nē bání ká' yáddā-niŋidib lā*

**NEG.IMP** have mouth:**SG** one with **REL.PL NEG.BE** assent-doer:**PL ART**

*yé yà níŋ sī'ela +∅.*

that **2PL** do **INDF.INAN NEG.**

"Do not agree with those who are not believers to do anything." (2 Cor 6:14)

## 30 Information packaging

### 30.1 Focus

The term "focus" is used significantly differently in different grammars, and cross-linguistically it is not clear that there is even a fundamental common core to the concept. Apart from the theoretical challenges, the matter is difficult to investigate in practical terms. I had little acquaintance with these issues when I had access to Kusaal speakers, and it is not easy to remedy this retrospectively from my limited data. Much of this section is therefore very tentative.

As a starting point, I adopt the formulation from Lambrecht 1994: "[Focus] is the UNPREDICTABLE or pragmatically NON-RECOVERABLE element in an utterance. The focus is what makes the utterance into an assertion."

A distinction is made between **ordinary** and **contrastive focus**.

Separate from the notion of focus is the concept of **foregrounding**, the usual function of it-clefting in English; as pointed out in CGEL p1424, foregrounded elements in English need not be focussed.

Two syntactic devices in Kusaal relate to focus: subject focussing with catenator-*n*, and the use of the particle *nē*<sup>+/</sup>. Clefting constructions with the clause linker *kà* and corresponding ellipted types relate to foregrounding rather than focus, or are motivated simply by ordering constraints.

Main clauses without any special syntactic marking of focus have ordinary focus on the predicate by default.

The usage of the **article** *lā*<sup>+/</sup> [16.5](#) interacts with the focus mechanisms described below.

#### 30.1.1 Subject focus with catenator-*n*

*N*-clefting uses a VP-chaining construction in the sense of a relative clause with the subject as antecedent, after a main clause with *Lì à nē* "It is ..." The sense resembles that of the formally analogous "it-clefting" of English, *foregrounding* the clefted element and backgrounding the rest:

*Ka dau mε pu sv'oe o mεη ningbinaa. Li anε o pu'a sv'oe li.*

*Kà dāy mé pū sú'v ò mēη nín-gbīnáa +∅.*

And man:SG also NEG.IND own 3AN self body-skin:PL NEG.

*Lì á né ò pɥ'ā\_∅ sú'v\_lī.*

3INAN COP FOC 3AN wife CAT own 3INAN.OB.

"And a husband, too, does not own his own body. It is his wife who owns it."

(1 Cor 7:4)

Like it-clefting in English (CGEL p1416) the construction has an implicature of exhaustiveness and exclusiveness: it is the wife (only), not the husband, who is the owner.

The main clause may instead have a non-verbal predicator [22](#):

*Anɔ'ɔn nwaá yísid nídib tɔumbɛ'edi basida?*

Ànɔ'ɔn\_ø ñwáa\_ø yísid nídib tɔùm-bɛ'edi\_ø básidà +ø?

Who CAT this CAT expel:IPFV person:PL deed-bad:PL CAT throw.out:IPFV CQ?

"Who is this who drives people's sins out?" (Lk 7:49)

*N*-focus presumably arose from *n*-clefting by ellipsis of everything but the NP in the main clause. The focussed element stands first, with the rest of the clause introduced by *n*, phonologically identical to the VP catenator [8.2.2.2](#). The clause lacks independency marking but has independent tense marking, unlike a non-initial VP. (Compare tense marking in ellipsed indirect commands [19.3.1](#).)

**The meaning of this construction is *focus* rather than foregrounding:**

*Wáafò\_ø dúm.ò\_ø.* "A snake bit him." WK

Snake:SG CAT bite 3AN.OB.

would be a felicitous reply to "What's happened?" as well as "Did a dog bite him?"

The focus meaning presumably arose to fill the gap caused by the fact that a clause subject cannot be focussed with *nɛ*<sup>+/</sup> [30.1.2](#).

Focus rather than foregrounding is also demonstrated by the fact that **interrogative pronouns as subjects are always *n*-focussed**. As a subject *ànɔ'ɔn* "who" thus always appears as *ànɔ'ɔn n* [anɔ:nɪ] (always NT *ano'one*, KB *anɔ'ɔnɛ*.)

Ànɔ'ɔnì\_ø kábúridà +ø?

Who CAT ask.for.entry:IPFV CQ?

"Who is asking permission to enter?"

Clauses containing interrogative pronouns may not contain focus-*nɛ*<sup>+/</sup>, an incompatibility which seems most readily explained by analysing interrogative pronouns as intrinsically focussed, though this is only syntactically manifested when they are subjects.

Furthermore, the focus particle *nɛ*<sup>+/</sup> in all its rôles is excluded from clauses which are *n*-focussed, with the corresponding VPred temporal distinctions present but unmarked, as in other cases of formal exclusion of the marker [30.1.2.1.1](#):

Ì zūgv\_ø zábìd. "My head is hurting."

1SG head CAT fight:IPFV. (Reply to "Where is the pain?")



cf *Ṁ zūg lā pú'alim nē.* "My head is hurting."  
**1SG head ART damage:IPFV FOC.** (Reply to "What's the matter with you?")

Accordingly, the ellipted construction with catenator-*n* after the subject represents focus, parallel to the use of *nē* with other clause constituents.

### 30.1.2 VP constituent and VP focus with *nē*<sup>+/</sup>

As a constituent-focus particle *nē*<sup>+/</sup> has two distinct rôles, readily distinguishable by position: preceding a VP-constituent, *nē*<sup>+/</sup> focusses that constituent, while VP-final *nē*<sup>+/</sup> focusses the entire VP contrastively.

The focus particle is homophonous with the preposition *nē* "with, and" and with the empty particle *nē* which follows objects of comparisons when they do not have the article [18.1](#); on distinguishing constituent-focus *nē*<sup>+/</sup> from the preposition see [20.4](#).

Greater difficulty arises over the distinction from the *nē*<sup>+/</sup> which is part of the VPred [19.2](#)<sup>10</sup>, and which actually represents a specialised use of the same particle for *temporal* focus. The temporal marker is subject to the same formal constraints on appearance as the constituent focus marker, and *nē*<sup>+/</sup> cannot appear twice in a clause in both constituent and temporal focus senses. The *temporal* sense normally prevails wherever semantically and formally possible; otherwise, the particle is interpreted as constituent focus. When temporal *nē*<sup>+/</sup> is excluded only by formal constraints, the different VPred meanings still appear but are unmarked.

#### 30.1.2.1 Restrictions

##### 30.1.2.1.1 Where *nē*<sup>+/</sup> cannot appear at all

*Nē*<sup>+/</sup> cannot appear in either constituent focus or temporal sense

- (a) if the subject has *n*-focus
- (b) in subordinate clauses other than content clauses
- (c) in content questions

***Nē*<sup>+/</sup> may only occur *once* in a clause;** this not necessarily in the *first* VP of a VP chain:

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10) In Dagbani, two different particles, *mi* and *la*, correspond to Kusaal *nē*<sup>+/</sup>, but they are in complementary distribution with no meaning difference to shed light on *nē*<sup>+/</sup>; together, they show much the same range of senses. Mampruli *ni* shares the initial *n*- of *nē*<sup>+/</sup>, but in the related languages the corresponding particles mostly have *m*-: Dagbani *mi*, Mooré *me*, Nabit and Farefare *mε*; even Toende Kusaal has *me*.

*Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Sun.*

*Fù pū má' n tìs nīn-sáalā +∅, àmáa fù mà'*

**2SG NEG.IND** lie **CAT** give person-smooth:**SG NEG** but **2SG** lie

*n tís nē Wínà'am Sí-sùŋ..*

**CAT** give **FOC** God Spirit-good:**SG**.

"You have not lied to a human being, but you have lied to the Holy Spirit."

(Acts 5:4, 1996)

When  $n\bar{e}^{+/-}$  marks constituent focus, VPred temporal distinctions are unmarked. This constraint reveals that temporal  $n\bar{e}^{+/-}$  is a specialised use of focus- $n\bar{e}^{+/-}$ .

Examples of exclusion of  $n\bar{e}^{+/-}$ :

Exclusion with *N*-focussing of the subject:

*M̄ zūgv\_∅ zábìd.*

**1SG** head **CAT** fight:**IPFV**.

"My head is hurting/hurts." (No temporal  $n\bar{e}^{+/-}$ )

Reply to "Where is the pain?"

*Àn'òni\_∅ dít sá'abò +∅?*

Who **CAT** eat:**IPFV** porridge **CQ?**

"Who eats/is eating millet porridge?" (No temporal  $n\bar{e}^{+/-}$ )

Exclusion of  $n\bar{e}^{+/-}$  in subordinate clauses:

In *h*-clauses:

*Ò dāa á nē bīg.*

**3AN TNS COP FOC** child:**SG**.

"She was a child."

but *ón àñ bīg lā zúg* "because she's a child"

**3AN:NZ COP** child:**SG ART** upon

*M̄ yí nē Bók.*

**1SG** emerge **FOC** Bawku.

"I come from Bawku." SB

and *Yadda nijir yitne labaar la wummug ni.*

*Yàddā-níjìr yít nē lābāar lā wúmmùg ní.*

Assent-doing emerge:**IPFV FOC** news **ART** hearing **LOC**.

"Faith comes from hearing the news." (Rom 10:17)

but *Meeri one yi Magdala* "Mary who came from Magdala"

*Meeri ónì yī Magdala* (Mk 16:9, 1996)

Mary **REL.AN** emerge Magdala

In adnominal *kà*-clauses:

*M̄ dāa pū ñyē dāy lá kà ò áñ ná'abā +∅.*

**1SG TNS NEG.IND** see man:**SG ART** and **3AN COP** chief:**SG NEG**.

"I didn't see the man as a chief." not \**kà ò á nē ná'abā*.

Contrast a main clause introduced by *kà* [25.3.2](#), with temporal *nē*<sup>+/</sup>:

*Ka ba due keŋ. Ka ban ken la, Jesus gbisid ne.*

*Kà bà dūe\_∅ kēŋ. Kà bán kēn lā, Jesus gbīsíd nē.*

And **3PL** arise **CAT** go. And **3PL:NZ** go:**IMPF ART**, Jesus sleep:**IPFV FOC**.

"So they started out. As they were travelling, Jesus was sleeping."

(Lk 8:22-23, 1976)

Exclusion of *nē*<sup>+/</sup> in content questions: temporal *nē*<sup>+/</sup>:

*Bó kà fù kúesida +∅?* "What are you selling/do you sell?"

What and **2SG** sell:**IPFV CQ?**

*Fù kúesid b́ +∅?* "What are you selling/do you sell?"

**2SG** sell:**IPFV** what **CQ?**

*Bó kà fù kúmmà +∅?* "Why are you crying/do you cry?"

What and **2SG** cry:**IPFV CQ?**

*Fù níŋìd b́ +∅?* "What are you doing/do you do?"

**2SG** do:**IPFV** what **CQ?**

*Fù wá'e yáa +∅?* "Where are you going (just now)?"

**2SG** go where **CQ?**

Exclusion of *nē*<sup>+/</sup> in content questions: constituent-focus *nē*<sup>+/</sup>:

*Mām áñ b́ +∅?* "What am I?"

**1SG.CNTR COP** what **CQ?**

*Fù áañ\_ àn'ónè +∅?* "Who are you?"

**2SG COP** who **CQ?**

*Fù b́óòd nē b́ +∅?* "What do you want it with?"

**2SG** want with what **CQ?** *Nē* must be interpreted as preposition (WK)

Focussing a constituent, thereby leaving temporal focus distinctions unmarked because  $n\bar{e}^{+/-}$  cannot be used twice:

$\dot{M}$  pú'vsìdī f nē. "I'm greeting you."  
1SG greet:IPFV 2SG.OB FOC.

$\dot{M}$  pú'vsìd nē ná'àb lā. "I'm greeting the chief."  
1SG greet:IPFV FOC chief:SG ART.

Ò kùəsìdī bá nē. "She's selling them."  
3AN sell:IPFV 3PL.OB FOC.

but Ò kùəsìd sūmma lā nē.  
3AN sell:IPFV groundnut:PL ART FOC.  
"She *sells/is selling* the groundnuts." ("They're not free.")

$\dot{M}$  pú'vsìd ná'àb lā nē. "I greet/am greeting the chief."  
1SG greet:IPFV chief:SG ART FOC.

### 30.1.2.1.2 Where $n\bar{e}^{+/-}$ cannot be temporal

There is potential ambiguity between  $n\bar{e}^{+/-}$  as marking constituent focus or as temporal. The default interpretation is temporal, but this may be ruled out by the position of the particle, by incompatibility of mood or polarity, by passive use of the verb, by impossibility of a resultative reading of a perfective, by the absence of an explicit time marker with stative verbs, or by the fact that the subject has generic status.

Temporal use of  $n\bar{e}^{+/-}$  requires that it follow the verb word directly, with at most liaison enclitics intervening; if not, the relevant VPred distinctions are unmarked:

Ò kùəsìdī bá nē. "She's selling them." (Temporal)  
3AN sell:IPFV 3PL.OB FOC.

but Ò kùəsìd sūmma lā nē.  
3AN sell:IPFV groundnut:PL ART FOC.  
"She *sells/is selling* the groundnuts." (VP focussed: "They're not free.")

$N\bar{e}^{+/-}$  may only be used temporally if the VPred has positive polarity; if not, the relevant VPred distinctions are again unmarked:

Ò zàbɪd. "He fights."  
**3AN fight:IPFV.**

Ò zàbɪd nĕ̄. "He's fighting."  
**3AN fight:IPFV FOC.**

but Ò p̄ zábɪdā +∅. "He's not fighting"/"He doesn't fight."  
**3AN NEG.IND fight:IPFV NEG.**

The predicator must have indicative mood for temporal use of *nĕ̄*<sup>+/</sup>. It is not clear if the relevant distinctions actually occur in the irrealis.

In direct commands *nĕ̄*<sup>+/</sup> may occur only as the VP-final marker of contrastive focus on the entire VP [30.1.2.3](#). It cannot be temporal or focus a constituent.

Ò gòsɪd nĕ̄. "She's looking."  
**3AN look:IPFV FOC.**

Gòsɪm kpĕ̄. "Look here!"  
 Look:**IMP** here.

but Gòsɪm nĕ̄. "Look!" ("Don't touch." WK)  
 Look:**IMP FOC.**

Ò à nĕ̄ bāāńlím. "She is quiet."  
**3AN COP FOC quiet:ABSTR.**

but Àñ bāāńlím! "Be quiet!"  
**COP quiet:ABSTR.**

However, a following *àlá* "thus" imposes a continuous/progressive imperfective sense on the verb, in a similar sense to *nĕ̄*<sup>+/</sup> with a dynamic imperfective [19.4](#).

Passive constructions [20.1.1](#) may only express punctual events, and are thus limited to perfective aspect and to dynamic imperfective in the propensity/habitual sense. Accordingly, the particle *nĕ̄*<sup>+/</sup> can never be interpreted temporally with passives.

(All interpretations WK):

Dāká lā záníl nĕ̄. "The box is portable by hand."  
 Box:**SG ART** carry.in.hands **FOC.** not "The box is being carried."

*Dāká lā zîd nē.* "The box is for *carrying on the head*."  
 Box:SG ART carry.on.head FOC. ("Not in the hands.")

*Dāam lā núùd.* "The beer gets drunk."  
 Beer ART drink:IPFV.

*Dāam núùd zīná.* "Beer gets drunk today."  
 Beer drink:IPFV today.

but *Dāam lā núùd nē.* Only "The beer is for drinking."  
 Beer ART drink:IPFV FOC. ("Not for throwing away.")  
 not "The beer is being drunk."

\**Dāam núùd nē.* rejected by WK altogether

Contrast the intransitive use of patientive ambitransitive verbs expressing changes of state [20.1](#):

*Ì yóòd nē kùlìŋ lā.* "I'm closing the door."  
 1SG close:IPFV FOC door:SG ART.

*Kùlìŋ lā yóòd nē.* "The door is closing."  
 Door:SG ART close:IPFV FOC.

*Ò tòlìgìd nē.* "He's heating it up."  
 3AN heat.up:IPFV FOC.

*Lì tòlìgìd nē.* "It's heating up."  
 3INAN heat.up:IPFV FOC.

*Lì mà'ad nē.* "It is getting cool" (ipfv of *mā'e<sup>+</sup>* "get cool")  
 3INAN get.cool:IPFV FOC.

but *Lì mà'an nē.* "It gets *cooled*." (contrastive focus on the VP)  
 3INAN cool:IPFV FOC. (ipfv of the causative *mā'al<sup>E/</sup>* "cool" as passive)

A perfective form can only be interpreted as resultative if it expresses a change of state in the subject.

*Ì dá' búŋ.* "I've bought a donkey."  
 1SG buy donkey:SG. ("What have you done?")

*M dá' nē búŋ.* "I've bought a *donkey*."  
**1SG** buy **FOC** donkey:**SG**. ("What have you bought?")

*M pū dá' bùŋā* + $\emptyset$ . "I haven't bought a donkey."  
**1SG NEG.IND** buy donkey:**SG NEG**.

*M pū dá' nē búŋā* + $\emptyset$ .  
**1SG NEG.IND** buy **FOC** donkey:**SG NEG**.  
 "I haven't bought a *donkey*." ("I bought something else.")

Note that assume-stance verbs do not express a change of state in the subject, because stance verbs are not stative [11.2.1](#). Accordingly, the perfective of an assume-stance verb cannot accept a resultative reading:

*Ò dìgɪl nē.* "He's *laid it down*." ("I thought he'd pick it up.")  
**3AN** lay.down **FOC**.

*Ò dìgɪn nē.* "He's *lain down*." DK: "Someone calls at your house and gets no answer; he thinks you're out but I'm explaining that you've gone to bed."  
 WK: "You've said: the child looks filthy. I'm replying: He's been lying down."

*Ò zì'ən nē.* "She's pregnant." (Not "She's stood still.")  
**3AN** stand.still **FOC**.

With stative verbs, temporal *nē*<sup>+/</sup> may only occur if there is an explicit time expression in the immediate context. If not, *nē*<sup>+/</sup> must be interpreted as focussing the VP or a constituent:

*Ò gìm.* "She's short."  
**3AN** be.short.

but *Ò gìm nē.* "He's *short*." ("I was expecting someone taller.")  
**3AN** be.short **FOC**.

*Lì zùlɪm.* "It's deep."  
**3INAN** be.deep.

but *Lì zùlm nē.* "It's *deep*." (Focus on the verb.)  
**3INAN** be.deep **FOC**.

*Ṁ mór pɥ'ā.* "I have a wife."  
**1SG** have wife:**SG**.

but *Ṁ mór nē pɥ'ā.* "I have a woman."  
**1SG** have **FOC** woman:**SG**. (not "wife": implies an irregular liaison, WK)

The verb *àeñ<sup>a</sup>* "be something/somehow" is *characteristically* followed by *nē<sup>+/</sup>* focussing its complement [21.2](#):

*Ò à nē bīg.* "He/she's a child."  
**3AN COP FOC** child:**SG**.

Stative verbs can be constrained to a temporary stative meaning if there is an explicit time-limiting constituent present in the clause: this may, however, be as little as a tense marker. (This requirement for an *explicit* marker of time in the clause to licence temporal *nē<sup>+/</sup>* may be partly an artefact of acceptability judgments based on short isolated clauses.) The meaning is limitation of the state described by the verb to a particular time period, with a clear implication of contrast between the time referred to and other times when the state was not in effect:

*Lì vèn nē.* "It's *beautiful*." (Focus on the verb.)  
**3INAN** be.beautiful **FOC**.

but *Nānnánā, lì vèn nē.*  
 Now, **3INAN** be.beautiful **FOC**.  
 "Just now, it's beautiful."

*Sān-kán lā, lì dāa zùlm nē.*  
 Time-**DEM.SG ART**, **3INAN TNS** be.deep **FOC**.  
 "At that time, it was deep."

*Mò'ar lā dāa zùlm nē.* "The lake *was* deep."  
 Lake:**SG ART TNS** be.deep **FOC**. (Implying, "Now it's shallow." WK)

*Lì dāa vén nē.* "It *was* beautiful."  
**3INAN TNS** be.beautiful **FOC**. WK: "I gave you a cup, and it was OK then, but you've spoiled it."



*Lì dāa bōgvs nē.* "It was soft." ("Now it isn't.")  
**3INAN TNS** be.soft **FOC**.

Temporal interpretation of *nē<sup>+/-</sup>* is also forced when the following constituent does not permit focussing with *nē<sup>+/-</sup>* [30.1.2.1.3](#).

A generic subject is not semantically compatible with the temporal use of *nē<sup>+/-</sup>*:

*Nīgí òñbɪd nē mōɔd.* "Cows eat *grass*." ("What do cows eat?")  
 Cow:PL chew:IPFV **FOC** grass:PL.

A form like *nīgí* is in itself ambiguous between generic and specific indefinite interpretations (like English "cows" versus the explicitly specific-indefinite "some cows") but the specific sense is only likely in the context of explicit introduction of a new discourse element [16.5](#). By context, pronoun subjects also can be generic or specific:

*Bà òñbɪd nē mōɔd.* "They (cows in general) eat *grass*."  
**3PL** chew:IPFV **FOC** grass:PL. or "They (particular cows) are eating *grass*."

A generic subject *is* compatible with the perfective; this is seen, for example, in proverbs, though as proverbs shade into mini-anecdotes or analogies they may contain NPs that are not so so much generic as illustrative or exemplary:

*Kukoma da zab taaba ason'e bi'ela yela.*  
*Kùkòma dá zàb tāabá à-sōñ'e bī'elá yèla.*  
 Leper:PL **TNS** fight each.other **PERS**-better.than slightly about.  
 "Lepers once fought each other about who was a bit better." KSS p40

The particle *nē<sup>+/-</sup>* in its temporal sense is omitted in replying to polar questions or responding to questions by repeating the verb:

A: *Gòsim!* "Look!"  
 B: *M̀ gósìd!* "I'm looking!"  
 A: *F̀ò gósìd néé?* "Are you looking?"  
 B: *M̀ gósìd!* "I'm looking!"

This probably simply represents the cross-linguistically common phenomenon of ellipsis in declarative replies to questions [24.1.5](#).

### 30.1.2.1.3 Words which cannot be focussed with *nē*<sup>+/</sup>

Certain words do not prevent focus-*nē*<sup>+/</sup> from being used in the clause (unlike interrogative proforms [30.1.2.1.1](#)), but cannot themselves be focussed with *nē*<sup>+/</sup>. Words which behave like this include *sùṅā*<sup>+/</sup> "good", *sùm*<sup>m</sup> "good", *bē'ed*<sup>ε</sup> "bad" *sìda*<sup>+</sup> "truth" when used as adverbs, and the "two, three exactly" quantifier forms *àyíṅā*<sup>+/</sup> *àtáṅā*<sup>+/</sup> [16.4.2.1](#). AdvPs formed by coordinating such words and NPs with these quantifiers as dependents share the same property.

*Lì àñ sùṅā.* "It's good."  
**3INAN COP good:ADV.**

*Lì àñ sùm.* "It's good."  
**3INAN COP good:ABSTR.**

*Lì àñ bē'ed.* "It's bad."  
**3INAN COP bad:ABSTR.**

*Lì àñ sídà.* "It's true."  
**3INAN COP truth.**

[*ye ka*] *o sariakadib a sum ne sida.*  
*ò sàríyà-kādīb áñ sùm nē sídà.*  
**3AN law-drive COP good:ABSTR with truth.**

"His judgments are good and true. (Rev 19:2, 1976)

If *nē*<sup>+/</sup> does occur before such constituents it must be interpreted temporally, limiting the state described to a particular time period, even with stative verbs and even if there is no explicit time marker in the clause (cf [30.1.2.1.2](#)):

*M̃ mór bīisá\_ àtáṅā.*  
**1SG have child:PL NUM:three.exactly.**  
 "I've got exactly three children."

but *M̃ mór nē bīisá\_ àtáṅā.*  
**1SG have FOC child:PL NUM:three.exactly.**  
 "I've got exactly three children just now." DK: "You're on a school trip, talking about how many children everyone has brought."

*Lì dāa áñ súnā.* "It was good." WK  
**3INAN TNS COP good:ADV.**

*Lì dāa á nē súnā.* "At the time, it was good." WK  
**3INAN TNS COP FOC good:ADV.**  
 = *Sān-kán lā, lì dāa á nē súnā.*  
 Time-DEM.SG ART, **3INAN TNS COP FOC good:ADV.**

*Lì à nē súnā.* "It's good." ("Now; it wasn't before." WK)  
**3INAN COP FOC good:ADV.**

Emphatics [30.6](#) do not behave in this way:

*bɔzugɔ o anɛ fɔ biig mɛn.*  
*bɔ́ zúgɔ̀ ò à nɛ́ fù bíig mɛ́n.*  
 Because **3AN COP FOC 2SG child:SG** also.  
 "Because he is your child too." (Genesis 21:13)

### 30.1.2.2 VP constituent focus

(See [30.1.2.1.2](#) for the constituent-focus sense of *nē*<sup>+/</sup> in the examples below.)

Focus on an **indefinite object** represents it as "unpredictable or pragmatically non-recoverable" information, as for example in supplying an answer to a content question; this is **ordinary** focus [30.1](#):

*M̄ dá' nē búŋ.* "I've bought a donkey."  
**1SG buy FOC donkey:SG.** ("What have you bought?")

*Nīigí òñbɪd nē mɔɔd.* "Cows eat grass."  
 Cow:PL chew:IPFV **FOC** grass:PL. ("What do [generic] cows eat?")

However, under the scope of a negative, focus is likely to be **contrastive**:

*M̄ pū dá' nē búŋā +∅.*  
**1SG NEG.IND buy FOC donkey NEG.**  
 "I haven't bought a donkey." ("I bought something else.")

**Definite objects/predicative complements** normally have old-information status, making the ordinary-focus sense of "unpredictable or pragmatically non-recoverable" unlikely; hence *nē*<sup>+/</sup> before a definite object is usually temporal:



*Dīb á nē bōn-súj.* "Food is a good thing."  
 Food **COP FOC** thing-good:SG.

*Ò à nē bāańlím.* "She is quiet."  
**3AN COP FOC** quiet:ABSTR.

*Lì à nē zāalím.* "It's empty."  
**3INAN COP FOC** empty:ABSTR.

*Lì à nē bōgvsígā.* "It's soft."  
**3INAN COP FOC** soft:ADV.

While such complements are characteristically indefinite, this is not invariably so: the pragmatic non-recoverability may lie in the internal relationship of the components of the complement, as for example in

*Biis la diemid nε dua gbinin. Ba zamisid nε bula wa'ab. Ba anε Apam biis.*

*Bīis lā dí'əmìd nē dúań gbínnī-n. Bà zà'misid nē*  
 Child:PL ART play:IPFV FOC dawadawa:SG base:SG-LOC. 3PL learn:IPFV FOC  
*būla wá'àb. Bà à né À-Pām bīis.*  
 shoot:PL dance:SG. 3PL COP FOC PERS-Apam child:PL.

"The children are playing under a dawadawa tree. They are learning the dance of the young shoots. They are Apam's children." KKY p6

(The father Apam has already been mentioned, as have the children, but the fact that the children belong to Apam is new.)

*Ka bumbudda banε lu gɔn'ɔs suugin la anε banε wum pian'ad la, ka...*

*Kà bōn-búudà bànì lù gǔń'ɔs súugū-n lā á nē*  
 And thing-planting:PL REL.PL fall thorn:PL among-LOC ART COP FOC  
*bánì wòm pjàń'ad lā, kà*  
 REL.PL hear speech ART, and...

"And the seeds which fell among thorns are those who heard the word, but..."  
 (Lk 8:14)

In this context proper names are non-referential (cf CGEL p402):

*O yū'ur na anε Joon.* "His name will be John." (Lk 1:60)

*Ò yū'ur ná ā nē Joon.*  
**3AN** name:SG IRR COP FOC John.

As with objects, when the complement falls under the scope of the negative (here with the negative verb *kā'ε*<sup>+</sup> "not be") focus is difficult to interpret in the "ordinary" sense, so that if *nē*<sup>+/</sup> is present at all the result is normally **contrastive**:

*M̄ á nē dɥ'átà.* "I'm a doctor."  
**1SG COP FOC doctor:SG.**

*M̄ kā' dɥ'átāa +∅.* "I'm not a doctor."  
**1SG NEG.BE doctor:SG NEG.**

*M̄ kā' nē dɥ'átāa +∅.* "I'm not a *doctor*." ("I'm a lab assistant.")  
**1SG NEG.BE FOC doctor:SG NEG.**

Focus on a **locative complement** [20.3](#) typically involves a definite predeterminer of a locative postposition or an old-information place name, but the fact that a referent is at a known place is often new information resulting in **ordinary** focus on the locative. The head of a locative AdvP is the locative particle, with a zero allomorph for Kusaal place names [17.3](#); like other postpositions, it is not itself referential even though it has a predeterminer. (Cf locative premodifiers [16.10.2.3](#).)

*Dāy lā b́é nē d́-kaṅā lā púvgū-n.*  
 Man:SG ART EXIST FOC hut-DEM.DEI.SG ART inside-LOC.  
 "The man is inside that hut." (Reply to "Where is that man?")

*Mam bene moogin.* "I'm in the bush." BNY p8  
*Mām b́é nē m̄ɔgv-n.*  
**1SG.CNTR EXIST FOC grass:SG-LOC.**

*M̄ yí nē Bók.* "I come from Bawku." SB  
**1SG emerge FOC Bawku.**

*Yadda niṅir yitne labaar la wummug ni.*  
*Yàddā-níṅìr yít nē lābāar lā wúmmùg ní.*  
 Assent-doing emerge:IPFV FOC news ART hearing LOC.  
 "Faith comes from hearing the news." (Rom 10:17)

Contrast the existential use of *bé*<sup>+</sup>, where the locative is a clause adjunct:

*Dāy-s̄' b́é d́-kaṅā lā púvgū-n.*  
 Man-INDF.AN EXIST hut-DEM.DEI.SG ART inside:SG LOC.  
 "There is a certain man in that hut."

There are few examples of  $n\bar{e}^{+/-}$ -focus on an adjunct in my data; one is

*Tì dít s̄ā'ab nē záàm.* "We eat millet porridge *in the evening*."  
**1PL eat:IPFV porridge FOC evening.** ("When do you eat porridge?")

### 30.1.2.3 VP focus

When  $n\bar{e}$  is placed finally in the VP and cannot be interpreted as temporal, there is focus on the entire VP; this is usually **contrastive**, reflecting the fact that non-contrastive "ordinary" focus on the VP is the *default* state implied by the unmarked construction of a clause with a VP.

Examples (cf [30.1.2.1.2](#) for the the constituent-focus sense of  $n\bar{e}^{+/-}$  here):

*Gòsim nē.* "Look!" ("Don't *touch*." WK)  
**Look:IMP FOC.**

*Ò kùèsíd sūmma lā nē.*  
**3AN sell:IPFV groundnut:PL ART FOC.**  
 "She *sells/is selling* the groundnuts." ("They're not free.")

*Ò gìm nē.* "He's *short*." ("I was expecting someone taller.")  
**3AN be.short FOC.**

*Lì zùlum nē.* "It's *deep*."  
**3INAN be.deep FOC.**

*M̄ bódī\_f nē.* "I really *love* you."  
**1SG want 2SG.OB FOC.**

*Ò dìgìl nē.* "He's *laid it down*." ("I thought he'd pick it up.")  
**3AN lay.down FOC.**

*Ò dìgìn nē.* "He's *lain down*."  
**3AN lie.down FOC.**

DK "Someone calls at your house and gets no answer; he thinks you're out, but I'm explaining that in fact you've gone to bed."

*Kà lì bódìg nē.* "It's *lost*."  
 And **3INAN get.lost FOC.** Contradicting "someone hid it." [25.3.2](#)

*Dāká lā zǎñl nē.* "The box gets carried *in the hands*."  
 Box:SG ART carry.in.hands FOC. ("Not on your head.")

*Dāká lā zîd nē.*  
 Box:SG ART carry.on.head:IPFV FOC.  
 "The box is for carrying *on the head*." ("Not carrying in the hands.")

*Dāam lā núùd nē.* "The beer is for *drinking*."  
 Beer ART drink:IPFV FOC. ("Not washing with!")

*Lì mà'an nē.* "It gets *cooled*."  
 3INAN get.cool:IPFV FOC. ("Not heated!")

An idiomatic use (marking a euphemism) is seen in

*Ò zì'an nē.* "She's pregnant." (Not "She has stood still.")  
 3AN stand.still FOC.

### 30.2 Clefting and preposing with *kà*

*Kà*-clefting arises from constructions with adnominal *kà*-clauses [26.2](#) in a way similar to the development of *n*-clefting from VP chaining. Once again, there is an implicature of exhaustiveness and exclusiveness, here made explicit by *mà'aa* "only."

*Aseε line an be'ed ma'aa ka m na tun'e niŋ.*  
*Àséé líni àñ bē'ed má'aa kà m ná tūñ'e\_∅ níŋ.*  
 Only REL.INAN COP bad only and 1SG IRR be.able CAT do.  
 "It's only that which is bad that I can do." (Rom 7:21)

The preposed element may be extracted from a subordinate clause:

*Li anε ya taaba banε pu'usid Wina'am ka li nar ka ya kad saria.*  
*Lì à né yà tāaba bání pù'usid Wínà'am kà lì nár*  
 3INAN COP FOC 2PL fellow REL.PL greet:IPFV God and 3INAN must  
*kà yà kád sàríyà.*  
 and 2PL drive judgment.

"It is your fellow-worshippers of God whom you must judge." (1 Cor 5:12)

The main clause may again have a non-verbal predicator:



*Ōni\_ ∅ lá kà fù dāa ñyēt.*

**3AN.CNTR CAT** that and **2SG TNS** see:IPFV.

"This is he whom you saw." WK

*Ànó'oni\_ ∅ ñwá kà tì ñyētá +∅?*

Who **CAT** this and **1PL** see:IPFV **CQ?**

"Who is this that we can see?"

*Bṣṣ\_ ∅ lá kà m ñyētá +∅?*

What **CAT** that and **1SG** see:IPFV **CQ?**

"What is that that I can see?"

Once again, there is a construction with ellipse of all the main clause except the NP. Independent tense marking is possible in the ellipited structure, as with *n*-focus. Preposed direct objects leave a null-anaphora gap [20.1](#).

*Bṣ kà fù kúesida +∅?* "What are you selling?"

What and **2SG** sell:IPFV **CQ?**

Unlike the construction with *n*, the effect of *kà*-preposing remains *foregrounding*, not focus. Preposing with *kà* is compatible both with *n*-focus and with the occurrence of the focus particle *nē*<sup>+/</sup>:

*Bī'əl bī'əl kà kōlɪg p'é'èl nē.*

Little little and river:SG get.full **FOC**.

"Little by little, and a river is full." (Proverb)

*Dinzug ka mam Paul n be sarega ni Yesu Kiristo zug yanam buudbane ka' Jew dim la yela.*

*Dìn-zúg kà mām Paul n bé sārɪgá nī Yesu Kiristo zúg yānám*

That-upon and **1SG.CNTR** Paul **CAT EXIST** prison:SG **LOC** Jesus Christ upon **2PL.CNTR**

*búùd-bàni kā' Jew dím lā yélà.*

tribe-REL.PL **NEG.BE** Jew individual.PL **ART** about.

"Therefore, I, Paul, am in prison for Jesus Christ because of you whose tribe is not Jewish." (Eph 3:1, 1996)

*Kà*-foregrounding of VP objects containing interrogative pronouns is very common. There is no syntactic movement rule for interrogative pronouns/proforms:

*Bùgúm lā yít yáa ní ná +∅?*  
 Fire **ART** emerge:IPFV where **LOC** hither **CQ?**  
 "Where is the light coming from?"

but *b̄* "what?" is very often preposed with *kà*, as in the example above; preposing is *required* if the sense is "why?" rather than "what?":

*Bó kà fù kúmmà?* "Why are you crying?"  
 cf *\*Fù kúm b́?* \*"What are you crying?"

This construction with *bó kà*... is by far the most frequent way of rendering "Why?", and most cases of *bó kà*... have this meaning, but foregrounding *b̄* in the normal sense "What?" occurs too:

*B̄ ka ti na niŋε?* "What are we going to do?" (Acts 21:22)  
*B́ kà tì ná niŋε +∅?*  
 What and **1PL IRR** do **CQ?**

Other queried NP objects in content questions are often preposed with *kà*:

*Nū'-bíbisá\_ àlá kà fù ñyētá +∅?*  
 Hand-small:PL **NUM**:how.many and **2SG** see:IPFV **CQ?**  
 "How many fingers can you see?"

*Kà*-preposing can also be used to extract an interrogative pronoun from a prepositional phrase; the original position must be filled by an anaphoric pronoun:

*Ka anɔ'ɔnam ka Wina'am sunf da pɛlig nɛ ba yuma piisnaasi la?*  
*Kà ànɔ'ɔn-nàm kà Wínà'am súñf dá pɛlɪg né bà*  
 And who-PL and God heart:SG **TNS** go.white with **3PL**  
*yùma pīs nāasí lá +∅?*  
 year:PL tens four **ART CQ?**  
 "And who was God angry with for forty years?" (Heb 3:17)

As interrogative pronouns are intrinsically focussed, these constructions, like other cases of preposing with *kà*, are best regarded as foregrounding, not focus.

Preposing the object of an invariable verb is uncommon, and interrogative pronouns in such cases usually remain *in situ*:

*Fù b́ɔ̀d b́ +∅?* "What do you want?"  
**2SG** want what **CQ?**

Examples do occur:

*Nìngbìŋ bɔ̄ buudi ka ba na ti mɔ̄ra?*

*nìn-gbīŋ bɔ̄-būudí kà bà ná tī mɔ̄rá +∅?*

Body-skin:SG what-sort and 3PL IRR afterwards have CQ?

"What kind of body will they have?" (1 Cor 15:35)

Predicative complements do not seem to permit preposing. Thus, the interrogative pronouns are left *in situ* in:

*Mām áñ bɔ̄ +∅?* "What am I?"

1SG.CNTR COP what CQ?

*Kà fù áañ\_ ànɔ́'ɔ̀nè +∅?* "Then who are you?"

And 2SG COP who CQ?

Adjuncts are often preposed with *kà*; there is probably a contrast between foregrounding with *kà* and focussing with *nē*:

*Ñwādisá\_ àtáñ' kà fù ná lēb nā.*

Month:PL NUM:three and 2SG IRR return hither.

"You're to come back in three months."

Instructions: not a reply to a question; excludes any other time.

*Tì dít sā'ab nē záàm.*

1PL eat:IPFV porridge FOC evening.

"We eat millet porridge in the evening."

Reply to "When do you eat porridge?"

*Kà*-preposed elements cannot be clause subjects, as is to be expected if the construction has arisen from ellipsis, because an adnominal *kà*-clause normally has a different subject from its main clause.

The only structure other than a NP (including *ñ*-clauses) or AdvP that I have found preposed with *kà* is *wōv* "like" + object:

*Wōv búŋ né kà ò zót.*

Like donkey:SG like and 3AN run:IPFV.

"It's like a donkey that he runs."

\**Né m̀ nú'ùg kà m̀ sī'is.*

\*With **1SG** hand:**SG** and **1SG** touch.

attempted for "With my hand, I touched it."

*Kà*-preposing is often simply a means of bringing a constituent before the clause subject with **no implication of foregrounding** at all. Purely formal *kà*-preposing is a feature of many relative clauses [28.2.3](#). Manner, place and reason adjuncts can *only* precede the subject by *kà*-preposing, and absolute clauses as adjuncts must often precede the main clause subject so that constituent order parallels event order [19.2.1](#) [23.1](#) [28.1.1](#):

*Mán ñwè' dāy lā zúg kà police gbáñ'a\_m.*

**1SG:NZ** hit man:**SG ART** upon and police seize **1SG.OB.**

"Because I hit the man, the police caught me." ILK

### 30.3 Extraposition and dislocation

A NP or AdvP placed after a distinctively phrase-final verb form must be an extraposed clause adjunct rather than part of the VP. The commonest cases involve manner-adverbs, where the effect seems to be to intensify the adverb:

*Ya yidigya bēdegv.*

"You are very much mistaken." (Mk 12:27)

*Yà yídìg yā bédvḡ.*

**2PL** go.astray **PFV** much.

*M̀ pú'ùs yā bédvḡ.*

"Thank you very much."

**1SG** greet **PFV** much.

NP objects (other than pronouns) can be extraposed; the sense seems to be that the extraposed element is contrary to expectation:

*Ò ñyè yā ná'àb lā.*

"He's seen the chief." ("of all people!")

**3AN** see **PFV** chief:**SG ART.**

*Ò dà' yā múj.*

"She's bought rice." ("of all things!")

**3AN** buy **PFV** rice.

Contrast the effects of focussing with *nē*, and foregrounding by *kà*-clefting:

*Ò dà' nē múj.*

"She's bought rice."

**3AN** buy **FOC** rice.

(reply to "What did she buy?")

*Lì à nē múj kà ò dá'.* "It's rice that she's bought." ("not millet.")  
**3INAN COP FOC** rice and **3AN** buy.

Leftward dislocation of objects and complements on the basis of **weight**, without clefting or *kà*-preposing, occurs in e.g.

*Wilkanε bεε m ni ka pu wanna, m Ba' nwaadi li nε* [sic: 1996 n] *basid.*

*Wil-kàni bεε\_òm ní kà pū wénnā<sup>+∅</sup>,*

Branch-**REL.SG** **EXIST** **1SG** **LOC** and **NEG.IND** bear.fruit:**IPVF** **NEG.**

*m̀ Bā' ñwá'adī\_í n básìd.*

**1SG** father:**SG** cut:**IPFV** **3INAN.OB** **CAT** throw.out:**IPFV.**

"A branch which is in me and does not bear fruit, my father cuts out."  
 (Jn 15:2)

*Onε ka ba tis o ka li zu'oe, ba με m̄r puten'er ye o na lεbis linε zu'oe.*

*̀Oni kà bà tíς\_ò\_∅ kà lì zú'e, bà m̀ m̀r*

**REL.AN** and **3PL** give **3AN.OB** and **3INAN** become.much, **3PL** also have

*pú-tèñ'er yé ò nà lēbis líni zù'e.*

inside-mind:**SG** that **3AN** **IRR** return **REL.INAN** become.much.

"Whom they have given much to, they expect he will return much." (Lk 12:48)

A heavy indirect object is right-dislocated to follow the object in

*Mam Paul ... tisid gboŋ kaŋa Wina'am nidib bane a sida dim ka a yinni ne  
 Jesus Christ Efesus teŋin la.*

*Mām Paul ... tísid gbáŋŋ-kàŋā Wínà'am nídìb bàni àñ*

**1SG.CNTR** Paul ... give:**IPFV** book-**DEM.DEI.SG** God person:**PL** **REL.PL** **COP**

*sídà dím kà áñ yīnní nē Jesus Christ Efesus téŋī-n lā.*

truth individual:**PL** and **COP** one with Jesus Christ Ephesus land:**SG-LOC** **ART**

"I, Paul ... give this letter to God's people who are truthful and one in Jesus  
 Christ in Ephesus." (Eph 1:1, 1976; KB ...*gbauŋ kaŋa tisid Wina'am...*)

### 30.4 Presentational constructions

A number of constructions are employed to introduce new entities into discourse. The NPs referring to the entities are, naturally, characteristically indefinite; it is in this context that absence of the article *lā*<sup>+</sup> typically reflects an indefinite but *specific* rather than generic reference 16.5. The NP head may (but need not) be followed by an indefinite postdeterminer pronoun or postdetermining number.

The verb *bè*<sup>+</sup> "be somewhere/exist" is frequent in presentational clauses, often with a following VP-chaining construction 23 or adnominal *kà*-clause 26.2.

*Dau da be mori o po'a yimmir*

*Dāy dá bè\_ ∅ mārí\_ ò pū'à-yīmmír*

Man:SG TNS EXIST CAT have 3AN wife-single:SG

"There was a man who had one wife." KSS p26

*Pu'a sɔ' da be mɔr o bipuŋ ka kikirig dɔl o.*

*Kà pū'à-sō' dá bè\_ ∅ mār ò bī-púŋ kà kīkīrīg dōll-ó\_ ∅.*

And woman-INDF.AN TNS EXIST CAT have 3AN child-girl:SG and fairy:SG follow 3AN.OB.

"There was a woman whose daughter was oppressed by a devil." (Mk 7:25)

*Dapa atan' n da be.*

"There were once three men." KSS p16

*Dāpá\_ àtáñ' n dá bè.*

Man:PL NUM:three CAT TNS EXIST

Other verbs expressing location can introduce the subject as a new topic, and verbs of finding, seeing etc can introduce their objects in a similar way.

*Ka dau daa zin'i Lystra ni ka pu tun'e kenna.*

*Kà dāy dāa zīñ'i Lystra ní kà pō tūñ'e\_ ∅ kēnná +∅.*

And man:SG TNS sit Lystra LOC and NEG.IND be.able CAT go:IPFV NEG.

"There was a man in Lystra who could not walk." (Acts 14:8, 1996)

*Anina ka o nyɛ dau ka o yu'ur buon Aneas.*

*Āníná kà ò ñyē dāy kà ò yū'ur búòn Aneas.*

ADV: there and 3AN see man:SG and 3AN name:SG call:IPFV Aeneas.

"There he found a man whose name was Aeneas." (Acts 9:33)

Change of polarity within a VP chain, which is otherwise unusual, may occur with presentational constructions:

*Ya sieba be kpela ku kpil asee ba ti nye Wina'am na'am la.*

*Yà sīaba bé kpēlá\_∅ kú kpīl<sup>+∅</sup>, àséé bà nà tì*

**2PL INDF.PL EXIST** here **CAT NEG.IRR** die **NEG**, except **3PL IRR** afterwards

*ñyè Wínà'am ná'àm lā.*

see God kingdom **ART**.

There are some of you here who will not die before they see the kingdom of God." (Lk 9:27)

### 30.5 Free and bound personal pronouns

There are environments in which only free pronoun *forms* are possible, and in which the forms are simply allomorphs of the bound pronouns:

Isolation:	<i>Mánè?</i>	"Me?"
Apposition:	<i>mān Paul</i>	"I, Paul"
Coordination:	<i>tīnám nē fōn</i>	"us and you"
Before relative pronouns:	<i>fōn-kánì ...</i>	"you, who ..."

and for some speakers, the 2nd persons before direct commands after a *yà'*-clause [27](#). In other contexts, the choice of a free pronoun over bound implies *contrast*. For the special case of **logophoric** use see [26.3.2](#).

A personal pronoun which is focussed [30.1](#) must be contrastive:

*Manε an kōnbkem suη la.*

*Māni\_∅ áñ kóñb-kìm-sùη lā.*

**1SG.CNTR CAT COP** animal-tender-good:SG **ART**.

"I am the good shepherd." (Jn 10:11)

*Funε mi', ka man zi'.*

*Fōni\_∅ mī', kà mān zī'ι<sup>+∅</sup>.*

**2SG.CNTR CAT** know, and **1SG.CNTR NEG.KNOW NEG**.

"You know but I do not know." (Rev 7:14)

Subordinate clauses cannot show any other markers of focus:

*Li nar ka on du ka man sie.*

*Lì nàr kà ōn dū, kà mān sīe.*

**3INAN** must and **3AN.CNTR** rise, and **1SG.CNTR** lower.

"He must increase and I must decrease." (Jn 3:30)

Contrastive pronouns as subjects of *h̄*-clauses are distinct from the *non-contrastive* fused *h̄*-clause pronoun subject series [16.3.1](#):

*wuu mane a si'em la.*

*w̄ūw mání* ∅ àñ sī'am lā.

like 1SG.CNTR NZ COP INDF.ADV ART.

"as I am." (1 Cor 7:7, 1996)

### 30.6 Emphatics

I have borrowed the term "emphatic" from Jeffrey Heath's Songhay grammars (e.g. Heath 2005 pp202ff.) The category corresponds quite well to CGEL's "Focussing Modifiers" in English (pp586ff); however, this "focus" is not "informational focus" of the kind discussed in [30.1](#) but "scopal focus", the semantic element which the particle applies to: this need not be the syntactic head of the NP, and is not necessarily the informational focus of the clause.

Emphatics relate a NP or AdvP to the discourse context. Apart from *hālí*<sup>+</sup>, they occur after top-level NPs or AdvPs within clauses, and share the unusual morphological feature of forming the LF by adding *-ne* to the SF [6.4](#).

*mè* DK KT SB NT *mèn* WK; clause finally (all sources) *mèn*<sup>ε</sup> "also, too"

*bɔzugɔ o anɛ fɔ biig mɛn.*

*b̄ɔ zúgɔ ò à né f̄ò b̄īg m̄én.*

Because 3AN COP FOC 2SG child:SG also.

"Because he is your child too." (Genesis 21:13)

*O pu'a mɛ kena.*

"His wife also came." (Acts 5:7)

*Ò p̄u'ā mé kè nā.*

3AN wife:SG also come hither.

The particle may follow *kà* + ellipted subject pronoun [24.1.5.2](#):

*Wina'am tɪsɪd ... ka mɛ tɪsɪd ...*

*Wínà'am tísìd ... k̄à mé tísìd ...*

God give:IPVF ... and also give:IPFV ...

"God gives ... and [God] also gives ..." (1 Cor 15:38)



**mà'aa** (LF *mà'anē*) "only"

*Asee line an be'ed ma'aa ka m na tun'e niŋ.*

*Àséé líni àñ bē'ed má'aa kà m ná tūñ'e\_∅ níŋ.*

Only **REL.INAN COP** bad only and **1SG IRR** be.able **CAT** do.

"It's only that which is bad that I can do." (Rom 7:21)

(*Kà*-foregrounding of the NP, which also implies exclusiveness [30.2](#).)

**gùllum**<sup>NE</sup> "only"

*M níŋi\_lí m gùllum.* "I did it myself alone."

**1SG** do **3INAN.OB 1SG** only

**kòtāa**<sup>NE</sup> "at all"

*Áyì kòtāa.*

"Not at all."

The added *-ne* of the LF of these words is found also with the quantifier *pāmm* SF *pāmné* LF "a lot" and the adverb *ñyāe*<sup>NE/</sup> "brightly, clearly" [6.4](#).

**hālí**<sup>+</sup> in addition to its many other rôles [18.1](#) [24.1.3](#) [23.4](#) can be used as an Emphatic *preceding* a NP or AdvP with the meaning "even":

*Hali tuumbē'ed dim niŋid ala.*

*Hālí tūm-bē'ed díŋ níŋid àlá.*

Even deed-bad:**PL** individual:**PL** do:**IPFV ADV**:thus.

"Even sinners do that." (Lk 6:33)

**Hālí báa** is also used in this way:

*Hali baa lampōdi'esidib me niŋid ala.*

*Hālí báa làmpō-dí'əsìdib mé niŋid àlá.*

Even tax-receiver:**PL** also do:**IPFV ADV**:thus.

"Even tax-collectors do that." (Mt 5:46)

*Hali baa bama wusa ya'a na zo ka basif, man ku basi f.*

*Hālí báa bàmmā wūsa yá' nà zó kà básì\_ f,*

Even **DEM.DEI.PL** all if **IRR** run and abandon **2SG.OB**,

*mān kú bāsì\_ f\_ +∅.*

**1SG.CNTR NEG.IRR** abandon **2SG.OB NEG**.

"If even they all run away and leave you, I will not leave you." (Mt 26:33)

**Lexicon****31 Greetings and other formulae**

(a) Enquiries after health.

*[Fù sá] gbìs wēlá?**Dúe wēlá?*

"How did you sleep?"

literally "How did you get up?"

both usual greetings on meeting

for the first time in the morning.

*Nīntāŋ á wēlá?*

"How is the day/afternoon?"

*Yú'uy á wēlá?*

"How is the evening?" literally "night"

*Fù yī-dímàa?*

"[How are] your household?"

*Nìn-gbīnàa?*

"[How is your] body?" i.e. "How are you?"

*Fù sìdaa?*

"[How is your] husband?"

*Pu'ā nē bíisèè?*

"[How are your] wife and children?"

... and so on, often at great length.

Replies:

*Àláafù bé.*

literally "There is health."

(Also a general purpose greeting itself.)

*Àláafù bé·o.*

... for him/her.

*Àláafù béé bá.*

... for them.

(b) Blessings

These follow the pattern

*Báríkà né fù ...*

"Blessing with your ..."

with the introductory words usually ellipted; the reply to all of these is *Náa*.*Kēn kēn.*"Welcome!" *Kēn*, gerund of *kēñ* "come"cf Hausa: *Barkà dà zuwàa*.*Nē záàm záàm.*

"Good evening."

*Tūuma!*or *Tūuma tūuma!*

literally "(Blessing on your) work!"

Interpreted to include practically anything which could be regarded as work, and hence probably the commonest daytime greeting.

<i>Nē sǎ̄sɔ̄gā.</i>	"(Blessing on your) conversation." to greet a group of people talking; also to greet a person sitting quietly alone, assumed to be conversing with his or her own <i>wīn</i> <sup>nɛ/</sup> (spiritual essence, personal <i>genius</i> )
<i>Né fù būrɪyá-sùŋ.</i>	"Merry Christmas." ( <i>būrɪyá</i> <sup>+</sup> ← * <i>burǔya</i> ← Twi/Fante <i>bronya</i> , of unclear ultimate origin)
<i>Né fù yùum-pāalíg.</i>	"Happy New Year."

(c) Prayers. Reply *Ámí!* "Amen!"

<i>Wīn ná lēbɪsɪ f nē láafɪya.</i>	"Safe journey!" literally "[I pray that] God will bring you back in health."
<i>Wīn ná sōŋɪ f.</i>	"God will help you." Generally a formula expressing thanks.
<i>Wīn ná tā'así f.</i>	"Safe journey!" ("God will help you travel.")

(d) Statements of fact and commands. Reply *Tò* "OK", or as appropriate.

<i>Bēogv lā.</i>	"See you tomorrow!" ("That's tomorrow.")
<i>Àtɪnì dáarì lā.</i>	"See you on Monday."
<i>Gbìsɪm sùŋā.</i>	"Sleep well."
<i>Kpèlɪmī sùm.</i>	"Remain (ye) well." Said by departing person to those remaining.
<i>Pù'usɪm yín.</i>	"Greet (those) at home." i.e. "Goodbye." reply <i>Tò</i> "OK", or <i>Bà nà wūm</i> "They will hear."

## (e) Miscellaneous formulae

<i>M pù'ùs yā.</i>	"Thankyou." reply <i>Tò</i> , or <i>Pù'usug kā'e.</i> "No thanks (sc. needed.)"
<i>M pù'ùs yā bédugū.</i>	"Thank you very much."
<i>Gáafàra.</i>	(← Arabic) "Pardon me, sorry." Also (like Ghanaian English "sorry") used simply to empathise with misfortune, with no implication of apology as such.

*Kābir kābirí!*

Formula asking admission to a house or compound. "Knock, knock!" Twi *agoo* is also used. (Actual knocking is for robbers trying to find out if anyone is at home.)

*Dìm sūgurú.*

"Please forgive me."

*M̀ b́élìm nē.*

"I beg you." Not equivalent to "please"; Kusaasi etiquette does not demand a spoken equivalent of the English "please."

*X lábāar á wēlá?*

"What is the news of X?"

A common initial reply is *Dīb má'aa.*

"Only food." i.e. "good"

*M̀ m̄r kú'əm náa?*

literally "Shall I bring water?"

Traditional first words to guest.

Reply for "No, thank you" is *Kù'əm á súm.*

("Water is good.")

*Wīn yél sídà.*

"Bless you!" (after a sneeze.) Literally

"God speaks truth"; WK explained: "If you

sneeze, it means someone elsewhere is praising you."

*F̀ wúm Kūsáalèè?*

"Do you understand [literally "hear"] Kusaal?"

*Ēēñ, m̀ wúm.*

"Yes, I do."

*Áyì, m̀ p̄ wúmmā.*

"No, I don't."

## 32 Structured semantic fields

### 32.1 Kinship terms

Pervading the whole system of Kusaal kinship terms is the importance of birth order among same-sex siblings, and its irrelevance between siblings of opposite sex. Some basic terms, such as those for siblings, do not in themselves distinguish sex, in a way that is surprising from a European perspective. Seniority goes by family branch, so I am senior to you if my parent is senior to your parent of the same sex, regardless of our own ages. Seniority among wives is determined by marriage order and is also independent of actual age. Age, as opposed to seniority, is in itself of little significance and many people do not know their own ages exactly.

My			
Father	is my	<i>sàam</i> <sup>ma</sup> , less formally <i>bā</i> <sup>+/</sup>	
Father's elder brother		<i>sàam-kpēēñm</i> <sup>m</sup>	
Father's younger brother		<i>sàam-pīt</i> <sup>a/</sup>	
Father's sister		<i>pùgvɔɖɪb</i> <sup>a</sup>	

My			
Mother	is my	<i>mà</i> <sup>+</sup>	
Mother's elder sister or senior co-wife		<i>mà-kpēēñm</i> <sup>m</sup>	
Mother's younger sister or junior co-wife		<i>mà-bīl</i> <sup>a</sup> or <i>mà-pīt</i> <sup>a/</sup>	
Mother's co-wives	are my	<i>mà nám</i> <sup>a</sup>	
Mother's brother	is my	<i>áñsib</i> <sup>a</sup>	

I am my mother's brother's *āñsínj*<sup>a</sup>; to all the other relatives above I am *bīig*<sup>a</sup> "child" or specifically *dà-kòcñr*<sup>ε</sup> "son" or *pɔ'á-yù*<sup>+</sup> "daughter." Although the Kusaasi are not matrilineal, the mother's brother is felt to be a particularly close relation with a traditionally benevolent rôle towards his sister's child.

There are no special terms for aunts or uncles by marriage.

My			
Grandparent	is my	<i>yáab</i> <sup>a</sup> ♂ <i>yāa-dáy</i> <sup>+</sup>	Sex can be specified as ♀ <i>yāa-pɔ'á</i> <sup>a</sup>
Grandchild		<i>yáanj</i> <sup>a</sup>	

These words are also used for ancestor/descendant.

My

Elder sibling of my own sex is my *bīār<sup>ε</sup>*

Younger sibling of my own sex is my *pītú<sup>+</sup>*

Sibling of opposite sex is my *tāyŋ<sup>+/</sup>*

These words are also used for cousins, with seniority, as always, going by family branch.

My

Wife is my *yī-py'á<sup>a</sup>* or simply *py'ā<sup>a</sup>*

Wife's parent *dīām<sup>ma</sup>* Sex can be specified as

♂ *dīām-dāy<sup>+</sup>* ♀ *dīām-pyāk<sup>a</sup>*

Wife's sibling *dàkīg<sup>a</sup>* Sex can be specified as

♂ *dàkì-dāy<sup>+</sup>* ♀ *dàkì-pyāk<sup>a</sup>*

*Dīām<sup>ma</sup>* is also used in polite address to an unrelated person of opposite sex and similar or greater age to oneself but not old enough to be called *m̄ m̄* "my mother" or *m̄ bā'* "my father." Parents-in-law are greatly respected, but with siblings-in-law there is a traditional reciprocal joking relationship; certain whole ethnic groups are said to bear this relationship to each other, called "playmate" in local English. At *Bùgúm-tōŋr<sup>ε</sup>*, the Fire Festival, one throws eggs at one's brothers-in-law.

I am my wife's parents' *bīig<sup>a</sup>* "child" and my wife's siblings' *dàkīg<sup>a</sup>*.

My

Husband is my *sīd<sup>a</sup>*

Husband's parent *dàyāam<sup>ma</sup>* Sex can be specified as

♂ *dàyāam-dáy<sup>+</sup>* ♀ *dàyāam-pyák<sup>a</sup>*

Husband's elder brother *sìd-kpēñm<sup>m</sup>*

Husband's younger brother *sìd-bīl<sup>a</sup>*

Husband's sister *sìd-pyāk<sup>a</sup>*

I am my husband's parents' *bīig<sup>a</sup>* "child"; all my husband's siblings (of both sexes) call me *py'ā<sup>a</sup>* "wife."

My co-wife is my *nìn-tāa<sup>=</sup>*, "rival" in Ghanaian English. In traditional stories the rôle of the "wicked stepmother" in European folklore is assumed by one of the father's other wives.

Two men married to sisters are each *dàkì-tù<sup>+</sup>* to the other; two women married to brothers are *nìn-tāas<sup>ε</sup>*, "co-wives." "Fiancée" is *py'à-ēlíg<sup>a</sup>*.

### 32.2 Personal names

See Haaf pp87ff for a detailed account of Kusaasi personal naming practices.

Personal names are mostly formed by the personifier clitic *À-* 16.6 followed by common nouns, but a few based on adjective stems are preceded by *Ñ-*, becoming *Ḃ-* before labial consonants. There are also some less common names with the clitic *À-* followed by a whole verb phrase, or even by a clause. Most names of foreign origin also take the *À-* clitic: *À-Sīimśòñ* "Simon"; none take *Ñ-/Ḃ-*.

On the form in which Kusaal personal and place names appear in English-language contexts see 32.4.

The Kusaasi do not use surnames traditionally; although everyone knows his or her clan, and indeed at least part of its genealogy, clan names are not used as surnames, as they are with the Mossi.

A few personal names account for a large proportion of all individuals; *À-Wīn* and *À-Bōgur* are especially common male names. Identification of particular individuals often requires further enquiries about kindred or residence.

Many names allude to a guardian spirit (*sīgir*<sup>ε/</sup>) assigned to a newborn child through the father's consultation with a diviner (*bā'a*<sup>̄</sup>); this may be the *wīn*<sup>ne/</sup> 1.1 33 of an ancestor, or of a powerful spiritually significant tree:

<i>À-Wīn</i> <sup>ne/</sup>	Awini	<i>wīn</i> <sup>ne/</sup>	person with a <i>sīgir</i> <sup>ε/</sup> from father's side of the family
<i>À-Bōgur</i> <sup>ε</sup>	Abugri	<i>bōgur</i> <sup>ε</sup>	person with a <i>sīgir</i> <sup>ε/</sup> from mother's side of the family
<i>À-Tìg</i> <sup>a</sup>	Atiga	<i>tìg</i> <sup>a</sup>	"tree", as <i>sīgir</i> <sup>ε/</sup>
<i>À-Kūdvg</i> <sup>ɔ</sup>	Akudugu	<i>kūdvg</i> <sup>ɔ</sup>	"piece of iron" (sc. as a marker on a tree- <i>sīgir</i> <sup>ε/</sup> ); displaced as a common noun by the pl-as-sg <i>kūt</i> <sup>ε</sup>

A younger sibling of *À-Wīn*<sup>ne/</sup> with the same *sīgir*<sup>ε/</sup> is called *À-Wīn-bīl*<sup>a</sup> "Awimbillah", of *À-Kūdvg*<sup>ɔ</sup>, *À-Kud-bīl*<sup>a</sup> "Akudibillah" etc. Names for girls may follow the pattern *À-Wīn-pyák*<sup>a</sup> "Awimpoaka."

Other names refer to birth circumstances:

<i>À-Nà'ab</i> <sup>a</sup>	Anaba	<i>nà'ab</i> <sup>a</sup>	"chief" but in the sense "afterbirth" (because a chief leaves his house after his retainers)
<i>À-Fūg</i> <sup>ɔ/</sup>	Afugu	<i>fūg</i> <sup>ɔ/</sup>	Name for sole survivor of twins
<i>À-Tūl</i> <sup>lε</sup>	Atuli	<i>tūl</i> <sup>gε</sup>	"clothing" for child born with a caul
			"invert" for breech-delivered child

A whole clause is seen as a birth-circumstance personal name in

*À-Tìim bódìg yā* "The medicine has got lost."

Many names relate to customs intended to break a cycle of stillbirths. One such custom is the apotropaic practice of throwing away the dead child or just burying it in a pot to avoid attracting malevolent spiritual attention; the next surviving child may then be called e.g.

<i>À-Tàmpūr<sup>ε</sup></i>	Tampuri	<i>tàmpūr<sup>ε</sup></i>	"ashpit, rubbish tip"
<i>À-Dūk<sup>ɔ̄</sup></i>	Aruk	<i>dūk<sup>ɔ̄</sup></i>	"pot"

Another strategy is pretended adoption by an outsider, resulting in names like *Jambeedu* "Fulani", or

<i>À-Sāan<sup>a/</sup></i>	Asana	<i>sāan<sup>a/</sup></i>	"guest, stranger"
<i>À-Sāan-dú<sup>+</sup></i>	Sadow	<i>sāan<sup>a/</sup></i>	"guest" + <i>dāy<sup>+</sup></i> "man"
<i>À-Zàngbèog<sup>ɔ̄</sup></i>	Azangbego	<i>Zàngbèog<sup>ɔ̄</sup></i>	"Hausa person"
<i>À-Nàsà-pyāk<sup>a</sup></i>	Anasapoaka		"European woman"; also a birth-circumstance name: "child delivered by a European midwife"

Names based on adjectives:

<i>Ñ-Dāvug<sup>ɔ̄</sup></i>	Ndago	<i>dāvug<sup>ɔ̄</sup></i>	"male"
<i>Ì-Pyāk<sup>a</sup></i>	Mpoaka	<i>pyāk<sup>a</sup></i>	"female"
<i>Ì-Bīl<sup>a</sup></i>	Mbillah	<i>bīl<sup>a</sup></i>	"little"

Muslims often use day-of-the-week names depending on birth; these are not so common among traditional Kusaasi, as the seven-day week was not generally in use; older persons still do not use it, adhering to the older three-day cycle of markets instead.

<i>À-Tínì<sup>+</sup></i>	"Girl born on Monday"
<i>À-Tàláatà<sup>+</sup></i>	"Girl born on Tuesday"
<i>Àrúumà<sup>+</sup></i>	"Boy born on Friday"
<i>À-Síbì<sup>+</sup></i>	"Boy born on Saturday"

Muslims also have formal Islamic Arabic names, sometimes adapted to Kusaal phonology, like *Dàhamáani<sup>+</sup>/Dàsmáani<sup>+</sup>* عبد الرحمن *ʿAbdu-r-Raḥma:n(i)*.



KKY p6 has the interesting girl's personal name *Amɔryam*, perhaps an adaptation of the Arabic *مريم Maryam(u)* "Mary" as *À-M̄r Yā'm* "Has Common Sense."

Christians use English (or French) baptismal names in speaking European languages, and in official contexts use their Kusaal personal names as "surnames."

### 32.3 Place names

For the form in which Kusaal personal and place names appear in English-language contexts see [32.4](#).

Many, though by no means all, Kusaal place names have transparent meanings.

[John Turl](#) maintains a site dedicated to Ghanaian toponymy, with much of interest both for the Kusaasi area and elsewhere. His research has helped me improve this section considerably. He does not always concur with my analyses: consult his site for details.

Place names include:

<i>B̀k̀</i> <sup>ɔ</sup>	Bawku	"pit, geographical depression"
<i>K̀k̀</i> <sup>a/</sup>	Koka	"mahogany tree"
<i>K̀k̀p̀r̀g̀</i> <sup>a</sup>	Kokpariga	"palm tree"
<i>T̀mp̀áǹ</i> <sup>nɛ</sup>	Tempane	perhaps "new villages"
<i>M̀'̀à-ǹɔ̀r̀</i> <sup>ɛ/</sup>	Mogonori	"lakeside" ("lake-mouth")
<i>B̀s̀-γ̀ǹ</i> <sup>nɛ/</sup>	Basyonde	"abandon sacks" ?reason for name
<i>K̀g̀v̀r̀</i> <sup>ɛ/</sup>	Kugri	"stone"
<i>B̀g̀v̀r̀</i> <sup>ɛ</sup>	Bugri	<i>b̀g̀v̀r̀</i> <sup>ɛ</sup> , object housing a <i>ẁǹ</i> <sup>nɛ/</sup> "spirit"
<i>Ẁd̀-ń̀ỳá'̀aŋ̀</i> <sup>a</sup>	Woriyanga	archaic for <i>ẁd̀-ń̀ỳá'̀aŋ̀</i> <sup>a</sup> "mare"
<i>B̀i-ǹà'̀ab̀</i> <sup>a</sup>	Binaba	"prince"
<i>G̀àarv̀</i> <sup>+</sup>	Garu	Hausa <i>g̀àaruu</i> "wall around a town or compound"
<i>Ẁid-ǹà'̀ab̀</i> <sup>a</sup>	Widinaba	"chief of the clan <i>Ẁid̀</i> <sup>a</sup> "
<i>P̀ūs̀g̀</i> <sup>a/</sup>	Pusiga	"tamarind"
<i>T̀l̀</i> <sup>ɛ/</sup>	Tilli	"tree trunk" cf Toende Kusaal <i>t̀l̀ id</i> (Hasiyatu Abubakari, p.c.)
<i>D̀ènnv̀g̀</i> <sup>ɔ</sup>	Denugu	No known meaning
<i>P̀ùl̀ma K̀ú'̀è̀m̀</i> <sup>m</sup>	Pulimakom	"water by <i>p̀ùl̀ma</i> <sup>+</sup> (grass sp)"
<i>Ẁid̀ā̀aǹ</i> <sup>a</sup>	Widana	for <i>Ẁid̀-đ̀ā̀aǹ</i> <sup>a</sup> "Horse-Owner", title of a chief's <i>ǹɔ̀-d̀í'̀ès̀</i> <sup>a</sup> "linguist" <a href="#">33</a> . Usual informal name for Pulimakom, as the seat of this particular linguist.

<i>Mì'isug</i> <sup>a</sup>	Missiga	Explained locally as from "mission" i.e. the Assemblies of God mission around which the village grew; perhaps influenced by <i>mì'isug</i> <sup>ɔ</sup> "dunking" (not in my materials, but cf Toende <i>mi'isuk</i> "baptism", KED <i>mi'is</i> "duck someone")
<i>Sā-bíl</i> <sup>a</sup>	Zebilla	"small grass"?
<i>Sā-píəlìg</i> <sup>a</sup>	Sapeliga	" <i>Isobertia Doka</i> " ("white grass")
<i>Kòl-tā'amís</i> <sup>ε</sup>	Kultamse	"dog almonds" ("river shea trees")

WK thought that the first component of the names *Sā-bíl*<sup>a</sup> and *Sā-píəlìg*<sup>a</sup> was a plant used in making brooms. \**Sāa*<sup>=/</sup> does not occur in my data (only *sāa*<sup>=</sup> "rain") or in Niggli's dictionary, but the cognate *sáagá* is glossed in his Farefare dictionary as "a kind of grass used for making brooms", and the Mampruli/Dagbani cognate *saa* refers to a grass *Sporobolus subglobosus* A. Chev ([Dagomba Plant Names](#) Blench 2006) used for binding materials together to make mats and traps, and presumably also brooms. Compounds need not have the literal sense of the components [16.11.1](#) [16.10.2.1](#), especially with names for plant and tree species: John Turl has located a careful 1935 report by an assistant agricultural officer which lists among local trees in the Farefare/Nabit area *sapelaga Isobertia doka*; it seems likely that this is the meaning of *sā-píəlìg*<sup>a</sup>. The report also lists *ta-anga* "Butyrospermum parkii" (Kusaal *tá'an*<sup>a</sup>), and *kulta-anga* "Andira inermis", so *kòl-tá'an*<sup>a</sup> is probably this "dog almond."

<i>Kòlugúŋ</i> <sup>ɔ</sup>	Kulungungu	?? <i>kòl-gùŋ</i> <sup>a</sup> "river-kapok"
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Turl cites a Bisa-speaking informant who suggests a more plausible origin in Bisa "Kuurgongu", "Crooked Sheanut Tree." Prost's grammar of Bisa confirms that Bisa adjectives follow head nouns, and his dictionary cites *kúr* "karité." The second element is probably a simplex form of Prost's *gongeda* "arqué" (*ng* = [ŋ]); Prost notes an adjectival suffix *-da* "s'appliquant aux grandes choses ou marquant intensité."

<i>Àgòl</i> <sup>lε</sup>	Agolle	the Kusaasi area east of the White Volta; cf <i>àgól</i> <sup>lε</sup> "upwards"; for the H toneme see <a href="#">8.3</a> .
<i>Tùen</i> <sup>nε</sup>	Toende	Kusaasi area west of the White Volta; cf <i>tùen</i> <sup>nε</sup> "in front", "West"

For points of the compass, WK gave as accepted terms

N	<i>Bārvug</i> <sup>ɔ/</sup>	"Bisa country"
E	<i>Ñyá'aŋ</i> <sup>a</sup>	"behind"
S	<i>Zuēya</i> <sup>+</sup>	"hills" (i.e. the Gambaga Escarpment)
W	<i>Tùən</i> <sup>nɛ</sup>	"in front"

reflecting the traditional Kusaasi West-facing orientation. For "South" and "North", KB has respectively *ya-dagɔbug yà dàgòbɔg*<sup>a</sup> "your left hand" and *ya-datiuŋ yà dàtiuŋ*<sup>ɔ</sup> "your right hand." KB similarly has *ya-nya'aŋ* "East", *ya-tuona* "West."

Words referring to ethnic groups and clans consistently have place names formed from the same stem with the suffix *-g*<sup>ɔ</sup>. These can be nonce-formations and need not necessarily refer to any established political entity or permanent settlement:

<i>Kùtāuŋ</i> <sup>ɔ/</sup>	any place inhabited by the clan <i>Kùtām</i> <sup>ma/</sup>
<i>Kūsáùg</i> <sup>ɔ</sup>	"Kusaasiland"
<i>Mòɔg</i> <sup>ɔ</sup>	"Mossi country" ( <i>Mòɔg Ná'àb</i> <sup>a</sup> "Moro Naba, King of the Mossi")

Places outside *Kūsáùg*<sup>ɔ</sup> generally do not have Kusaal names (an exception is *Sānkáàñs*<sup>ɛ</sup> "Sankanse" in Burkina Faso.) For "Accra" the Twi-derived name *Ankara* is usual. Niggli's dictionary has Toende *Wa'aruk* for "Ouagadougou", but I could not elicit any Agolle equivalent. The form looks like *\*Wā'adúg*<sup>ɔ</sup> "Place of the Dancers (*wā'adíb*<sup>a</sup>)", but the Mooré name *Waogdgo* apparently does not have a transparent meaning for Mooré speakers, and its true etymology is uncertain.

There seems to be no Agolle Kusaal proper name for the White Volta river, which is simply *kɔlug*<sup>a</sup> "river"; presumably this is simply because it is the only real river within *Kūsáùg*<sup>ɔ</sup>.

### 32.4 Kusaal personal and place names in English

When speaking English or French, Kusaasi cite Kusaal personal and place names in a guise which resembles the Long Form, showing the underlying final vowel without apocope: thus *À-Wīn*<sup>nɛ/</sup> from *Widɪ-ñyá'anj*<sup>a</sup> will introduce himself as "Awini" from "Woriyanga." Similarly "Kusaasi" for *Kūsáàs*<sup>ɛ</sup>, "Bawku" for *Bòk*<sup>ɔ</sup>, and many other examples in [32.2](#) and [32.3](#).

If this behaviour were confined to personal names, it might plausibly be attributed to the incorporation of the vocative prosodic clitic, but, as has been seen, it is equally characteristic of place names. Moreover, the form "Woriyanga" for *Widɪ-ñyá'anj*<sup>a</sup> shows a characteristically Mampruli rather than Kusaal form for the initial combining form of "horse": Mampruli *wuri-* versus Kusaal *wid-*. It seems probable that this reflects a convention which originally arose from the fact that the British came to know the region through Mamprussi guides and interpreters. According to Tony Naden (p.c.) a parallel development had taken place earlier in Mamprussi country when the British arrived with Dagomba guides: thus "Gambaga" for the Mampruli place name "Gambaa."

However, not all these forms can be explained without further ado as Mampruli. The place name "Widana", for example, resembles Kusaal *Widāan*<sup>a</sup> rather than Mampruli *Wuddaana* "(title of) a chief's linguist" and female personal names like "Awimpoaka" *À-Wīn-pyák*<sup>a</sup> even show the characteristic Agolle Kusaal vowel breaking, in contrast to the Toende form *Awɪnpɔka* (Niggli.) Again, the personal name "Akudugu" *À-Kūdug*<sup>ɔ</sup> shows the postvocalic *-d-* characteristic of Agolle Kusaal rather than Mampruli. The Toende place name *Tīl*<sup>ɛ/</sup> "Tilli" corresponds to Toende Kusaal *tíl* and Farefare *tíllé* "tree trunk", but no cognate word appears in Naden's extensive dictionary of Mampruli. Accordingly, even if the convention of preserving underlying final vowels originated from transposition of personal and place names from Kusaal into Mampruli, it has apparently been generalised by analogy and can now produce forms which cannot be regarded as Mampruli.

Cases also occur of straightforward reproduction of the Kusaal, as in "Aruk", alongside "Aruku" for the personal name *À-Dōk*<sup>ɔ/</sup>.

### 32.5 Ethnic group and clan names

Names for the group belong to the  $^a|b^a$  or  $g^a|s^\varepsilon$  classes (apart from *Zàngbèog*<sup>ɔ</sup> "Hausa" and *Nàsāara*<sup>+</sup> "European") and their language to the  $l^\varepsilon$  subclass of  $r^\varepsilon|a^+$ . The place they inhabit has the suffix  $-g^\partial$ .

<u>Ethnic gp sg</u>	<u>Ethnic gp pl</u>	<u>Language</u>	<u>Place</u>	
<i>Kūsáa</i> <sup>=</sup>	<i>Kūsáàs</i> <sup>ε</sup>	<i>Kūsáàl</i> <sup>ε</sup>	<i>Kūsábog</i> <sup>ɔ</sup>	Kusaasi
<i>Ñwāmpūrg</i> <sup>a/</sup>	<i>Ñwāmpūrs</i> <sup>ε/</sup>	<i>Ñwāmpūrl</i> <sup>ε/</sup>	<i>Ñwāmpūrg</i> <sup>ɔ/</sup>	Mamprussi
<i>Bārg</i> <sup>a/</sup>	<i>Bārs</i> <sup>ε/</sup>	<i>Bāt</i> <sup>ε/</sup>	<i>Bārg</i> <sup>ɔ/</sup>	Bisa
<i>Mùa</i> <sup>+</sup>	<i>Mòɔs</i> <sup>ε</sup>	<i>Mòɔl</i> <sup>ε</sup>	<i>Mòɔg</i> <sup>ɔ</sup>	Mossi
<i>Dàgbān</i> <sup>nε/</sup>	<i>Dàgbām</i> <sup>ma/</sup>	<i>Dàgbān</i> <sup>nε/</sup>	<i>Dàgbāng</i> <sup>ɔ/</sup>	Dagomba
<i>Bìn</i> <sup>nε</sup>	<i>Bìm</i> <sup>ma</sup>	<i>Bìn</i> <sup>nε</sup>	<i>Bìng</i> <sup>ɔ</sup>	Moba
<i>Sìmiig</i> <sup>a</sup>	<i>Sìmiis</i> <sup>ε</sup>	<i>Sìmiil</i> <sup>ε</sup>	<i>Sìmiug</i> <sup>ɔ</sup>	Fulbe
<i>Yàaŋ</i> <sup>a</sup>	<i>Yàaŋs</i> <sup>ε</sup>	<i>Yàan</i> <sup>nε</sup>		Yansi
<i>Gūríg</i> <sup>a</sup>	<i>Gūrís</i> <sup>ε</sup>	<i>Gūrín</i> <sup>nε</sup>		Farefare
<i>Yārg</i> <sup>a/</sup>	<i>Yārs</i> <sup>ε/</sup>	<i>Yāt</i> <sup>ε/</sup>		Yarsi
<i>Zàngbèog</i> <sup>ɔ</sup>	<i>Zàngbèed</i> <sup>ε</sup>	<i>Zàngbèel</i> <sup>ε</sup>		Hausa
<i>Bùlg</i> <sup>a</sup>	<i>Bùls</i> <sup>ε</sup>	<i>Bùl</i> <sup>lε</sup>		Bulsa
<i>Tàlŋ</i> <sup>a</sup>	<i>Tàls</i> <sup>ε</sup>	<i>Tàlɪn</i> <sup>nε</sup>		Tallensi
<i>Nàbɪd</i> <sup>a</sup>	<i>Nàbɪdɪb</i> <sup>a</sup>	<i>Nàbɪr</i> <sup>ε</sup>		Nabdema
<i>Bùsáŋ</i> <sup>a</sup>	<i>Bùsáàŋs</i> <sup>ε</sup>	<i>Bùsáàŋl</i> <sup>ε</sup>		Bisa
<i>Nàsāara</i> <sup>+</sup>	<i>Nàsàa-nàm</i> <sup>a</sup>	<i>Nàsāal</i> <sup>ε</sup>		European
<i>Kàmbùŋ</i> <sup>a</sup>	<i>Kàmbùmɪs</i> <sup>ε</sup>	<i>Kàmbùnɪr</i> <sup>ε</sup>		Ashanti

*Bārs*<sup>ε/</sup> is "Bisa" generally, not just the Bareka; *Bìm*<sup>ma</sup> similarly is "Moba" in general, and not only the Bemba (WK.)

Note

<i>Tùen</i> <sup>nε</sup>	"Toende area"
<i>Tùennɪr</i> <sup>ε</sup>	"Toende dialect of Kusaal"
<i>Àgòl</i> <sup>lε</sup>	"Agolle area"
<i>Àgòl</i> <sup>lε</sup>	"Agolle dialect of Kusaal"
<i>Ò pjàŋ'ad Àgòl.</i> 3AN speak:IPFV Agolle.	"She speaks Agolle Kusaal."

Kusaasi clan names include, among many others:

<u>Singular</u>	<u>Plural</u>	<u>Place</u>	
<i>Kùtān</i> <sup>nε/</sup>	<i>Kùtām</i> <sup>ma/</sup>	<i>Kùtāuŋ</i> <sup>ɔ/</sup>	WK's clan
<i>Zùà</i> <sup>+</sup>	<i>Zùəs</i> <sup>ε</sup>		
	<i>Zùà-sābulís</i> <sup>ε</sup>		subclans
	<i>Zùà-wiib</i> <sup>a</sup>		
	or <i>Zùà-wiis</i> <sup>ε</sup>		
<i>Wiid</i> <sup>a</sup>	<i>Wiid-nam</i> <sup>a</sup>	<i>Wiidug</i> <sup>ɔ</sup>	
<i>Nàbɪd</i> <sup>a</sup>	<i>Nàbɪdɪb</i> <sup>a</sup>	<i>Nàbɪdug</i> <sup>ɔ</sup>	
<i>Gòɔg</i> <sup>a</sup>	<i>Gòɔs</i> <sup>ε</sup>	<i>Gòɔg</i> <sup>ɔ</sup>	
<i>Sà'dàbùà</i> <sup>+</sup>	<i>Sà'dàbùəs</i> <sup>ε</sup> - <i>bùəb</i> <sup>a</sup>	<i>Sà'dàbòɔg</i> <sup>ɔ</sup>	
	<i>Nà'dàm</i> <sup>ma</sup>	<i>Nà'dauŋ</i> <sup>ɔ</sup>	
	<i>Gùm-dim</i> <sup>a</sup>	<i>Gùm</i> <sup>mε</sup>	

*Nàbɪd*<sup>a</sup> as a clan name is different from the ethnic group "Nabdema" (WK.)

### 32.6 Trees and fruits

Tree names are almost all *g*<sup>a</sup>|*s*<sup>ε</sup> class, like *tùg*<sup>a</sup> "tree"; their fruits are classes *r*<sup>ε</sup>|*a*<sup>+</sup> or *g*<sup>ɔ</sup>|*d*<sup>ε</sup>.

<u>Tree sg</u>	<u>Tree pl</u>	<u>Fruit sg</u>	<u>Fruit pl</u>	
<i>āāndɪg</i> <sup>a</sup>	<i>āāndɪs</i> <sup>ε</sup>	<i>āāndɪr</i> <sup>ε</sup>	<i>āānda</i> <sup>+</sup>	Vitex doniana
<i>dùāñ</i> <sup>+</sup>	<i>dòɔñs</i> <sup>ε</sup>	<i>dòɔñg</i> <sup>ɔ</sup>	<i>dòɔñd</i> <sup>ε</sup>	dawadawa
<i>gāāñ</i> <sup>=/</sup>	<i>gāāñs</i> <sup>ε/</sup>	<i>gāñr</i> <sup>ε/</sup>	<i>gāñyá</i> <sup>+</sup>	Nigerian ebony
<i>gùŋ</i> <sup>a</sup>	<i>gùmɪs</i> <sup>ε</sup>	<i>gùm</i> <sup>mε</sup>	<i>gùma</i> <sup>+</sup>	kapok
<i>kìkàŋ</i> <sup>a</sup>	<i>kìkàmɪs</i> <sup>ε</sup>	<i>kìkàm</i> <sup>mε</sup>	<i>kìkàma</i> <sup>+</sup>	fig tree
<i>kpùkpàrɪg</i> <sup>a</sup>	<i>kpùkpàrɪs</i> <sup>ε</sup>	<i>kpùkpàr</i> <sup>ε</sup>	<i>kpùkpàra</i> <sup>+</sup>	palm
<i>pūsɪg</i> <sup>a/</sup>	<i>pūsɪs</i> <sup>ε/</sup>	<i>pūsɪr</i> <sup>ε/</sup>	<i>pūsá</i> <sup>+</sup>	tamarind
<i>sīsíbɪg</i> <sup>a</sup>	<i>sīsíbɪs</i> <sup>ε</sup>	<i>sīsíbɪr</i> <sup>ε</sup>	<i>sīsíbà</i> <sup>+</sup>	neem
<i>tá'aŋ</i> <sup>a</sup>	<i>tā'amɪs</i> <sup>ε</sup>	<i>tá'am</i> <sup>mε</sup>	<i>tā'amá</i> <sup>+</sup>	shea butter
<i>tè'εg</i> <sup>a</sup>	<i>tè'εs</i> <sup>ε</sup>	<i>tè'og</i> <sup>ɔ</sup>	<i>tè'εd</i> <sup>ε</sup>	baobab
<i>vúəŋ</i> <sup>a</sup>	<i>vūəmɪs</i> <sup>ε</sup>	<i>vúər</i> <sup>ε</sup>	<i>vūáa</i> <sup>=</sup>	red kapok

The stems for "red kapok" and its fruit are slightly different: tree \**vuəm*- fruit \**vuəg*-

### 32.7 Body parts

Most human and animal body parts belong to the classes  $r^\varepsilon|a^+$  and  $g^\partial|d^\varepsilon$ :

<i>bjāuñk</i> <sup>∂</sup>	"shoulder"	<i>bīān</i> <sup>nε</sup>	"shin"
<i>bì'isur</i> <sup>ε</sup>	"woman's breast"	<i>dūm</i> <sup>mε</sup>	"knee"
<i>gbāuŋ</i> <sup>∂/</sup>	"animal skin; lip, eyelid"	<i>gbēr</i> <sup>ε/</sup>	"thigh"
<i>gbè'og</i> <sup>∂</sup>	"forehead"	<i>gbìn</i> <sup>nε</sup>	"buttock"
<i>gbìn-vòwñr</i> <sup>ε</sup>	"anus"	<i>gūr</i> <sup>ε</sup>	"ridge of back"
<i>í </i> <sup>ε</sup>	"horn"	<i>kōbir</i> <sup>ε</sup>	"bone"
<i>kōñbug</i> <sup>∂</sup>	"hair"	<i>kpeñdir</i> <sup>ε/</sup>	"cheek"
<i>kpìsukpì </i> <sup>ε</sup>	"fist"	<i>lām</i> <sup>mε/</sup>	"gum"
<i>lān</i> <sup>nε</sup>	"testicle"	<i>lōgur</i> <sup>ε</sup>	"organ, member"
<i>nìn-gbīŋ</i> <sup>∂/</sup>	"human skin, body"	<i>nìn-gòwr</i> <sup>ε</sup>	"neck"
<i>nóbùr</i> <sup>ε</sup>	"leg"	<i>nōb-púmpàuŋ</i> <sup>∂</sup>	"foot"
<i>nōwr</i> <sup>ε/</sup>	"mouth"	<i>ñyīn</i> <sup>nε/</sup>	"tooth"
<i>ñyōwd</i> <sup>ε</sup>	"intestines"	<i>ñyō'wŋ</i> <sup>∂/</sup>	"chest"
<i>ñyōwr</i> <sup>ε</sup>	"nose"	<i>pèn</i> <sup>nε</sup>	"vagina"
<i>pūr</i> <sup>ε/</sup>	"stomach"	<i>sōwñr</i> <sup>ε</sup>	"liver"
<i>tàsintà </i> <sup>ε</sup>	"palm"	<i>tàtà </i> <sup>ε</sup>	"palm"
<i>tìəŋ-gūr</i> <sup>ε</sup>	"chin"	<i>tùb-kpìr</i> <sup>ε</sup>	"half of jaw"
<i>tùbur</i> <sup>ε</sup>	"ear"	<i>yìər</i> <sup>ε</sup>	"jaw"
<i>yū'ər</i> <sup>ε</sup>	"penis"	<i>zàñ </i> <sup>ε</sup>	"umbilicus"
<i>zì im</i> <sup>mε</sup>	"tongue"	<i>zūg</i> <sup>∂/</sup>	"head"
<i>zūəbúg</i> <sup>∂</sup>	"human head hair"	<i>zūr</i> <sup>ε</sup>	"tail"

There are significant exceptions, however:

$g^a|s^\varepsilon$  class:

<i>nú'ùg</i> <sup>∂</sup>	"hand" <a href="#">9.3.2.1</a>	perhaps as the prototypical tool.
<i>nū'-bíl</i> <sup>a</sup>	"finger"	but <i>nū'-dàwòg</i> <sup>∂</sup> "thumb"
<i>nū'-íñ'a</i> <sup>+</sup>	"fingernail"	<i>nōb-bíl</i> <sup>a</sup> "toe"
<i>nōb-íñ'a</i> <sup>+</sup>	"toenail"	<i>sīa</i> <sup>+</sup> "waist"
<i>ñyá'aŋ</i> <sup>a</sup>	"back"	<i>tìəŋ</i> <sup>a</sup> "beard"

$f^\partial|t^+$  class:

<i>nīf</i> <sup>/</sup>	"eye"	as a "small round thing"?
<i>sjà-nīf</i> <sup>/</sup>	"kidney"	as a compound of "eye"
<i>sūñf</i> <sup>/</sup>	"heart"	beside <i>sūuñr</i> <sup>ε/</sup> $r^\varepsilon a^+$ class

### 32.8 Colour terms

Kusaal, like many local languages, has a basic three-colour system:

<i>zèñ'og</i> <sup>ɔ</sup>	"red"	covering all reddish shades
<i>sābilíg</i> <sup>a</sup>	"black"	covering all darker shades of colour
<i>pìəlíg</i> <sup>a</sup>	"white"	covering all lighter shades of colour

*Wiug*<sup>ɔ</sup> "red" is synonymous with *zèñ'og*<sup>ɔ</sup>. Kusaal has many more or less standardised expressions for colour (e.g. *wōv támpōvr nē* "like ash", i.e. "grey"), often with parallels in other West African languages. The system is described as "three-colour" because any colour can be allocated correctly to one of only three terms, and not because only three colour terms exist.

### 32.9 Time expressions

Answers to *bò-wìn*<sup>nɛ</sup> "what time of day?"

<i>bēogv-n</i> <sup>ɛ/</sup>	"morning"	<i>àsùbá</i> <sup>+</sup>	"dawn" (← Arabic)
<i>bèkèkèoňg</i> <sup>ɔ</sup>	"very early morning"	<i>zàam</i> <sup>m</sup>	"evening"
<i>wìn-līr</i> <sup>ɛ</sup>	"sunset"	<i>yú'vɔ</i> <sup>ɔ</sup>	"night"
<i>wìn-kòɔňr</i> <sup>ɛ</sup>	"sunset"	<i>nīntāŋ</i> <sup>a/</sup>	"heat of the day, early afternoon"

*Win*<sup>nɛ</sup> "time of day" (cf *wìnnig*<sup>a</sup> "sun"), always with a predeterminer.

There are no traditional expressions for clock time; NT/KB adapts from Hausa:

<i>kérufà àtáň</i> <sup>!</sup>	"three o'clock"	Hausa:	<i>karfèe ukù</i>
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The deictic particle *ňwà* "this" is commonly attached to time words:

<i>zàam ñwá</i>	"this evening"	[za:ma]	
<i>yú'vɔ ñwá</i>	"tonight"	[yʊ:ɲ:a]	<a href="#">8.5.1</a>

The day begins at sunrise.

Answers to *bōn-dáàr*<sup>ɛ</sup> "which day?":

<i>zīná</i> <sup>+</sup>	"today"	<i>sù'əs</i> <sup>a</sup>	"yesterday"
<i>bēog</i> <sup>ɔ</sup>	"tomorrow"	<i>dāar</i> <sup>ɛ</sup>	"day after tomorrow/ day before yesterday"



Weekday names are of Arabic origin, the seven-day week being a Muslim importation. The traditional "week" is a three day market cycle, differing from village to village and carrying on regardless of any weekdays or festivals. Many older speakers do not use weeks at all, but count in days instead.

<i>Àláasìd dáàr</i> <sup>ε</sup>	"Sunday"	<i>Àtínì dáàr</i> <sup>ε</sup>	"Monday"
<i>Àtáláatà dáàr</i> <sup>ε</sup>	"Tuesday"	<i>Àlárìbà dáàr</i> <sup>ε</sup>	"Wednesday"
<i>Àlàmiisì dáàr</i> <sup>ε</sup>	"Thursday"	<i>À(r)zúmà dáàr</i> <sup>ε</sup>	"Friday"
<i>Àsíbitì dáàr</i> <sup>ε</sup>	"Saturday"		

*Dāar*<sup>ε</sup> "day" is "twenty-four hour period" (*nīntān* "day as opposed to night") and is used with predeterminers to specify a particular day; the word *dàbisir*<sup>ε</sup> is also used for "day" in counting periods of time, occurring usually in the plural:

<i>Dābá àyóṗṗè dáàr kà fù ná lēb nā.</i>	"You'll come back in a week."
<i>Dābá àyóṗṗè kà fù ná lēb nā.</i>	"You'll come back for a week."
<i>Àláasìd dáàr kà fù ná lēb nā.</i>	"You'll come back on Sunday."
<i>Tì kpélìm ànínā dábisà bī̀ǎlá.</i>	"We stayed there a few days."

Longer periods of time:

<i>dābá àyóṗṗè</i>	"week"	also <i>bákpàṗ</i> ← Hausa <i>bakwàì</i> "seven"
<i>ñwādìg<sup>a/</sup></i>	"moon, month"	
<i>ñwād-kánì kēn nā lā</i>	"next month"	("the month which is coming")
<i>ñwād-kánì gàad lā</i>	"last month"	("the month which has passed")

There are two seasons:

<i>sēoṅṅ<sup>ᵟ</sup></i>	"rainy season"	<i>úun<sup>nε</sup></i>	"dry season"
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The Harmattan part of *úun* is called *sāpál<sup>lε</sup>* and the very hot humid part before the rains is *dàwàlìg<sup>a</sup>*.

<i>yùum<sup>mε</sup></i>	"year"	<i>dūnná<sup>+</sup></i>	"this year"
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"Time" in general is the irregular noun *sānjá<sup>+</sup>* pl *sānsá<sup>+</sup>* cb *sān-*; "time of day" is *wìn<sup>nε</sup>*; "time" as in "several times" is *nōɔr* [16.4.2.4](#). Examples with *sānjá<sup>+</sup>*:

<i>sān-kánè?</i>	"when?"	<i>sān-kán lā</i>	"at that time"
<i>sānjá kám</i>	"all the time"	<i>sānjá bèdvgū</i>	"a long time"
<i>sānsá bèdvgū</i>	"many times"	<i>sānjá bī̀ǎlá</i>	"for/in a short time"

### 33 General vocabulary

Words are ordered by Short Forms.

Vowel glottalisation, and the distinctions *n/ñ*, *ə/e/ɛ/ε*, *i/ɨ/j*, *o/ɔ* and *u/ʊ/ɯ* are ignored in the ordering. The consonant *ŋ* follows *n*.

Compounds are not listed if they are regularly formed and have transparent meanings. Those that *are* listed are included under the entry for the first element.

Nouns are listed under the singular form. Adjectives are listed under the *g<sup>a</sup>|s<sup>ε</sup>* class form if extant, if not, then *g<sup>ɔ</sup>|d<sup>ε</sup>* or *r<sup>ε</sup>|a<sup>+</sup>*. Variable verbs are listed under the perfective.

Variable-verb imperfectives and imperatives are listed only where irregular. Gerunds, agent nouns and dynamic adjectives are not listed unless they show some irregularity of form or a specialised meaning.

Personal names and Kusaasi place names are not listed below: see [32.2](#) [32.3](#) for examples.

I have attempted to list all function words, with references to the sections in which they are treated above.

All words occurring in the paradigms and examples in the grammar should be included. I have added other words from my collected materials, and words from David Spratt's "A Short Kusaal-English Dictionary" (KED below) in all cases where I was able to determine the tones and also the quality of *i u* versus *ɪ ʊ* where necessary. Unfortunately, time considerations prevented me from systematically going through KED in its entirety with my informants.

Words listed as derived from Arabic are probably all borrowed via other languages, generally Hausa [15.1](#).

Binomial names of plants taken from Haaf (see References) are likely to be reliable; he checked the identifications with local botanical experts.

#### Abbreviations:

<i>adj</i>	adjective	<i>adv</i>	adverb
<i>agt</i>	agent noun	<i>cb</i>	combining form
<i>ger</i>	gerund	<i>imp</i>	imperative
<i>ipfv</i>	imperfective	<i>iv</i>	invariable verb
<i>n</i>	noun	<i>pl</i>	plural
<i>q</i>	quantifier	<i>res</i>	resultative
<i>sg</i>	singular	<i>vv</i>	variable verb

## A

**à-** personifier proclitic [16.6](#)

**āāñdɪg<sup>a</sup>** pl *āāñdɪs<sup>ɛ</sup>* cb *āāñd-* n. black plum tree, *Vitex doniana* [32.6](#)

**āāñdɪr<sup>ɛ</sup>** pl *āāñda<sup>+</sup>* n. black plum fruit [32.6](#)

**āāñs<sup>ɛ</sup>** vv. tear

**àbùlá<sup>+</sup>** how many-fold? [16.4.2.4](#)

**àbùyí<sup>+</sup>** **àbùtáñ<sup>+</sup>** **àbùnāasí<sup>+</sup>** adv. twice, three times etc [16.4.2.4](#)

**à-dàalúŋ<sup>ɔ</sup>** pl *à-dàalís<sup>ɛ</sup>* *à-dàalímìs<sup>ɛ</sup>* cb *à-dàalúŋ-* n. stork [16.6](#)

**àdàkón<sup>+</sup>** q. one [16.4.2.2](#)

**àɛñ<sup>a</sup>** ger *àañlím<sup>m</sup>* iv. be something/somewhat [21.2](#) [8.5.3](#) [8.5.2](#)

**àeñ<sup>+</sup>** vv. get torn; *res* adj *àañlúŋ<sup>ɔ</sup>* torn

**à-gáùŋg<sup>ɔ</sup>** pl *à-gáàñd<sup>ɛ</sup>* cb *à-gāñ-* n. pied crow [16.6](#)

**àgól<sup>ɛ</sup>** **àgōlá<sup>+</sup>** adv. upwards

**Àgòl<sup>ɛ</sup>** n. Agolle district of Kusaasi territory; n. Agolle Kusaal dialect

**à-kōra-díàm<sup>ma</sup>** pl *à-kōra-díàm-nàm<sup>a</sup>* n. praying mantis [16.6](#)

**àlá<sup>+</sup>** adv. thus [17.7](#)

**àlá<sup>+</sup>** q. so many; how many? [17.7](#)

**àlááfù<sup>+</sup>** n. health; in greetings [31](#) cf *lááfɪya<sup>+</sup>* ← Arabic العافية *ʔal-ʕa:fiya(tu)*

**Àláasìd dáàr<sup>ɛ</sup>** n. Sunday [32.9](#) ← Arabic

**Àlànísì dáàr<sup>ɛ</sup>** n. Thursday [32.9](#) ← Arabic

**Àlárɪbà dáàr<sup>ɛ</sup>** n. Wednesday [32.9](#) ← Arabic

**àlá zùg<sup>ɔ</sup>** therefore [25.1.1](#) [17.7](#)

**àlòpìr<sup>ɛ</sup>** pl *àlòpìya<sup>+</sup>* n. aeroplane ← English

**àmáa<sup>=</sup>** but [24.1.3](#) ← Hausa ← Arabic

**àmēŋá<sup>+</sup>** adv. really, truly [17.4](#)

**àmí** amen ← Arabic آمين; in replies to greetings [31](#)

**à-mús<sup>ɛ</sup>** pl *à-mús-nàm<sup>a</sup>* n. cat [16.6](#); cf Hausa *mussàa id*

**ànāasí<sup>+</sup>** q. four [16.4.2.1](#)

**àní<sup>+</sup>** adv. there [17.7](#)

**àní<sup>=</sup>** q. eight [16.4.2.1](#)

**àní nā<sup>+/</sup>** adv. there [17.7](#)

**àníŋà<sup>+</sup>** adv. promptly [17.4](#)

**àń'òñ<sup>ɛ</sup>** who? [16.3.4](#)

**àñrɔŋ<sup>ɔ</sup>** pl *àñrɔma<sup>+</sup>* cb *àñrɔŋ-* n. boat (written *aarɔŋ* in the 1976/1996 NT)

**āñs<sup>ɛ</sup>** vv. pluck (leaves)

**āñsìb<sup>a</sup>** pl *āñs-nám<sup>a</sup>* cb *āñs-* n. mother's brother [32.1](#)

**āñsɪg<sup>ɛ/</sup>** vv. break at an angle

**āñsíŋ<sup>a</sup>** pl *āñsí<sup>ɛ</sup>* cb *āñsɪŋ-* n. (man's) sister's child [32.1](#)

**àntù'a<sup>=</sup>** pl *àntù'əs<sup>ɛ</sup>* cb *àntù'à-* n. lawsuit

**ànū<sup>+</sup>** q. five [16.4.2.1](#)

**àñwá**<sup>+</sup> *adv.* like this [17.7](#)

**ànzúrfà**<sup>+</sup> *n.* silver; cf Hausa *azùrfaa* ← Berber \**a-zrəf*, Souag 2016

**àrazàk**<sup>a</sup> *pl* àrazà<sup>a</sup> *as*<sup>ε</sup> *cb* àrazà<sup>-</sup> - Generally used in *pl*: *n.* wealth, riches ← Arabic الرزق *ʔar-rizq(u)*

**àrazánà**<sup>+</sup> *n.* heaven ← Arabic الجنة *ʔal-janna(tu)*

**Àrzúmà dáàr**<sup>ε</sup> *n.* Friday [32.9](#) ← Arabic

**àsés** except, unless [18.1](#) [24.1.3](#) ← Hausa *sai*

**Àsíbitì dáàr**<sup>ε</sup> *n.* Saturday [32.9](#) ← Arabic

**àsìda**<sup>+</sup> *adv.* truly [17.4](#)

**àsùbá**<sup>+</sup> *n.* dawn ← Arabic الصباح *ʔas<sup>ε</sup>-s<sup>ε</sup>aba:ħ(u)*

**àtán**<sup>+</sup> *q.* three [16.4.2.1](#)

**Àtáláatà dáàr**<sup>ε</sup> *n.* Tuesday [32.9](#) ← Arabic

**àtánā**<sup>+/</sup> *q.* three exactly [16.4.2.1](#)

**Àtínì dáàr**<sup>ε</sup> *n.* Monday [32.9](#) ← Arabic

**àtìyùk**<sup>ɔ</sup> *n.* sea ← Hausa *tèeku*

**àwánā**<sup>+/</sup> *adv.* like this [17.7](#)

**àwāē**<sup>+</sup> *q.* nine [16.4.2.1](#)

**àyí**<sup>+</sup> *q.* two [16.4.2.1](#)

**áyù** no [25.2.4](#)

**àyínā**<sup>+/</sup> *q.* two exactly [16.4.2.1](#)

**àyópòē**<sup>+</sup> *q.* seven [16.4.2.1](#)

**àyúebù**<sup>+</sup> *q.* six [16.4.2.1](#)

## B

**bà** they, their (*proclitic*) [16.3.1](#)

**ba**<sup>+</sup> them (*enclitic object*) [16.3.1](#)

**bā**<sup>+/</sup> *pl* bā<sup>-</sup> *nám*<sup>a</sup> *cb* bā<sup>-</sup> - *n.* father [9.4](#)

**bāa**<sup>=</sup> *pl* bāas<sup>ε</sup> *cb* bà<sup>-</sup> - *n.* dog

**báa** (← Hausa *bâa* "not exist") in constituent negation [29.4](#)

**bā'a**<sup>=</sup> *pl* bā'ab<sup>a</sup> *cb* bà'a<sup>-</sup> - *n.* traditional diviner; **bà'a-kòlug**<sup>ɔ</sup> *pl* bà'a-kòñ<sup>nε</sup> *cb* bà'a-kòl<sup>-</sup> - *n.* diviner's bag

**bā'a**<sup>=</sup> *pl* bā'as<sup>ε</sup> *cb* bà<sup>-</sup> - *n.* peg to hang things on

**bà'an**<sup>nε</sup> *pl* bà'ana<sup>+</sup> *cb* bà'an<sup>-</sup> - *n.* stocks (punishment)

**bàañlug**<sup>a</sup> *pl* bàañlus<sup>ε</sup> *adj.* narrow, slender

**bāañlíg**<sup>a</sup> *adj.* quiet

**bāañlím**<sup>m</sup> *adv.* quietly

**bà'ar**<sup>ε</sup> *pl* bàda<sup>+</sup> bà'a<sup>+</sup> *cb* bà<sup>-</sup> - *n.* idol

**bābá**<sup>+</sup> beside *postposition* [17.6](#); cf *bābir*<sup>εl</sup> sphere of activity

**bàbugā**<sup>+/</sup> *q.* many [16.4.1](#)

**bákpàē**<sup>+</sup> *n.* week ← Hausa *bakwài* "seven"

- bàlàar**<sup>ε</sup> pl *bàlàya*<sup>+</sup> cb *bàlà-* n. stick, staff, club  
**bàlàŋɪr**<sup>ε</sup> pl *bàlàŋa*<sup>+</sup> cb *bàlàŋ-* n. hat  
**bālērvɔ**<sup>ɔ</sup>/ pl *bālērɪd*<sup>ε</sup>/ *bālērɪs*<sup>ε</sup>/ cb *bālér-* n. ugly person; cf *lēr*<sup>ε</sup> get ugly  
**bàmmā**<sup>+/</sup> these, those *demonstrative* [16.3.2](#)  
**bàn**<sup>ε</sup> these, those *demonstrative* [16.3.2](#)  
**bán** they (*subject of ñ-clause*) [16.3.1](#)  
**bān**<sup>ε</sup> they, them (*contrastive*) [16.3.1](#)  
**bāñ**<sup>+</sup> vv. ride  
**bānāa**<sup>=</sup> pl *bānāas*<sup>ε</sup> cb *bànà-* (tone *sic* in my materials) n. traditional "fugu" smock  
**bāñ'ad**<sup>a</sup> pl *bāñ'ad-nàm*<sup>a</sup> n. ill person  
**bāñ'al**<sup>ε</sup>/ vv. make to ride (horse, bicycle)  
**bāñ'as**<sup>ε</sup> cb *bāñ'-* n. pl *as sg* disease  
**bàn-dāvɔ**<sup>ɔ</sup> pl *bàn-dāad*<sup>ε</sup> cb *bàn-dà-* n. crocodile  
**bān-kúsél**<sup>lε</sup> pl *bān-kúsélá*<sup>+</sup> cb *bān-kúsél-* n. lizard  
**bāŋ**<sup>a</sup> pl *bāaŋs*<sup>ε</sup> cb *bàŋ-* n. ring, chain, fetter  
**bàŋ**<sup>a</sup> n. agama lizard  
**bàŋ**<sup>ε</sup> vv. come to know  
**báp** wallop!  
**Bārɪg**<sup>a</sup>/ pl *Bārɪs*<sup>ε</sup>/ cb *Bār-* n. Bisa person [32.5](#) (not only the Bareka, WK)  
**bárikà**<sup>+</sup> n. blessing; in greetings [31](#) ← Arabic بركة *baraka(tun)*  
**Bārvɔ**<sup>ɔ</sup>/ n. Bisa country; North [32.3](#)  
**bàs**<sup>ε</sup> vv. go away; abandon; throw out  
**Bāt**<sup>ε</sup>/ n. Bisa language [32.5](#)  
**bàtáñ**<sup>+</sup> q. three (*after personal pronoun* [16.4.2.1](#))  
**bàɯŋv**<sup>+</sup> n. found only as in *Ò kpèñ' báɯŋv*. He was circumcised. ← Songhay "pool"  
 (for the idiom [15.1](#))  
**bàyéog**<sup>ɔ</sup>/ betrayer of secrets (cf *yēs*<sup>ε</sup>)  
**bàýí**<sup>+</sup> q. two (*after personal pronoun* [16.4.2.1](#))  
**bàýópɔ**<sup>+</sup> q. seven (*after personal pronoun* [16.4.2.1](#))  
**bè**<sup>+</sup> ger *bèllím*<sup>m</sup> (*sic*) iv. exist; be in a place [21.1](#)  
**bēdɪg**<sup>ε</sup>/ vv. go rotten  
**bèdug**<sup>ɔ</sup> **bèdir**<sup>ε</sup> pl *bèda*<sup>+</sup> cb *bèd-* adj. great  
**bèdugū**<sup>+/</sup> q. much, a lot [16.4.1](#)  
**bēε** or [24.1.2](#) [25.2.2](#)  
**bèkèkèoŋg**<sup>ɔ</sup> or **bèkèoŋg**<sup>ɔ</sup> n. very early morning  
**bèlim**<sup>m</sup> vv. beg  
**bèlɪs**<sup>ε</sup> vv. comfort  
**bēn**<sup>nε</sup> pl *bēna*<sup>+</sup> cb *bèn-* n. end  
**bèñ**<sup>+</sup> ger *bèñ'εs*<sup>ε</sup> vv. fall ill  
**bèñsɪg**<sup>ε</sup> vv. serve soup  
**bèŋ**<sup>ε</sup> vv. mark out a boundary

- bēñíd<sup>ε</sup>** *cb bēñ-* *n. pl* bean leaves, *Vigna unguiculata* (Haaf); **bēñíd nē kī<sup>+/</sup>** *n.* beanleaf-and-millet, a traditional snack
- bēñír<sup>ε</sup>** *pl bēñá<sup>+</sup> cb bēñ-* *n.* brown bean
- bēog<sup>ɔ</sup>** *n.* tomorrow [32.9](#); **Kà bēog níe kà ...** The next day ...
- bēogv-n<sup>ε/</sup>** *n.* morning [32.9](#)
- bē'og<sup>ɔ</sup> bī'a<sup>+</sup>** *pl bē'ed<sup>ε</sup> bī'əs<sup>ε</sup> cb bē'- bjà'-* *adj.* bad
- bèrɪŋ<sup>a</sup>** *pl bèrɪŋs<sup>ε</sup> sic n.* a plant used for fibre (KED), *Hibiscus cannabinus* (Haaf)
- bērɪga<sup>+</sup>** *cb bèrɪg-* *pl* leaves of **bèrɪŋ** used for soup (KED)
- bēsug<sup>ɔ</sup>** *pl bēsɪd<sup>ε</sup> cb bēs-* *n.* a kind of wide-mouthed pot
- bjāñ'ar<sup>ε/</sup>** *pl bjāñ'ad<sup>+</sup> bjāñ'a<sup>+</sup> cb bjāñ'-* *n.* wet mud, black mud; riverbed
- bjāuñk<sup>ɔ</sup>** *pl bjāñ'ad<sup>ε</sup> cb bjāñ'-* *n.* shoulder
- bīál<sup>lε</sup>** *pl bīálá<sup>+</sup> adj.* naked
- bìəl<sup>ε</sup>** *vv.* accompany
- bī'əlá<sup>+</sup> q.** a little [16.4.1](#); **bī'əl bī'əl q. and adv.** a very little; little by little
- bī'əm<sup>m</sup>** *pl bī'əm-nàm<sup>a</sup> bī'əmma LF cb bī'əm-* *n.* enemy
- bīən<sup>nε</sup>** *pl bīəna<sup>+</sup> cb bīən-* *n.* shin
- bīər<sup>ε/</sup>** *pl bjēyá<sup>+</sup> cb bjā-* *n.* elder sibling of the same sex
- bī'əs<sup>ε</sup>** *vv.* doubt
- bìgɪs<sup>ε</sup>** *vv.* show, teach
- bīig<sup>a</sup>** *pl bīis<sup>ε</sup> cb bī- bī-* *n.* child; **bī-díbìŋ<sup>a</sup>** *n.* boy; **bī-līa<sup>+</sup>** *n.* baby; **bī-nà'ab<sup>a</sup>** *n.* prince; **bī-pīt<sup>a/</sup>** *pl bī-pītíb<sup>a</sup> cb bī-pīt-* *n.* father's younger brother [32.1](#); **bī-púŋ<sup>a</sup>** *n.* girl
- bī'ig<sup>ε</sup>** *vv.* ripen, become pregnant
- bīilít<sup>ɔ</sup>** *pl bīilít<sup>+</sup> cb bīil-* *n.* seed
- bīilím<sup>m</sup>** *n.* childhood
- bīum<sup>m/</sup>** *cb bī-* *n.* soup, stew
- bī'ísím<sup>m</sup>** *n.* milk (human or animal)
- bī'ísur<sup>ε</sup>** *pl bī'isa<sup>+</sup> cb bī'is-* *n.* woman's breast
- bīl<sup>a</sup>** *pl bībɪs<sup>ε</sup> cb bīl- or bī-* *adj.* little, small
- bìlɪg<sup>ε</sup>** *vv.* roll (*transitive*)
- bìlum<sup>m</sup>** *vv.* roll (*intransitive*)
- bìmbìm<sup>mε</sup>** *pl bìmbìma<sup>+</sup> cb bìmbìm-* *n.* altar NT (KED: mound or pillar of earth)
- Bìn<sup>nε</sup>** *pl Bìm<sup>ma</sup> cb Bìn-* *n.* Moba, Bimoba person [32.5](#) (not only Bemba, WK)
- Bìn<sup>nε</sup>** *n.* Moba language [32.5](#)
- bīn<sup>nε</sup>** *n.* excrement
- Bìŋ<sup>ɔ</sup>** *n.* Moba country [32.5](#)
- bò<sup>+</sup>** *vv.* seek; **bòòd<sup>a</sup>** *ipfv* used for: want, like, love (sexual, romantic); *imperfective gerund* **bòòdum<sup>m</sup>** *will* [13.1.1.4](#)
- bō<sup>+</sup> cb bō-** what? why? [16.3.4](#); **bō-būudi<sup>+</sup>** what sort of ..?; **bō-zúgō** because [24.1.3](#), why? [17.7](#); **bō-wìn<sup>nε</sup>** what time of day?
- bòbɪg<sup>ε</sup>** *vv.* wrap round, tie round
- bòdɪg<sup>ε</sup>** *vv.* lose, become lost



- būrāa**<sup>°</sup> *n.* man, male adult (in ILK but characteristically *Toende* Kusaal; no examples in NT. See *dāy*<sup>+</sup>)
- būriyá**<sup>+</sup> *n.* Christmas ← Twi/Fante *bronya*
- bùrkìn**<sup>a</sup> *pl* *bùrkìn-nàm*<sup>a</sup> *cb* *bùrkìn-* *n.* free person; honourable person ← Songhay [15.1](#)
- Bùsààñl**<sup>°</sup> *n.* Bisa language [32.5](#)
- Bùsáj**<sup>a</sup> *pl* *Bùsáàñs*<sup>°</sup> *cb* *Bùsāŋ-* *n.* Bisa person [32.5](#)
- būtɪŋ**<sup>a</sup> *pl* *būtɪs*<sup>°</sup> *irregular* [6.2.1](#); *cb* *bùtɪŋ-* *n.* cup (in general; etymologically ← "seed planting [cup]")
- būud**<sup>°</sup> *n.* *pl* as *sg* innocence
- būudi**<sup>+</sup> *cb* *būud-* *n.* kind, sort, ethnic group
- būvg**<sup>a</sup> *pl* *būvs*<sup>°</sup> *cb* *bù-* *n.* goat; **bù-dìbɪg**<sup>a</sup> *n.* male kid

## D

- dà** before two days ago, *tense particle* [19.3.1](#)
- dā** not with imperative mood [19.5](#)
- dàa** day after tomorrow, *tense particle* [19.3.1](#)
- dāa** before yesterday, *tense particle* [19.3.1](#)
- dà**<sup>+</sup> *vv.* buy
- dà'a**<sup>°</sup> *pl* *dà'as*<sup>°</sup> *cb* *dà-* *n.* market
- dà'abɪr**<sup>°</sup> *n.* slave
- dàalɪm**<sup>m</sup> *n.* masculinity
- dàalím**<sup>m</sup> *pl* *dàalímìs*<sup>°</sup> *n.* male organs
- dāam**<sup>m/</sup> *cb* *dā-* *n.* millet beer, "pito"; **dā-núùr**<sup>°</sup> *n.* beer-drinking; **dā-bín**<sup>n°</sup> *cb* *dā-bín-* *n.* residue of beer; NT yeast (cf *bīn*<sup>n°</sup>)
- dàam**<sup>m</sup> *vv.* disturb, trouble (cf Hausa *dàamaa id*)
- dāan**<sup>a</sup> *pl* *dāan-nàm*<sup>a</sup> *cb* *dāan-* *n.* owner of ... [16.10.3.1](#)
- dāar**<sup>°</sup> *pl* *dābá*<sup>+</sup> *cb* *dà-* *n.* day, 24-hour period [32.9](#); **dà-pīiga**<sup>+</sup> *n.* ten days
- dābìè**<sup>m</sup> *tone sic n.* fear
- dàbìog**<sup>°</sup> *pl* *dàbìəd*<sup>°</sup> *cb* *dàbjà-* *n.* coward
- dàbɪsɪr**<sup>°</sup> *pl* *dàbɪsa*<sup>+</sup> *cb* *dàbɪs-* *n.* day (as one of several)
- dādúk**<sup>°</sup> *n.* a kind of large pot
- dā'e**<sup>+/</sup> *vv.* push; blow (of wind)
- Dàgàád**<sup>a</sup> *pl* *Dàgàadìb*<sup>a</sup> *Dàgàad-nàm*<sup>a</sup> *cb* *Dàgàád-* *n.* Dagaaba person (L prefix *sic*)
- Dàgbān**<sup>n°/</sup> *pl* *Dàgbām*<sup>ma/</sup> *cb* *Dàgbān-* *n.* Dagomba person [32.5](#)
- Dàgbān**<sup>n°/</sup> *n.* Dagbani language [32.5](#)
- Dàgbāuŋ**<sup>°/</sup> *n.* Dagomba country, Dagbon [32.5](#)
- dàgòbɪg**<sup>a</sup> *n.* left-hand; (*yà*) *dàgòbɪg*<sup>a</sup> South KB [32.3](#)
- dāká**<sup>+</sup> *pl* *dāká-nàm*<sup>a</sup> *cb* *dāká-* *n.* box ← Hausa *àdakàa*
- dàkīg**<sup>a</sup> *pl* *dàkīis*<sup>°</sup> *cb* *dàkì-* *n.* wife's sibling [32.1](#); **dàkì-dāy**<sup>+</sup> *n.* wife's brother; **dàkì-puāk**<sup>a</sup> *n.* wife's sister; **dàkì-tuà**<sup>+</sup> *n.* wife's sister's husband



**dà-kòǎr<sup>ε</sup>** pl *dà-kòǎya<sup>+</sup>* cb *dà-kòǎ-* n. unmarried son [32.1](#)

**dàm<sup>m</sup>** ipfv *dàmmɪd<sup>a</sup>* vv. shake

**dàmà'a<sup>=</sup>** n. liar cf *mà<sup>+</sup>*

**dàmà'am<sup>m</sup>** n. lie, untruth, lying

**dàmà'ar<sup>ε</sup>** n. lie, untruth

**dāmpūsāar<sup>ε</sup>** n. stick

**dānkòŋ<sup>ɔ</sup>** n. measles

**dà-pāal<sup>a/</sup>** n. young man, son

**dà-sāŋ<sup>a</sup>** pl *dà-sāaŋs<sup>ε</sup>* *dà-sām<sup>ma</sup>* cb *dà-saŋ-* n. young man

**dà-tāa<sup>=</sup>** pl *dà-tāas<sup>ε</sup>* cb *dà-tà-* n. enemy

**dàtiŋ<sup>ɔ</sup>** n. right-hand; (*yà*) *dàtiŋ<sup>ɔ</sup>* North KB [32.3](#)

**dāu<sup>+</sup>** pl *dāp<sup>a</sup>* cb *dāu-* *dāp-* [9.2.2](#) n. man (as opposed to woman)

**dāvɔ<sup>ɔ</sup>** pl *dāad<sup>ε</sup>* cb *dà-* n. piece of wood, log; pl also: wood (material); **dà-kīəd<sup>a</sup>** n. wood-cutter; **dà-kpīəd<sup>a</sup>** n. carpenter; **dà-pūvdír<sup>ε</sup>** n. cross-piece, pl **dà-pūvdá<sup>+</sup>** n. used as sg cross NT

**dāvɔ<sup>ɔ</sup>** pl *dāad<sup>ε</sup>* cb *dà-* adj. male

**dāvàlɔg<sup>a</sup>** n. hot humid season before the rains

**dāvān<sup>ne/</sup>** pl *dāvānā<sup>+</sup>* cb *dāvān-* n. pigeon

**dāvāam<sup>ma</sup>** pl *dāvāam-nām<sup>a</sup>* cb *dāvāam-* n. husband's parent [32.1](#); **dāvāam-dāu<sup>+</sup>** n. husband's father; **dāvāam-puāk<sup>a</sup>** n. husband's mother

**dāvūug<sup>ɔ/</sup>** pl *dāvūud<sup>ε/</sup>* cb *dāvū-* n. rat

**dèbɪr<sup>ε</sup>** pl *dèba<sup>+</sup>* n. mat, pallet, bed

**dēŋ<sup>a</sup>** pl *dēŋs<sup>ε</sup>* *dēmɪs<sup>ε</sup>* *dēŋa<sup>+</sup>* cb *dēŋ-* q. first [16.4.2.3](#)

**dēl<sup>la/</sup>** ger *dēllúg<sup>ɔ</sup>* *dēllím<sup>m</sup>* iv. lean on something (of a person)

**dēlum<sup>m</sup>** vv. begin to lean on something (of a person)

**dēŋ<sup>a</sup>** pl *dēmɪs<sup>ε</sup>* cb *dēŋ-* n. accidental bruise

**dēŋ<sup>ε</sup>** vv. go, do first

**dēŋum** beforehand, preverb [19.7.2](#)

**dì** it, its (proclitic) [16.3.1](#) = *lì*

**dì<sup>+</sup>** ipfv *dìt<sup>a</sup>* imp *dìm<sup>a</sup>* vv. eat, receive; ger **dīb<sup>ɔ</sup>** n. food; *Ò dì pu'ā*. He's married a wife. *Ò dì ñyán*. She's ashamed.

**djā<sup>a</sup>** vv. get dirty

**djā'ad<sup>ε/</sup>** n. dirt

**dī'e<sup>+/</sup>** vv. receive, get

**dīəm<sup>ma</sup>** pl *dīəm-nām<sup>a</sup>* cb *dīəm-* n. wife's parent [32.1](#); also in polite address to an unrelated person of opposite sex and similar or greater age than oneself;

**dīəm-dāu<sup>+</sup>** n. wife's father; **dīəm-puāk<sup>a</sup>** n. wife's mother

**dī'əm<sup>m</sup>** vv. play, not be serious

**dī'əma<sup>+</sup>** n. festival

**dī'əs<sup>ε/</sup>** vv. receive (many things)

**dīgɪ<sup>ya/</sup>** ger *dīk<sup>a/</sup>* KT *dīgɪ<sup>ε/</sup>* WK iv. be lying down

- dīgísá**<sup>+</sup> *n. pl* lairs  
**dīgí**<sup>ε/</sup> *vv.* lay down  
**dìgin**<sup>ε</sup> *vv.* lie down  
**dìgir**<sup>ε</sup> *pl* **dìga**<sup>+</sup> *cb* **dìg-** *n.* dwarf  
**dūs**<sup>ε</sup> *vv.* feed; *agt* **dūs**<sup>a</sup> *n.* glutton  
**dūsúŋ**<sup>ɔ</sup> *pl* **dūsímà**<sup>+</sup> **dūsís**<sup>ε</sup> *cb* **dūsúŋ-** *n.* spoon  
**dīm**<sup>a</sup> *dummy head pronoun, animate pl* [16.10.3.1](#)  
**dìn**<sup>nε</sup> *dummy head pronoun, inanimate* [16.10.3.1](#)  
**dín** *it (subject of ñ-clause)* [16.3.1](#)  
**dīn**<sup>ε</sup> *it (contrastive)* [16.3.1](#) = *līn*<sup>ε</sup>  
**dìndēog**<sup>ɔ/</sup> *pl* **dìndēed**<sup>ε/</sup> *cb* **dìndē-** *n.* chameleon  
**dìndūs**<sup>a</sup> *n.* glutton  
**dìn zúg**<sup>ɔ</sup> *therefore* [17.7](#)  
**dítúŋ**<sup>ɔ</sup> *n.* right-hand (see **dàtìyŋ**<sup>ɔ</sup>)  
**dì-zōrvug**<sup>ɔ/</sup> *pl* **dì-zōrá**<sup>+</sup> *cb* **dì-zōr-** *n.* crumb  
**dōl**<sup>la/</sup> *ger* **dōllím**<sup>m</sup> *iv.* accompany in a subordinate rôle; **Àn'òni dōllí fò?** Who has come with you? (to an elderly patient.) **Bà dòl nē tāaba.** They went together.  
**dōlig**<sup>ε/</sup> *vv.* make accompany, send along with  
**dōlis**<sup>ε/</sup> *vv.* investigate, trace  
**dōñlig**<sup>ε/</sup> *vv.* stretch oneself  
**dòñ'wε**<sup>ε</sup> *vv.* water plants  
**dòwɔ**<sup>ɔ</sup> *pl* **dòwd**<sup>ε</sup> **dòt**<sup>ε</sup> *cb* **dò-** *n.* house, hut; clan; **dòwɔ bíŋ**<sup>a</sup> *n.* (house) cat  
**dòwŋɔ**<sup>ɔ</sup> *pl* **dòwŋd**<sup>ε</sup> *cb* **dòwŋ-** *n.* dawadawa fruit [32.6](#)  
**dū**<sup>+</sup> *ipfv* **dūt**<sup>a/</sup> *imp* **dùm**<sup>a</sup> *vv.* go up  
**dū'à**<sup>a</sup> *vv.* bear, give birth, beget; *agt* **dū'ad**<sup>a</sup> *n.* elder relation  
**dù'al**<sup>ε</sup> *vv.* make interest (of a loan)  
**dū'am**<sup>m</sup> *n.* birth  
**dùañ**<sup>+</sup> *pl* **dòwŋd**<sup>ε</sup> *cb* **dòwŋ-** *n.* dawadawa [32.6](#) *Parkia clappertoniana* [*biglobosa*] (Haaf)  
**dū'átà**<sup>+</sup> *n.* doctor ← English  
**dūe**<sup>+/</sup> *vv.* raise, rise  
**dūg**<sup>ε</sup> *vv.* cook  
**dūk**<sup>ɔ/</sup> *pl* **dūgvud**<sup>ε/</sup> **dút**<sup>ε</sup> *cb* **dūg-** *n.* cooking pot; **dūg-pe'èla**<sup>+</sup> *n.* full pots  
**dùm**<sup>m</sup> *vv.* bite  
**dūm**<sup>mε</sup> **dūm**<sup>nε</sup> *pl* **dūma**<sup>+</sup> *cb* **dùm-** *n.* knee  
**dòndùug**<sup>ɔ</sup> *pl* **dòndùud**<sup>ε</sup> *cb* **dòndù-** *n.* cobra  
**dūnyá**<sup>+</sup> *cb* **dūnyá-** [9.7](#) *n.* world ← Arabic دنيا *dunya*:  
**dūnná**<sup>+</sup> *adv.* this year [32.9](#)  
**dūŋ**<sup>a</sup> *pl* **dūmɪs**<sup>ε</sup> *cb* **dūŋ-** *n.* mosquito  
**dūer**<sup>ε/</sup> *pl* **dūyáyá**<sup>+</sup> *cb* **dūyā-** *n.* stick  
**dū'es**<sup>ε/</sup> *vv.* lift up, honour  
**dūr**<sup>a</sup> *iv.* be many

**dū'un**<sup>El</sup> vv. pass water (*ger* recorded as **dū'unóg**<sup>ɔ</sup>)

**dū'uním**<sup>m</sup> *cb* **dū'un-** n. urine

**dūsá**<sup>+</sup> n. pl. steps

## E

**ēēñ** yes [25.2.4](#)

**ēēñ** or **ēēñ tí** see *ñyēē*, *ñyēē tí* preverb [19.7.2](#)

**ēēñb**<sup>El</sup> vv. lay a foundation

**ēēñbír**<sup>E</sup> n. foundation [12.1.2](#)

**èñbıs**<sup>E</sup> vv. scratch

**èñd**<sup>E</sup> vv. block up, plug up

**èñdıg**<sup>E</sup> vv. unblock, unplug

**èñrıg**<sup>E</sup> vv. shift along (e.g. a bench)

## F

**fāañ**<sup>=</sup> q. every [16.4.1](#)

**fāañ**<sup>+l</sup> vv. save; *agt* **fāañd**<sup>a</sup> **fāañgíd**<sup>a</sup> n. saviour [15.1](#)

**fāñ**<sup>+</sup> vv. grab, rob

**fáss** ideophone for *pìəɪɪg*<sup>a</sup> white [16.11.1.3](#)

**fēeg**<sup>El</sup> vv. (of food) get old, cold

**fēñ'og**<sup>ɔ</sup> *pl* **fēñ'ed**<sup>El</sup> *cb* **fēñ'**- n. ulcer

**fıəb**<sup>E</sup> vv. beat

**fı'ıg**<sup>E</sup> vv. cut off

**fıiñ**<sup>=</sup> q. a little (liquid) [16.4.1](#)

**fıtlá**<sup>+</sup> n. lamp ← Hausa *fıtilàa*; in KB adapted to the *r<sup>E</sup>|a<sup>+</sup>* class: *sg* *fıtir* *pl* *fıta*

**fıɔs**<sup>El</sup> vv. blow, puff (wind); *ger* **fıɔsúg**<sup>ɔ</sup> n. hypocrisy NT

**fù** you, your *sg* (*proclitic*) [16.3.1](#)

**f** you *sg* (*enclitic object*) [16.3.1](#)

**fùe**<sup>+</sup> vv. draw out

**fūfūm**<sup>mE</sup> *pl* **fūfūma**<sup>+</sup> *cb* **fūfúm-** n. envy; stye (believed to result from envy)

**fún** you *sg* (*as subject of ñ-clause*) [16.3.1](#)

**fūn** SF **fúnē** LF you *sg* (*contrastive*) [16.3.1](#)

**fūug**<sup>ɔ</sup> *pl* **fūud**<sup>El</sup> **fūt**<sup>El</sup> *cb* **fū-** n. shirt, clothing; *pl* also: cloth

## G

**gàad**<sup>E</sup> vv. pass, surpass [23.3.2](#)

**gáafàra** sorry formula [31](#) (Hausa *gaafaràa*, ultimately ← Arabic)

**gà'al**<sup>E</sup> vv. button up

- gà'am<sup>m</sup>** vv. grind teeth  
**gāañ<sup>l</sup>** / pl *gāañs<sup>l</sup>* / cb *gāñ-* n. Nigerian ebony [32.6](#) *Diospyros mespilliformis* (Haaf)  
**gàas<sup>l</sup>** vv. pass by  
**gādu<sup>+</sup> gādug<sup>l</sup>** / pl *gādu-nám<sup>a</sup>* *gāt<sup>l</sup>* / cb *gād- gādu-* n. bed ← Hausa *gadoo*  
**gàlum<sup>m</sup>** vv. joke  
**gàlis<sup>l</sup>** vv. exceed, get to be too much  
**gāñr<sup>l</sup>** / pl *gāñyá<sup>+</sup>* / cb *gāñr-* n. fruit of Nigerian ebony [32.6](#)  
**gàŋ<sup>l</sup>** vv. step over  
**gāŋ<sup>l</sup>** / vv. choose  
**gbāñ'e<sup>+</sup>** / vv. catch  
**gbāñyà'a<sup>l</sup>** n. lazy person [15](#)  
**gbāñyà'am<sup>m</sup>** n. laziness; 1976 NT *gonya'am*  
**gbàŋ<sup>l</sup>** / pl *gbàna<sup>+</sup>* / cb *gbàn- gbàŋ-* n. book WK  
**gbāŋ<sup>l</sup>** / pl *gbāná<sup>+</sup>* / cb *gbān- gbāŋ-* n. animal skin WK; animal skin, book DK  
**gbéěŋ<sup>m</sup>** / cb *gbēñ-* n. sleep  
**gbè'og<sup>l</sup>** / pl *gbè'ed<sup>l</sup>* *gbèda<sup>+</sup>* / cb *gbè'-* n. forehead; shore of a lake  
**gbēr<sup>l</sup>** / pl *gbēyá<sup>+</sup>* / cb *gbēr-* n. thigh  
**gbīgum<sup>ne</sup>** / pl *gbīguma<sup>+</sup>* / cb *gbìgum-* n. lion  
**gbìn<sup>ne</sup>** / pl *gbìna<sup>+</sup>* / cb *gbìn-* n. buttock; base (e.g. of a mountain); *postposition* [17.6](#)  
**gbìn-vòcñr<sup>l</sup>** n. anus  
**gbīs<sup>l</sup>** vv. sleep  
**gēel<sup>l</sup>** / vv. place between one's legs (Pattern H)  
**gēēñ<sup>m</sup>** / vv. go mad, madden  
**gēēñmís<sup>l</sup>** n. pl as sg madness  
**gēēñŋ<sup>a</sup>** / pl *gēēñmís<sup>l</sup>* n. madman  
**gél<sup>le</sup>** / pl *gēlá<sup>+</sup>* / cb *gēl-* n. egg  
**gēñ<sup>+</sup>** vv. get tired; *res adj* **gēēñlúŋ<sup>l</sup>** *adj.* tired  
**gēñ<sup>+</sup>** vv. get angry  
**gēog<sup>l</sup>** n. place between one's legs (Pattern O *sic*)  
**gīñlím<sup>m</sup>** n. shortness  
**gìk<sup>a</sup>** / pl *gìgìs<sup>l</sup>* / cb *gìg-* n. dumb person  
**gìgulim<sup>m</sup>** vv. become dumb  
**gìlug<sup>l</sup>** / ipfv *gīn<sup>na</sup>* / vv. go around [11.1.1](#)  
**gīm<sup>ma</sup>** / iv. be short  
**gīŋ<sup>a</sup>** / pl *gīma<sup>+</sup>* / cb *gīŋ-* *adj.* short  
**gìŋ<sup>l</sup>** vv. scrimp  
**gīŋa<sup>+</sup>** *adv.* shortly [17.4](#)  
**gīŋulím<sup>m</sup>** n. shortness  
**gōdug<sup>l</sup> gò'ɔn<sup>l</sup>** vv. look up  
**gōl<sup>la</sup> gōr<sup>a</sup> gō'e<sup>ya</sup>** / iv. be looking up  
**gòñ<sup>+</sup>** vv. hunt; ipfv **gòcñd<sup>a</sup>** wander, *ger* **gòcñdum<sup>m</sup>** wandering [13.1.1.4](#)

- Gòḡg<sup>a</sup>** pl *Gòḡs<sup>ε</sup>* n. clan name [32.5](#)  
**Gòḡḡ<sup>ḡ</sup>** n. place of the *Gòḡs<sup>ε</sup>* Goosi clan  
**gò'ḡn<sup>ε</sup>** vv. look up  
**gḡr<sup>a/</sup>** iv. be looking up  
**gḡs<sup>ε</sup>** ipfv *gḡsɪd<sup>a/</sup>* *gḡt<sup>a/</sup>* imp *gḡsɪm<sup>a</sup>* *gḡm<sup>a</sup>* ger *gḡsɪg<sup>a</sup>* vv. look; agt **gḡt<sup>a/</sup>** n. seer, prophet  
**gḡl<sup>ε</sup>** ipfv *gḡn<sup>na</sup>* vv. suspend  
**gḡl<sup>la</sup>** ger *gḡlib<sup>ḡ</sup>* iv. be suspended  
**gḡllm<sup>ne</sup>** only; post-NP/AdvP particle [30.6](#)  
**gḡm<sup>me</sup>** pl *gḡma<sup>+</sup>* n. kapok fruit [32.6](#); also thread WK  
**Gḡm<sup>me</sup>** n. place of the clan *Gḡm-dìm<sup>a</sup>* [32.5](#)  
**gḡmpḡzēr<sup>ε/</sup>** pl *gḡmpḡzēyá<sup>+</sup>* cb *gḡmpḡzér-* n. duck  
**gḡñ'a<sup>+</sup>** pl *gḡñ'ḡs<sup>ε</sup>* cb *gḡñ'-* n. thorn  
**gḡngḡm<sup>me</sup>** n. kapok material  
**gḡḡ<sup>a</sup>** pl *gḡmɪs<sup>ε</sup>* cb *gḡḡ-* n. kapok tree [32.6](#) *Ceiba pentandra* (Haaf)  
**gḡr<sup>a/</sup>** ger *gḡrím<sup>m</sup>* iv. be on guard, watch for [26.1](#)  
**Gḡrín<sup>ne</sup>** n. Farefare language [32.5](#)  
**Gḡrín<sup>a</sup>** pl *Gḡrís<sup>ε</sup>* n. Farefare person [32.5](#)  
**gḡ'ul<sup>ε/</sup>** vv. put on guard  
**gḡ'ulm<sup>m</sup>** vv. become half-ripe  
**gḡur<sup>ε</sup>** pl *gḡya<sup>+</sup>* cb *gḡ-* n. upland; bank of river  
**gḡur<sup>ε</sup>** pl *gḡya<sup>+</sup>* cb *gḡ-* n. ridge of back  
**gḡ'us<sup>ε/</sup>** vv. take care, watch out  
**gḡ'us<sup>ε</sup>** n. pl half-ripe fruit

## H

- hālí<sup>+</sup>** until, up to and as far as, even [18.1](#) [24.1.3](#) [23.4](#) [30.6](#); ? ← Arabic حتى *ḥatta*:  
*hālí báa* even [30.6](#)

## I

- ḡā<sup>+</sup>** vv. seek  
**ḡāñ'as<sup>ε/</sup>** vv. leap  
**ḡāñk<sup>ε/</sup>** ger *ḡāñ'ad<sup>a/</sup>* agt *ḡāñ'ad<sup>a/</sup>* vv. leap, fly [11.1.1](#)  
**ḡu<sup>ya/</sup>** ger *ḡk<sup>a/</sup>* KT *ḡu<sup>ε/</sup>* WK iv. be kneeling  
**ḡu<sup>ε/</sup>** vv. make to kneel  
**ḡun<sup>ε</sup>** vv. kneel down  
**íul<sup>ε</sup>** pl *ílá<sup>+</sup>* cb *íl-* n. horn  
**ísur<sup>ε</sup>** pl *ísa<sup>+</sup>* cb *ís-* n. scar  
**ísuḡ<sup>ε</sup>** vv. get up early

## K

**kà** and, that [24.1.2](#)

**kāab**<sup>ε/</sup> vv. offer, invite

**kāal**<sup>ε/</sup> vv. count

**kāas**<sup>ε/</sup> vv. cry out, weep; (cock) crow

**kà'asigē** LF *only*; iv. not exist [29.1.1](#)

**kābɨg**<sup>ε/</sup> vv. ladle out (liquid)

**kābur**<sup>ε/</sup> vv. call out asking for admission [31](#); ger **kāburí**<sup>+</sup> n. calling out for admission

**kàd**<sup>ε</sup> vv. drive away; **kàd sàriyà** vv. judge [20.1](#); agt **sàriyà-kāt**<sup>a</sup> n. judge NT

**kā'ε**<sup>+</sup> ger **kā'alím**<sup>m</sup> iv. not exist, not be, not have [29.1.1](#) [8.5.3](#)

**kāl**<sup>ε/</sup> pl **kālá**<sup>+</sup> cb **kāl-** n. number

**kàlɨgā**<sup>+/</sup> q. few [16.4.1](#)

**kàm**<sup>a</sup> q. every [16.4.1](#)

**Kàmbònɨr**<sup>ε</sup> n. Twi language [32.5](#)

**Kàmbònɨ**<sup>a</sup> pl **Kàmbòmɨs**<sup>ε</sup> cb **Kàmbònɨ-** n. Ashanti person [32.5](#)

**kàn**<sup>ε</sup> this, that *demonstrative* [16.3.2](#)

**kàñb**<sup>ε</sup> ger **kàñbur**<sup>ε</sup> vv. scorch

**kàñā**<sup>+/</sup> this, that *demonstrative* [16.3.2](#)

**kàr**<sup>a</sup> iv. be few

**kàrɨm**<sup>m</sup> vv. read

**kàsēt**<sup>a/</sup> n. witness; testimony (Mooré **kàsétò** "proof, testimony"; probably ultimately ← French *cachet* [15.1](#); pl **kàsētɨb**<sup>a</sup> witnesses)

**kē**<sup>+</sup> ipfv **kēt**<sup>a/</sup> imp **kèl**<sup>a</sup> vv. let, cause to ... [11.1.1](#) [26.1](#)

**kèekè**<sup>+</sup> pl **kèekè-nàm**<sup>a</sup> cb **kèekè-** n. bicycle ← Hausa **kèekè**

**kèes**<sup>ε</sup> vv. say farewell to

**kèlɨs**<sup>ε</sup> vv. listen

**kēñ**<sup>+</sup> ipfv **kēn**<sup>a/</sup> imp **kèm**<sup>a</sup> ger **kēn**<sup>nε/</sup> vv. come [11.1.1](#); always with **nā** [20.7](#); **kēn kēn** welcome! [31](#)

**kēñ**<sup>ε/</sup> ipfv **kēn**<sup>na/</sup> imp **kèm**<sup>a</sup> (*disambiguated with sà* [20.7](#)) vv. go; walk [11.1.1](#); agt **kēn**<sup>na/</sup> n. traveller

**kérɨfà** or **káɨfà** ← Hausa *karfèe*; in telling time [32.9](#)

**kī**<sup>+/</sup> cb **kī-** **kā-** n. cereal, millet; **kì-dà'ar**<sup>ε</sup> pl **kì-dà'ada**<sup>+</sup> n. purchased millet; **kā-wēnnɨr**<sup>ε</sup> pl **kā-wēnna**<sup>+</sup> cb **kā-wén-** n. corn

**kjà**<sup>+</sup> vv. cut

**kídɨg**<sup>ε/</sup> vv. cross over, meet; **À-Kídɨgɨ Bū'əs** n. the constellation Orion

**kīibú**<sup>+</sup> cb **kīib-** n. soap WK; ← Mampruli [15.1](#); written materials **kī'ib**<sup>ɔ</sup>, probably **kī'ib**<sup>ɔ</sup>

**kíiñɔ** pl **kīiní**<sup>+</sup> n. millet seed

**kùs**<sup>ε</sup> vv. listen

**kī'is**<sup>ε/</sup> vv. deny

**kìkàm**<sup>mε</sup> pl **kìkàma**<sup>+</sup> n. fig [32.6](#)

- kìkàŋ<sup>a</sup> kìnkàŋ<sup>a</sup>** pl *kìkàmìs<sup>ε</sup>* cb *kìkàŋ-* n. fig tree [32.6](#) *Ficus capensis* (Haaf)
- kìkīrɔg<sup>a/</sup>** pl *kìkīrìs<sup>ε/</sup>* cb *kìkīr-* n. "fairy" in local English; protective spiritual beings associated with a person (three for a man, four for a woman because of the dangers of childbirth.) Wild *kìkīrìs<sup>ε/</sup>* hostile to man live in the bush: "Their feet are attached backwards to confuse trackers." WK; **kìkīr-bé'èd<sup>ε</sup>** n. NT evil spirit, demon (KB just uses *kìkīrɔg<sup>a/</sup>*)
- kīlɔm<sup>m/</sup>** vv. become, change into
- kīm<sup>m</sup>** vv. tend flock, herd; agt **kòñb-kīm<sup>na</sup>** n. herdsman, shepherd
- kīr<sup>ε</sup>** ger *kìkírùg<sup>ɔ</sup>* *kīrɔb<sup>ɔ</sup>* vv. hurry, tremble
- kīs<sup>a/</sup>** ger *kísùg<sup>ɔ</sup>* agt *kīs<sup>a/</sup>* *kīsɔd<sup>a/</sup>* iv. hate
- kísùg<sup>ɔ</sup>** adj. hateful, taboo
- kò<sup>+</sup>** vv. get broken, break (*intransitive*); res adj **kòɔlúg<sup>ɔ</sup>** adj. broken
- kòbɔgā kòbɔsɪ<sup>+</sup>** q. one hundred, two hundred [16.4.2.1](#)
- kòbɔr<sup>ε</sup>** pl *kòba<sup>+</sup>* cb *kòb-* n. bone
- kòdú<sup>+</sup>** n. banana ← Twi *kwadu*
- kòl<sup>ε</sup>** vv. put something around the neck
- kòlɔg<sup>a</sup>** pl *kòlɔs<sup>ε</sup>* cb *kòl-* n. river; **kòlɔgɔ-n nɔ-dáùg<sup>ɔ</sup>** n. crayfish
- kòlɔg<sup>ɔ</sup>** pl *kòn<sup>nε</sup>* cb *kòlɔg-* [9.2.2](#) n. sack, bag
- kòm<sup>m/</sup>** cb *kòm-* n. hunger
- kòñbɔg<sup>ɔ</sup>** pl *kòñbɔd<sup>ε</sup>* cb *kòñb-* (also used as cb of *būn-kòñbùg<sup>ɔ</sup>* animal) n. animal hair or human body hair; cf *zūəbùg<sup>ɔ</sup>*; **kòñb-kīm<sup>na</sup>** pl *kòñb-kīmɔb<sup>a</sup>* n. shepherd, herdsman
- kòñ'ɔkò<sup>+</sup>** adv. alone, by oneself [17.4](#)
- kòñs<sup>ε</sup>** vv. cough
- kòñsɔm<sup>m</sup>** vv. cough
- kò'ɔg<sup>ε</sup>** vv. break (*transitive or intransitive*)
- kò'ɔs<sup>ε</sup>** vv. break several times
- kòtā<sup>nε</sup>** at all; post-NP/AdvP particle [30.6](#)
- kótù<sup>+</sup>** n. lawcourt ← English, probably via Hausa
- kpà'a<sup>=</sup>** pl *kpà'a-nàm<sup>a</sup>* n. rich person
- kpāad<sup>a/</sup>** pl *kpāadɪb<sup>a</sup>* cb *kpāad-* n. farmer, cultivator
- kpà'am<sup>m</sup>** n. riches
- kpāañm<sup>m/</sup>** cb *kpāñ-* n. grease, ointment; **kpāñ-sóñ'ɔdìm<sup>m</sup>** n. anointing oil
- kpàkūr<sup>ε/</sup>** pl *kpàkūyá<sup>+</sup>* cb *kpàkūr-* n. tortoise
- kpān<sup>nε</sup>** pl *kpāna<sup>+</sup>* cb *kpān-* n. spear
- kpàñdɪr<sup>ε</sup>** pl *kpàñda<sup>+</sup>* cb *kpàñd-* n. baboon
- kpàr<sup>ε</sup>** vv. lock
- kpār-kéòŋg<sup>ɔ</sup>** pl *kpār-kéèñd<sup>ε</sup>* cb *kpār-kéñ-* n. rag
- kpā'úŋg<sup>ɔ</sup>** pl *kpā'íní<sup>+</sup>* cb *kpā'-* n. guinea fowl
- kpē<sup>+</sup>** adv. here [17.7](#)
- kpēñm<sup>m</sup>** pl *kpēñm-nàm<sup>a</sup>* cb *kpēñm-* n. elder

**krēñm<sup>ma/</sup>** *iv.* be older than

**krēlá<sup>+</sup>** *adv.* here [17.7](#)

**krèlum** still; immediately after, *preverb* [19.7.2](#)

**krèlum<sup>m</sup>** *vv.* remain

**krèn** *reduced form of the preverb* **krèlum**

**krèñ<sup>+</sup>** *vv.* enter

**krèñdir<sup>ε/</sup>** *pl* **krèñdá<sup>+</sup>** *cb* **krèñd-** *n.* cheek

**krèñ'ε<sup>ε</sup>** *vv.* make enter

**krè'η<sup>ε</sup>** *vv.* strengthen

**krēoñη<sup>ᵓ</sup>** *n.* seniority

**krì<sup>+</sup>** *vv.* die; *res adj* **krìilúη<sup>ᵓ</sup>** *adj.* dead

**krì'a<sup>+</sup>** *pl* **krì'əs<sup>ε</sup>** *cb* **krìà'-** *n.* neighbour

**krìà<sup>+</sup>** *vv.* shape wood with axe etc

**krì'e<sup>+</sup>** *vv.* approach

**krī'ə<sup>m</sup>** *iv.* be strong, hard

**krīib<sup>a</sup>** *pl* **krīibis<sup>ε</sup>** *cb* **krīib-** *n.* orphan

**krīig<sup>ε</sup>** *vv.* go out (fire)

**krī'ulim<sup>m</sup>** *vv.* finish, come to an end

**krī'im<sup>m/</sup>** *pl* **krī'imís<sup>ε</sup>** *cb* **krī'im-** *n.* dead person, corpse

**krīis<sup>ε</sup>** *vv.* quench (fire)

**krīkpin<sup>na/</sup>** *pl* **krīkpiníb<sup>a</sup>** *cb* **krīkpin-** *n.* merchant

**krī'or<sup>ᵓ</sup>** *pl* **krī'əma<sup>+</sup>** *cb* **krī'or-** *adj.* strong, hard

**krīsunkpil<sup>le</sup>** *pl* **krīsunkpila<sup>+</sup>** *cb* **krīsunkpil-** *n.* fist

**krīsukpil<sup>le</sup>** *n.* fist

**krùkpar<sup>ε</sup>** *pl* **krùkpara<sup>+</sup>** *n.* palm tree fruit [32.6](#)

**krùkparig<sup>a</sup>** *pl* **krùkparis<sup>ε</sup>** *cb* **krùkpar-** *n.* palm tree [32.6](#) (Probably *Borassus akeassii* or *aethiopum*)

**krùkpa<sup>u</sup>η<sup>ᵓ</sup>** *pl* **krùkpa<sup>a</sup>** *cb* **krùkpa<sup>u</sup>η-** *n.* arm, wing

**kù** not; *negates irrealis mood* [19.5](#)

**kū<sup>+</sup>** *vv.* kill

**kū<sup>+</sup>** *vv.* gather, threaten (of rain): *Sāa kú yā.* It looks like rain.

**kūā<sup>+</sup>** *vv.* hoe, farm

**kū'alí<sup>a</sup>** *pl* **kū'alímís<sup>ε</sup>** **kū'alís<sup>ε</sup>** *cb* **kū'alí<sup>η</sup>** *n.* sleeveless traditional smock

**kùd<sup>ε</sup>** *vv.* work iron

**kùd<sup>ε</sup>** *vv.* shrivel up, dry out, age

**kūdum<sup>m</sup>** *n.* the olden days; *also for* **kūlum** *qv*

**kūdug<sup>ᵓ</sup>** **kūd<sup>ε</sup>** *pl* **kūda<sup>+</sup>** **kūt<sup>ε</sup>** *cb* **kùd-** *adj.* old

**kūdug<sup>ᵓ</sup>** *pl* **kūt<sup>ε</sup>** (used as *sg* [9.5](#)) *cb* **kùt-** *n.* iron, nail; *sg obsolete except in names* [32.2](#)

**kūgur<sup>ε/</sup>** *pl* **kūgá<sup>+</sup>** *cb* **kūg-** *n.* stone

**kūk<sup>a</sup>** *pl* **kūgus<sup>ε</sup>** *cb* **kùg-** *n.* chair

**kùk<sup>a</sup>** *n.* ghost



- kōk<sup>a/</sup>** *n.* mahogany tree, *Khaya senegalensis* (Haaf); cf Hausa *kuukàa*
- kùkòm<sup>mε</sup>** *pl* *kùkòmá<sup>+</sup>* *cb* *kùkòm-* *n.* leper
- kùkōr<sup>ε/</sup>** *pl* *kùkōyá<sup>+</sup>* *cb* *kùkōr-* *n.* voice
- kùkpàrig<sup>a</sup>** see *kpùkpàrig<sup>a</sup>* *id*
- kūl<sup>ε</sup>** *ger* *kūlig<sup>a/</sup>* *vv.* return home; *transitive* marry (woman subject, man object)
- kōlum** always, *post-subject particle* [24.1.4](#)
- kùlɿ<sup>a</sup>** *pl* *kùlumis<sup>ε</sup>* *kùlis<sup>ε</sup>* *cb* *kùlɿ-* *n.* door
- kòm<sup>m</sup>** *vv.* cry, weep
- kūm<sup>m</sup>** *cb* *kùm-* *n.* death; **kùm-vō'ugír<sup>ε</sup>** *n.* resurrection NT
- kùndò'ar<sup>ε</sup>** *pl* *kùndò'ada<sup>+</sup>* *cb* *kùndu'à-* *n.* barren woman
- kùndòŋ<sup>a</sup>** *pl* *kùndòm<sup>is</sup><sup>ε</sup>* *kùndòna<sup>+</sup>* *n.* jackal, hyena
- kù'øm<sup>m</sup>** *cb* *ky'à-* *n.* water; **ky'à-nūud<sup>ε/</sup>** *n.* thirst; **ky'à-ñwiig<sup>a/</sup>** *pl* *ky'à-ñwiis<sup>ε/</sup>* *n.* current in a river
- kùø<sup>ε</sup>** *vv.* sell
- kùrkōr<sup>ε/</sup>** *pl* *kùrkōyá<sup>+</sup>* *cb* *kùrkōr-* *n.* pig
- Kūsáa<sup>m</sup>** *pl* *Kūsáàs<sup>ε</sup>* *cb* *Kūsá-* *n.* Kusaasi person [32.5](#)
- Kūsáal<sup>ε</sup>** *n.* Kusaal language [32.5](#)
- Kūsáùg<sup>ɔ</sup>** *n.* Kusaasi country [32.5](#)
- Kùtān<sup>ne/</sup>** *pl* *Kùtām<sup>ma/</sup>* *cb* *Kùtān-* *n.* member of WK's clan
- Kùtāuŋ<sup>ɔ/</sup>** *n.* country of clan *Kùtām<sup>ma/</sup>* Kutamba
- kūv** or [24.1.2](#) [25.2.2](#) ← Hausa
- kūug<sup>a/</sup>** **kūug<sup>ɔ/</sup>** *pl* *kūus<sup>ε/</sup>* *cb* *kū-* *n.* mouse
- kùv<sup>ε</sup>** *vv.* get drunk

## L

- lā<sup>+/</sup>** *definite article* [16.5](#)
- là<sup>+</sup>** *vv.* laugh
- lā'af<sup>ɔ</sup>** *n.* cowrie; *pl* **līgud<sup>+</sup>** *n.* cowries, money; *cb* *lìg- là'-;* **là'-bīəlí<sup>ɔ</sup>** *n.* small coin
- lāafɿyá<sup>+</sup>** *n.* health ← Arabic العافية *ʔal-ʔa:fiya(tu)*; replaced throughout by *laafe* **lāafi** in 1996 NT and KB
- là'am** together, *preverb* [19.7.2](#)
- là'am<sup>m</sup>** *vv.* associate with; together with [23.3](#)
- là'as<sup>ε</sup>** *vv.* gather together (*transitive*); *Bà là'as tāaba* They gathered together.
- làbāar<sup>ε</sup>** *cb* *làbà-* *n.* news ← Arabic الاخبار *ʔal-ʔaxba:r(u)*
- làbɿ<sup>ya</sup>** *iv.* be crouching, hiding behind something (cf Hausa *laḅèè* "crouch behind something to eavesdrop" [15.1](#))
- làbɿ<sup>ε</sup>** *vv.* make crouch behind something
- làbɿn<sup>ε</sup>** *vv.* crouch behind something
- làbɿs<sup>ε</sup>** *vv.* walk stealthily
- làbɿs<sup>a/</sup>** *iv.* be wide

**lābısıg<sup>a</sup> lābısır<sup>ε</sup>** pl *lābısá<sup>+</sup>* cb *lābıs-* adj. wide

**lābısım<sup>m</sup>** n. width

**lāk<sup>ε/</sup>** vv. open (eye, book)

**lāl<sup>la/</sup>** iv. be distant

**lālıg<sup>ε/</sup>** vv. get to be far, make far

**lālلی<sup>+</sup>** adv. far off

**lālلیg<sup>a</sup>** pl *lālلیs<sup>ε</sup>* cb *lālلیg-* adj. distant

**lālلیg<sup>ɔ</sup>** pl *lālلیá<sup>+</sup>* cb *lāl-* adj. distant

**lām<sup>mε/</sup>** pl *lāmá<sup>+</sup>* cb *lām-* n. gum (of tooth); **lām-fıđg<sup>ɔ</sup>** pl *lām-fıđđ<sup>ε</sup>* adj. toothless

16.11.1.4

**lāmpō-dí'əs<sup>a</sup>** n. tax collector 15 ← French *l'impôt*

**lān<sup>nε</sup>** pl *lāna<sup>+</sup>* cb *lān-* n. testicle

**lāngāvıg<sup>ɔ</sup>** pl *lāngāam<sup>mε</sup> lāngāamá<sup>+</sup>* cb *lāngāvıg-* n. crab (cf *māngāvıg<sup>ɔ</sup>* id)

**lānnıg<sup>a</sup>** pl *lānnıs<sup>ε</sup>* cb *lānnıg-* 9.2.2 n. squirrel

**lā'ıg<sup>ε/</sup>** vv. set alight

**lāıgım<sup>m</sup>** vv. wander around searching

**lāıg<sup>ɔ</sup>** pl *lā'ad<sup>ε</sup>* cb *lā'-* n. item of goods pl goods

**lā'ıg<sup>ɔ</sup>** pl *lā'ama<sup>+</sup>* n. fishing net

**lēb<sup>ε</sup>** ger *lēbıg<sup>a</sup>* vv. return (*intrans*)

**lēbıg<sup>ε</sup>** vv. turn over

**lēbıs<sup>ε</sup>** vv. answer; send back; divorce (wife)

**lēε** but, VPred particle 19.7.1

**lēm** again, preverb 19.7.2

**lēm<sup>m</sup>** ipfv *lēmııd<sup>a</sup>* vv. sip, taste

**lēr<sup>ε</sup>** vv. get ugly

**lì** it, its (*proclitic*) 16.3.1

**lı<sup>+</sup>** it (*enclitic object*) 16.3.1

**lı<sup>+</sup>** ipfv *lıt<sup>a</sup> imp lim<sup>a</sup> ger lıg<sup>a</sup>* vv. fall

**lı<sup>+</sup>** vv. block up

**lıa** where is ...? 22

**lıdıg<sup>ε</sup>** vv. turn a shirt WK

**lıdıg<sup>ε</sup>** vv. astonish, be amazed

**lıəb<sup>ε</sup>** vv. become

**lı'əı<sup>ε</sup>** vv. approach, come near

**lıəıg<sup>a</sup>** pl *lıəmıs<sup>ε</sup>* cb *lıəıg-* n. axe

**lıg<sup>ε</sup>** vv. patch

**lıgıı<sup>ε</sup>** vv. cover

**lıgıı<sup>ε</sup>** vv. cover oneself

**lııbır<sup>ε</sup>** pl *lııba<sup>+</sup>* cb *lııb-* n. twin

**lıık<sup>a</sup>** pl *lııgıs<sup>ε</sup>* n. darkness

**lıılāalıg<sup>a</sup>** pl *lıılāalıs<sup>ε</sup> lıılāalımıs<sup>ε</sup>* cb *lıılāalıg-* n. swallow

**lín** it (subject of *h*-clause) [16.3.1](#)

**līn<sup>ε</sup>** it (contrastive) [16.3.1](#)

**lìn<sup>ε</sup>** that demonstrative [16.3.2](#)

**líná<sup>+</sup>** that demonstrative [16.3.2](#)

**l̄<sup>+</sup>** vv. tie

**l̄b<sup>ε</sup>** vv. throw stones at

**l̄b̄d̄íg<sup>a</sup>** pl **l̄b̄d̄ís<sup>ε</sup>** n. water drawing vessel

**l̄d̄íg<sup>a/</sup>** pl **l̄d̄ís<sup>ε/</sup>** cb **l̄d-** n. corner; **l̄d̄ígín kúg-súg<sup>ɔ</sup>** cornerstone NT

**l̄d̄íg<sup>ε/</sup>** vv. untie

**l̄k<sup>ɔ</sup>** pl **l̄'ad<sup>ε</sup>** cb **l̄'à-** n. quiver (for arrows)

**l̄mb̄'ɔg<sup>ɔ</sup>** pl **l̄mb̄'ɔd<sup>ε</sup>** cb **l̄mb̄'-** n. garden ← Hausa *làmbuu*

**l̄ŋ<sup>a</sup>** pl **l̄m̄s<sup>ε</sup>** cb **l̄ŋ-** n. a kind of frog

**l̄'ŋ<sup>ε/</sup>** vv. go across river, road etc

**l̄r<sup>ε</sup>** pl **l̄yà<sup>+</sup>** **l̄ɔm<sup>ma</sup>** cb **l̄r-** n. car, lorry ← English

**l̄<sup>+</sup>** ipfv **l̄t<sup>a</sup>** imp **l̄m<sup>a</sup>** vv. fall

**l̄ūb<sup>ε</sup>** ger **l̄ūb̄r<sup>ε/</sup>** vv. buck, kick, struggle, throw off rider

**l̄ūg<sup>ε</sup>** vv. swim

**l̄ōḡv<sup>ε</sup>** n. organ, member

## M

**m̄** I, my (proclitic) [16.3.1](#)

**m<sup>a</sup>** me (enclitic) [16.3.1](#)

**mà<sup>+</sup>** cb **mà-** n. mother; pl **mà nám<sup>a</sup>** (tone sic) mother's sisters/co-wives; **mà-biig<sup>a</sup>** n. sibling with same mother; **mà-bil<sup>a</sup>** n. mother's younger sister or junior co-wife; **mà-kp̄ēñm<sup>m</sup>** n. mother's elder sister or senior co-wife; **mà-pīt<sup>a/</sup>** n. mother's younger sister

**mà<sup>+</sup>** vv. lie, deceive

**mà'aa** SF **mà'anē** LF only; post-NP/AdvP particle [30.6](#)

**màal<sup>ε</sup>** vv. prepare, sacrifice; agt **màal-māan<sup>na</sup>** n. sacrificer; used for "priest" in the NT, but in traditional usage just a worker who conducts the actual slaying for the the **t̄ēŋ-dāan<sup>a</sup>** earth-priest himself

**mā'al<sup>ε/</sup>** vv. make cool, wet

**māan<sup>ne</sup>** pl **māana<sup>+</sup>** cb **māan-** n. sacrifice [12.1.2](#)

**mā'an<sup>ne</sup>** pl **mā'aná<sup>+</sup>** cb **mā'an-** n. okra

**mā'as<sup>a/</sup>** iv. be cool, wet

**mā'asíg<sup>a</sup>** **mā'asír<sup>ε</sup>** pl **mā'asá<sup>+</sup>** cb **mā'as-** adj. cool, wet

**mā'asígā<sup>+/</sup>** adv. coolly [17.4](#)

**mā'asím<sup>m</sup>** n. coolness, wetness

**mād̄íg<sup>ε/</sup>** vv. overflow, abound

**mā'e<sup>+/</sup>** vv. cool down

**màk<sup>ε</sup>** vv. crumple up

**māk<sup>ε/</sup>** vv. measure, judge

**màlīāk<sup>a/</sup>** pl *màlīā'as<sup>ε/</sup>* *màlīāk-nám<sup>a</sup>* cb *màlīā'*- n. angel ← Arabic ملاك *malʔak(un)* [15.1](#)  
written *malek* in NT versions before 2016

**màlɔgum** again; preverb [19.7.2](#)

**māls<sup>a/</sup>** iv. be sweet, pleasant

**mālsíg<sup>a</sup>** **mālsír<sup>ε</sup>** pl *mālsá<sup>+</sup>* cb *māls-* adj. sweet, pleasant

**mālsím<sup>m</sup>** n. sweetness

**mālsíg<sup>a</sup>** pl *mālsís<sup>ε</sup>* cb *mālsíg-* adj. sweet, pleasant

**mālvɔ<sup>ɔ</sup>** pl *mālvma<sup>+</sup>* cb *mālvɔ-* n. sacrifice

**mām** I, me [16.3.1](#)

**mán** I (as subject of *ñ*-clause) [16.3.1](#)

**mān** SF **mánē** LF I, me (contrastive) [16.3.1](#)

**màngáuvɔ<sup>ɔ</sup>** pl *màngáam<sup>mε</sup>* *màngāamá<sup>+</sup>* cb *màngāuvɔ-* n. crab (cf *làngáuvɔ<sup>ɔ</sup>* id)

**màvɔk<sup>ɔ</sup>** pl *mà'ad<sup>ε</sup>* adj. crumpled up

**mè<sup>+</sup>** vv. build

**mè mèn<sup>ε</sup>** too, also; post-NP/AdvP particle [30.6](#); **mè-kàma** -soever [16.3.3](#)

**mēd<sup>ε</sup>** vv. mash up

**mèεɔ<sup>a</sup>** pl *mèεmɔs<sup>ε</sup>* cb *mèεɔ-* n. turtle

**mèlɔgum<sup>m</sup>** n. dew

**mēj<sup>a/</sup>** self [16.10.3.1](#)

**mējír<sup>ε</sup>** adj. genuine

**mēt<sup>ε/</sup>** cb *mēt-* n. pl as sg pus

**mī<sup>+</sup>** ger *mī'ilím<sup>m</sup>* iv. know; agt **gbàn-mī'id<sup>a/</sup>** n. scribe ("book-knower") NT

**míif<sup>ɔ</sup>** pl *mīiní<sup>+</sup>* n. okra seed

**mì'ig<sup>ε</sup>** vv. become sour

**mì'is<sup>a</sup>** iv. be sour

**mì'isvɔ<sup>ɔ</sup>** pl *mì'isa<sup>+</sup>* cb *mì'is-* adj. sour

**mīlvɔ<sup>ε/</sup>** vv. get dirty

**mìmīilím<sup>m</sup>** **mìmīilúvɔ<sup>ɔ</sup>** n. sweetness

**mìt** see that it doesn't happen that... [29.1.1](#); always *mid* in KB

**mō<sup>+</sup>** vv. strive, struggle

**mōd<sup>ε</sup>** vv. swell

**mōdɔg<sup>ε/</sup>** vv. be patient, endure

**mòlvɔ<sup>ɔ</sup>** pl *mòlv<sup>+</sup>* cb *mòlv-* n. gazelle

**mōn<sup>ε</sup>** vv. grind millet to make *sā'ab<sup>ɔ</sup>* porridge

**mōɔ<sup>ε/</sup>** vv. refuse to lend

**mōɔvɔ<sup>ɔ</sup>** pl *mōɔd<sup>ε</sup>* cb *mō-* n. grass, "bush"; **mō-pīl<sup>ε</sup>** n. grass thatch

**Mòɔvɔ<sup>ɔ</sup>** n. Mossi realm; **Mòɔg Ná'àb<sup>a</sup>** n. the Moro Naba, King of the Mossi

**mōɔlv<sup>ε/</sup>** vv. proclaim; agt **mōɔlv-mòɔn<sup>na</sup>** n. proclaimer

**Mòɔlv<sup>ε</sup>** n. Mooré language

**Mōr**<sup>ε/</sup> pl *Móom*<sup>ma</sup> cb *Mōr*- n. Muslim  
**mōr**<sup>a/</sup> ger *mōrí*<sup>m</sup> iv. have, possess; **mōr nā** bring [20.7](#)  
**Mù**<sup>+</sup> pl *Mòos*<sup>ε</sup> cb *Mò*- n. Mossi person [32.5](#)  
**mṽ'à**<sup>a</sup> vv. suck (of a baby)  
**mṽàk**<sup>a</sup> pl *mṽ'as*<sup>ε</sup> cb *mṽ'à*- n. maggot  
**mṽ'ar**<sup>ε</sup> pl *mṽ'àa*<sup>+</sup> *mṽ'ada*<sup>+</sup> cb *mṽ'à*- n. dam; reservoir  
**mṽ'as**<sup>ε</sup> vv. give (to baby) to suck  
**mṽ'e**<sup>+</sup> vv. redden; catch fire/ignite; become intense, severe  
**mṽj**<sup>+</sup> cb *mṽj*- n. pl as sg rice  
**mṽl**<sup>ε</sup> vv. itch  
**mṽm**<sup>m</sup> vv. bury

## N

**ṅ** clause nominaliser particle [28](#)  
**n** VP catenator particle [23.1](#)  
**ṅ-** personifier clitic before an adjective [16.6](#)  
**n<sup>ε</sup>** discontinuous-past enclitic [27.1.1](#)  
**n<sup>ε</sup> nī**<sup>+/</sup> locative enclitic [17.3](#)  
**nà** positive irrealis mood marker [19.4](#)  
**nā**<sup>+/</sup> hither; VP-final particle [20.7](#)  
**nā**<sup>+</sup> vv. join  
**nāa** reply to greetings invoking blessings [31](#)  
**nà'ab**<sup>a</sup> pl *nà'-nàm*<sup>a</sup> cb *nà'*- n. chief, king; **nà'-bīg**<sup>a</sup> n. prince, princess  
**nāaf**<sup>p</sup> pl *nāíg*<sup>+</sup> cb *nā'*- n. cow; **nā'-lór**<sup>ε</sup> n. place in compound for tying up cows;  
**nā'-dàùg**<sup>p</sup> pl *nā'-dààd*<sup>ε</sup> cb *nā'-dá*- n. ox; **nā'-dá-kūedír**<sup>ε</sup> n. ox for ploughing  
**nàam**<sup>m</sup> vv. happen  
**nā'am**<sup>m</sup> cb *nà'am*- n. chieftaincy, kingdom  
**nāan** next, afterwards = *ñyāan*  
**nāan** or **nāani** then, in that case, being thus/there [27.1.2](#)  
**nà'anā**<sup>+/</sup> adv. easily [17.4](#)  
**nà'as**<sup>ε</sup> vv. honour; ger **nà'asi**<sup>+</sup> n. honour  
**Nàbıd**<sup>a</sup> pl *Nàbıdıb*<sup>a</sup> cb *Nàbıd*- n. Nabdema person [32.5](#)  
**Nàbıdug**<sup>p</sup> n. Nabdema country  
**Nàbı**<sup>ε</sup> n. Nabit language [32.5](#)  
**Nà'dàm**<sup>ma</sup> n. clan name [32.5](#)  
**Nà'dàıj**<sup>p</sup> n. place of clan Nadamba  
**nà'-dàwān**<sup>nε/</sup> n. pigeon KED (= *dàwān*<sup>nε/</sup>)  
**nāe**<sup>+/</sup> vv. finish  
**nàm** still, yet; auxiliary tense particle [19.3.1](#)  
**nàm**<sup>a</sup> pluraliser [9.4](#)

- nā'mis**<sup>ε/</sup> vv. persecute, suffer  
**nān**<sup>ε</sup> vv. love, respect, appreciate  
**nà'-nēsinnēog**<sup>ɔ/</sup> n. centipede WK  
**nānná**<sup>+</sup> adv. now [17.7](#)  
**nānná-nā**<sup>+/</sup> adv. now [17.7](#)  
**nānzū'us**<sup>ε/</sup> n. pepper tones uncertain  
**nāŋ**<sup>a</sup> pl **nām**<sup>is</sup><sup>ε</sup> cb **nàŋ-** n. scorpion  
**nār**<sup>a/</sup> ger **nārím**<sup>m</sup> iv. be obliged to; impersonal: to be necessary; with following subordinate **yē** or **kà**-clause [26.1](#); negated: be obliged not to [29.2](#)  
**nàrvŋ**<sup>ɔ</sup> pl **nàrvma**<sup>+</sup> cb **nàrvŋ-** adj. necessary  
**Nàsāal**<sup>ε</sup> n. English/French language  
**Nàsāara**<sup>+</sup> pl **Nàsāa-nām**<sup>a</sup> **Nàsāar-nām**<sup>a</sup> cb **Nàsāa- Nàsāar-** n. European person  
 ← Arabic نصارى **Nas'a:ra**: "Christians"; **Nàsāa-biig**<sup>a</sup> n. European child  
**nàyiig**<sup>a</sup> pl **nàyiig-nām**<sup>a</sup> **nàyiis**<sup>ε</sup> n. thief  
**nàyiigum**<sup>m</sup> n. thievery  
**nà'-zòm**<sup>mε</sup> n. locust  
**nē** preposition: with [18.1](#); linking NPs and AdvPs: and [16.7](#)  
**nē** uncommon variant of **yē** that [26.3](#) (cf Mampruli *ni id*)  
**nē**<sup>+/</sup> focus particle [30.1.2](#); temporal marker [19.2](#)  
**nē**<sup>+/</sup> meaningless particle after objects of **wūv** and **wēn**<sup>na/</sup> [18.1](#)  
**nē**<sup>+/</sup> this (pronoun) [16.3.2](#)  
**nèel**<sup>ε</sup> vv. reveal  
**nèem**<sup>m</sup> adv. for free  
**nēem**<sup>m/</sup> vv. grind with a millstone  
**nēer**<sup>ε/</sup> n. millstone  
**nèes**<sup>ε</sup> vv. reveal  
**nèesum**<sup>m</sup> n. light  
**nēm-nèèr**<sup>ε</sup> pl **nēm-néyà**<sup>+</sup> n. someone who grinds  
**nēn**<sup>na/</sup> ger **nēnním**<sup>m</sup> iv. envy  
**nē'ŋá**<sup>+</sup> this (pronoun) [16.3.2](#)  
**nèog**<sup>ɔ</sup> **nèer**<sup>ε</sup> pl **nèed**<sup>ε</sup> **nèya**<sup>+</sup> cb **nè-** adj. empty  
**nēsinnēog**<sup>ɔ/</sup> pl **nēsinnèed**<sup>ε/</sup> cb **nēsinné-** n. envious person WK; others: centipede  
**ñ fá!** Well done! [25.2.4](#)  
**nī**<sup>+/</sup> locative enclitic [17.3](#) see **n**<sup>ε</sup>  
**nì**<sup>+</sup> vv. rain  
**nīd**<sup>a/</sup> pl **nīdtb**<sup>a/</sup> cb **nīn-** n. person; **nīn-sáàl**<sup>a</sup> pl **nīn-sáalìb**<sup>a</sup> cb **nīn-sáàl-** n. human being;  
**nīnpōnān**<sup>na/</sup> pl **nīnpōnānnìb**<sup>a</sup> cb **nīnpōnán-** n. disrespectful person; **nīn-**  
**sábùlìs**<sup>ε</sup> n. Africans  
**nìe**<sup>+</sup> vv. appear, reveal

- nīf**<sup>pl</sup> pl *nīn*<sup>+</sup> cb *nīn-* *nīf-* n. eye; **nīf-gbáun**<sup>3</sup> n. eyelid; **nīf-sób**<sup>a</sup> n. miser; **nīf-ñyáuk**<sup>3</sup> adj. one-eyed [16.4.2.3](#) [16.11.1.4](#); **nīn-dáa**<sup>=</sup> pl *nīn-dáàs*<sup>ε</sup> cb *nīn-dá-* n. face; **nīn-gótìŋ**<sup>a</sup> n. mirror pl **nīn-gótis**<sup>ε</sup> n. spectacles, glasses; **nīn-kúgvdiŋ**<sup>a</sup> pl *nīn-kúgvdiŋ*<sup>ε</sup> n. eyebrow; **nīn-tá'àm**<sup>m</sup> n. tear(s); **nīn-múa**<sup>+</sup> n. concentration ("eye-redness"); *m̄ nīn* *m̄'e nē* ... I'm concentrating on ... (KB "zealous for ...")
- nīŋ**<sup>a</sup> pl *nīimís*<sup>ε</sup> *nīs*<sup>ε</sup> cb *nīŋ-* n. bird
- nīm**<sup>nε/</sup> **nī'm**<sup>nε/</sup> pl *nīmá*<sup>+</sup> cb *nīm-* n. meat
- nīn-báalìg**<sup>a</sup> n. pity; **nīn-báal-zōr**<sup>ε</sup> n. pity; *Ò zòt-ō nīn-báalìg*. He has pity on him.
- nīŋ**<sup>a</sup> pl *nīs*<sup>ε</sup> cb *nìŋ-* *nìn-* n. body (uncommon); **nìn-tōllím**<sup>m</sup> n. fever; **nìn-tāa**<sup>=</sup> pl *nìn-tāas*<sup>ε</sup> cb *nìn-tà-* n. co-wife; husband's sister's wife (Ghanaian English: "rival"); **nìn-gbīŋ**<sup>pl</sup> pl *nìn-gbīná*<sup>+</sup> cb *nìn-gbīŋ-* n. body (plural often used as singular); **nìn-gòr**<sup>ε</sup> n. neck
- nīn-púòd**<sup>ε</sup> n. pl as sg pus
- nīntāŋ**<sup>a/</sup> pl *nīntāaŋs*<sup>ε/</sup> cb *nīntāŋ-* n. heat of the day, early afternoon
- nìŋ**<sup>ε</sup> vv. do
- n lā** that is ... [22](#)
- ñnāas** q. four, in counting [16.4.2.2](#)
- ñnī** q. eight, in counting [16.4.2.2](#)
- ñnū** q. five, in counting [16.4.2.2](#)
- n ñwà** this is ... [22](#)
- n ñwà nā** this here is ... [22](#)
- nō**<sup>+</sup> vv. tread
- nōb**<sup>ε</sup> vv. get fat
- nōbìg**<sup>ε/</sup> vv. grow (e.g. child, plant)
- nóbìr**<sup>ε</sup> pl *nōbá*<sup>+</sup> cb *nōb-* n. leg, foot; **nōb-bíl**<sup>a</sup> n. toe; **nōb-yíun**<sup>3</sup> adj. one-legged [16.4.2.3](#) [16.11.1.4](#); **nōb-íñ'a**<sup>+</sup> n. toenail; **nōb-púmpàun**<sup>3</sup> n. foot
- nōk**<sup>ε/</sup> vv. pick up, take up
- nòŋ**<sup>ε</sup> agt *nòŋid*<sup>a</sup> (irregularly Pattern L) vv. love (family, spiritual); stative [11.1.1](#)
- nōŋ**<sup>3/</sup> cb *nōŋ-* n. poverty; **nōŋ-dáàn**<sup>a</sup> n. poor person
- nòŋlím**<sup>m</sup> n. love
- nōr**<sup>ε/</sup> pl *nōyá*<sup>+</sup> cb *nō-* n. mouth; command, message, opinion; **nō-dí'ès**<sup>a</sup> n. "linguist", a councillor who speaks on a chief's behalf on all official occasions (a custom by no means confined to the region of the old Mossi-Dagomba states, where the chiefs were originally foreign invaders who may once have needed interpreters [1.1](#): "linguist" in Ghana typically refers to an Akan chief's herald and spokesman, the *okyeame*); **Wínà'am nō-dí'ès**<sup>a</sup> ("God's linguist") prophet NT/KB; **nō-lóòr**<sup>ε</sup> n. fasting ("mouth-tying", as throughout W Africa); **nō-nààr**<sup>ε</sup> n. covenant; **nō-póòr**<sup>ε</sup> n. oath; **nō-gbáun**<sup>3</sup> pl *nō-gbánà*<sup>+</sup> n. lip
- nōr**<sup>ε/</sup> times [16.4.2.4](#)
- nōrím**<sup>m</sup> times [16.4.2.4](#)
- ñpòè** q. seven, in counting [16.4.2.2](#)

**ntáñ'** *q.* three, in counting [16.4.2.2](#)

**nū**<sup>+</sup> *vv.* drink

**nūa**<sup>+</sup> *pl* *nōɔs*<sup>ε/</sup> *cb* *nō-* *n.* hen; **nō-dáùg**<sup>ɔ</sup> *n.* cock; **nō-ñyá'àη**<sup>a</sup> *n.* (specifically female) hen; **Nō-ñyá'àη-né-ò-Biis** the Pleiades

**nūlɪg**<sup>ε/</sup> *vv.* make drink

**nūlɪs**<sup>ε/</sup> *vv.* make drink

**nú'ùg**<sup>ɔ</sup> *pl* *nú'ùs*<sup>ε</sup> *cb* *nū'-* *n.* hand, arm; **nū'-bíl**<sup>a</sup> *pl* *nū'-bíbìs*<sup>ε</sup> *n.* finger; **nū'-dáùg**<sup>ɔ</sup> *n.* thumb; **nū'-yíɪŋ**<sup>ɔ</sup> *adj.* one-armed [16.4.2.3](#) [16.11.1.4](#); **nū'-íñ'a**<sup>+</sup> *pl* *nū'-éñ'ès*<sup>ε</sup> *cb* *nū'-éñ'-* *n.* fingernail; **nū'-wéñ'èd**<sup>a</sup> *n.* mediator

**ñwà**<sup>+</sup> *this* [16.5](#)

**ñwā**<sup>+</sup> *vv.* smash, break up

**ñwāaη**<sup>a</sup> *pl* *ñwāamɪs*<sup>ε</sup> *cb* *ñwàaη-* *n.* monkey

**ñwādɪg**<sup>a/</sup> *pl* *ñwādɪs*<sup>ε/</sup> *cb* *ñwād-* *n.* moon, month; **ñwād-bíl**<sup>a</sup> *pl* *ñwād-bíbìs*<sup>ε</sup> *n.* star; **Ñwād-dár**<sup>ε</sup> *n.* Venus

**ñwà'e**<sup>+</sup> *vv.* cut wood

**ñwāe** *q.* nine, in counting [16.4.2.2](#)

**ñwām**<sup>mε</sup> **ñwān**<sup>nε</sup> *pl* *ñwāma*<sup>+</sup> *ñwāna*<sup>+</sup> *cb* *ñwām-* *ñwān-* *n.* calabash

**Ñwāmpūrig**<sup>a/</sup> *pl* *Ñwāmpūrɪs*<sup>ε/</sup> *cb* *Ñwāmpūr-* *n.* Mamprussi person [32.5](#)

**Ñwāmpūrɪ**<sup>ε/</sup> *n.* Mampruli language [32.5](#)

**Ñwāmpūrvɔ**<sup>ɔ/</sup> *n.* Mamprussi country

**ñwè**<sup>+</sup> *vv.* beat; **ñwè**<sup>+</sup> X **nú'ùg** make an agreement with X; **ñwè**<sup>+</sup> **ñyō'ɔg** boast

**ñwiig**<sup>a/</sup> *pl* *ñwiis*<sup>ε/</sup> *cb* *ñwī-* *n.* rope; **ñwī-ték**<sup>a</sup> *pl* *ñwī-tékìdɪb*<sup>a</sup> *cb* *ñwī-ték-* *n.* rope-puller; **ñwī-tékìr**<sup>ε</sup> *pl* *ñwī-tékà*<sup>+</sup> *n.* rope for pulling

**ñwiig**<sup>ε/</sup> *vv.* make a rope

**ñyā'al**<sup>ε/</sup> *vv.* leave behind

**ñyāan** next, afterwards; *post-subject particle* [24.1.4](#)

**ñyá'aη**<sup>a</sup> *pl* *ñyá'as*<sup>ε</sup> *ñyā'amís*<sup>ε</sup> *cb* *ñyā'aη-* *adj.* female (animal)

**ñyá'aη**<sup>a</sup> behind, *postposition* [17.6](#); East [32.3](#); **ñyà'an-dòl**<sup>la</sup> **ñyà'an-dòl**<sup>le</sup> *pl* *ñyà'an-dòlla*<sup>+</sup> *ñyà'an-dòllɪb*<sup>a</sup> *cb* *ñyà'an-dòl-* *n.* disciple NT; *tones unexpected, Pattern L*

**ñyā'ar**<sup>ε</sup> *pl* *ñyā'a*<sup>+</sup> *cb* *ñyà'-* *n.* root

**ñyāe**<sup>nε/</sup> *adv.* in the light, brightly, clearly [17.3](#)

**ñyālúŋ**<sup>ɔ</sup> *pl* *ñyālmá*<sup>+</sup> *cb* *ñyālɔŋ-* *adj.* wonderful

**ñyàn**<sup>nε</sup> *n.* shame; **Ò dì ñyán.** He's ashamed.

**ñyāŋ**<sup>ε/</sup> *vv.* overcome [23.3](#)

**ñyàùk**<sup>ɔ</sup> *pl* *ñyà'ad*<sup>ε</sup> *adj.* only (eye) [16.4.2.3](#) [16.11.1.4](#)

**ñyē**<sup>+</sup> *ipfv* **ñyēt**<sup>a/</sup> *imp* **ñyèm**<sup>a</sup> *vv.* see, find; **ñyē láafɪya** get well

**ñyēε, ñyēε tí** habitually, *preverb* [19.7.2](#)

**ñyē'εr**<sup>ε/</sup> *pl* *ñyēdá*<sup>+</sup> *cb* *ñyē'-* *n.* next-younger sibling

**ñyèεs**<sup>a</sup> *iv.* be self-confident

**ñyèεsɪm**<sup>m</sup> *n.* self-confidence

**ñyèεsíŋ**<sup>a</sup> *pl* *ñyèεsíς*<sup>ε</sup> *cb* *ñyèεsíŋ-* *adj.* self-confident



**ñyèesíḡā**<sup>+/</sup> *adv.* self-confidently [17.4](#)

**ñyí** *q.* two, in counting [16.4.2.2](#)

**ñyīn**<sup>ne/</sup> *pl* ñyīná<sup>+</sup> *cb* ñyīn- *n.* tooth

**ñyīrí**<sup>f</sup> *pl* ñyīrí<sup>+</sup> *n.* a kind of edible seed, egusi: *Colocynthis citrullus* (Haaf)

**ñyṵṵ**<sup>e</sup> *n.* intestines

**ñyṵ'ṵḡ**<sup>d/</sup> *n.* chest

**ñyṵṵ**<sup>e</sup> *pl* ñyṵya<sup>+</sup> *cb* ñyṵ- *n.* nose; breath; **ñyṵ-vūr**<sup>e/</sup> *pl* ñyṵ-vūyá<sup>+</sup> *cb* ñyṵ-vūr- *n.* life;

**ñyṵ-vūr-páàl**<sup>le</sup> *n.* new life NT

**ñyṵ'ṵs**<sup>e/</sup> *n.* smoke

**ñyúèb** *q.* six, in counting [16.4.2.2](#)

**ñyūur**<sup>e/</sup> *pl* ñyūyá<sup>+</sup> *cb* ñyū- *n.* yam

## O

**ò** [ʊ] he, she, his, her (*proclitic*) [16.3.1](#)

**°** LF [ʊ] him, her (*enclitic object*) [16.3.1](#) [8.2.1.1](#)

**ón** he, she (*subject of ñ-clause*) [16.3.1](#)

**ōn**<sup>e</sup> he, she (*contrastive*) [16.3.1](#)

**òn**<sup>e</sup> this, that (*animate sg demonstrative*) [16.3.2](#)

**òñb**<sup>e</sup> *ger* òñbir<sup>e</sup> *vv.* chew

**òḡā**<sup>+/</sup> this, that (*animate sg demonstrative*) [16.3.2](#)

**ṵṵs**<sup>e/</sup> *vv.* warm oneself; **Ò ṵṵsid nē búgúm lā.** She's warming herself at the fire.

## P

**pà'** earlier today, *tense particle* [19.3.1](#)

**pà'al**<sup>e</sup> *vv.* teach, inform; *agt* **pā'an**<sup>na</sup> *pl* pā'annib<sup>a</sup> *cb* pà'an- *n.* teacher

**pà'al**<sup>e</sup> *vv.* put on top of something

**pāalíg**<sup>a</sup> **pāal**<sup>le</sup> *pl* pāalís<sup>e</sup> pāalá<sup>+</sup> *cb* pāal- *adj.* new

**pāalím**<sup>m</sup> *adv.* recently [17.4](#)

**pāalú**<sup>+</sup> *adv.* openly [17.4](#)

**pàañlúḡ**<sup>d</sup> *pl* pàañlímìs<sup>e</sup> *n.* spider's web

**pàam**<sup>m</sup> *vv.* receive a gift

**pàas**<sup>e</sup> *vv.* add up to, amount to

**pāe**<sup>+/</sup> *vv.* reach

**pàk**<sup>e</sup> *vv.* surprise

**pàk**<sup>e</sup> *vv.* take off from the top

**pāmm** SF **pāmné** LF *q.* much, a lot [16.4.1](#) [6.4](#)

**pàñ'alum**<sup>m</sup> *vv.* dedicate

**pàñsig**<sup>e</sup> *vv.* lack

**pàḡ**<sup>a</sup> *pl* pàañs<sup>e</sup> *cb* pàḡ- *n.* power

**pà' tì** perhaps; *post-subject particle* [24.1.4](#)

**pèbɪs<sup>ɛ</sup>** vv. blow (of wind)

**pèbɪsɪm<sup>m</sup> pèbɪsɔg<sup>ɔ</sup>** n. wind

**pè'el<sup>ɛ</sup>** vv. fill; *res adj* **pè'elúŋ<sup>ɔ</sup>** full

**pɛɛɪɔg<sup>ɔ</sup>** in *zū-pɛɛɪlòg<sup>ɔ</sup>* bald [16.11.1.4](#); cf *pie* "go bald" (Leviticus 13:40), Mooré *pěoogè*

**pè'es<sup>ɛ</sup>** vv. add up to, amount to

**pèlɪg<sup>ɛ</sup>** vv. whiten, go white

**pèlɪs<sup>ɛ</sup>** vv. sharpen

**pèn<sup>nɛ</sup>** n. vagina

**pē'ŋ<sup>ɛ/</sup>** vv. borrow; knock over WK

**pèog<sup>ɔ</sup>** pl *pèed<sup>ɛ</sup>* cb *pè-* n. basket

**pē'og<sup>ɔ/</sup>** pl *pē'es<sup>ɛ/</sup>* cb *pē'-* n. sheep; **pē'-sá'a<sup>ɛ</sup>** n. ewe lamb

**pēsɪg<sup>ɛ/</sup>** vv. sacrifice

**pjā<sup>+</sup>** vv. dig up

**pjāñ<sup>a</sup>** vv. speak, praise; *ger* **pjàuñk<sup>ɔ</sup>** n. word pl **pjàñ'ad<sup>ɛ</sup>** language cb *pjàñ'-*;

**pjàñ'-zòna<sup>+</sup>** n. foreign language

**pìbɪg<sup>ɛ</sup>** vv. uncover

**pìbɪ<sup>ɛ</sup>** vv. cover up

**pībɪn<sup>nɛ</sup>** pl *pībɪna<sup>+</sup>* cb *pìbɪn-* n. covering [12.1.2](#)

**pìd<sup>ɛ</sup>** vv. put on (hat, shoes, rings)

**pīd<sup>ɛ</sup>** vv. get bloated

**pìdɪg<sup>ɛ</sup>** vv. take off (hat, shoes, rings)

**pīe<sup>+/</sup>** vv. wash (part of one's own body)

**pìəb<sup>ɛ</sup>** vv. blow (e.g. flute)

**pìəɪg<sup>a</sup> pìəɪ<sup>ɛ</sup>** pl *pìəla<sup>+</sup>* *pìəɪs<sup>ɛ</sup>* cb *pìəɪ-* *adj.* white

**pìəɪm<sup>m</sup>** n. whiteness

**pìəs<sup>ɛ</sup>** vv. fool someone

**pìəs<sup>ɛ/</sup>** vv. wash

**pīiga<sup>+</sup>** q. ten [16.4.2.1](#)

**pīim<sup>m/</sup>** pl *pīmá<sup>+</sup>* cb *pīm-* n. arrow

**píuñ<sup>ɔ</sup>** pl *pīuñí<sup>+</sup>* cb *pīuñ-* n. genet

**pīini<sup>+</sup>** cb *pīin-* pl as sg (?) n. gift

**pīl<sup>ɛ</sup>** vv. put (hat, shoes, rings) on someone

**pīlɪg<sup>ɛ</sup>** vv. take (hat, shoes, rings) off someone

**pīñ'il<sup>ɛ/</sup>** vv. begin

**pīpīrɪg<sup>a/</sup>** pl *pīpīrɪs<sup>ɛ/</sup>* cb *pīpír-* n. desert

**pīsí<sup>+</sup>** q. twenty [16.4.2.1](#)

**pītú<sup>+</sup>** pl *pītíb<sup>a</sup>* cb *pīt-* n. younger sibling of the same sex [32.1](#)

**pō<sup>+</sup>** vv. swear

**pòñd<sup>ɛ</sup>** vv. crouch down

**pōñ'ɔɪ<sup>ɛ/</sup>** vv. cause to rot



## S

**sà** yesterday, tense particle [19.3.1](#)

**sà** hence, ago, VP-final particle [20.7](#)

**sā**<sup>+</sup> vv. be in distress

**sàa** tomorrow, tense particle [19.3.1](#)

**sāa**<sup>=</sup> pl **sāas**<sup>ε</sup> cb **sà-** n. rain; sky; as subject of **jāñk**<sup>εl</sup> "leap": lightning; **sāa** **díndēog**<sup>pl</sup> rainbow ("rain chameleon"); **sāa zúg**<sup>pl</sup> n. sky [17.6](#)

**sā'ab**<sup>pl</sup> cb **sà'-** n. millet porridge, "TZ", the staple food of the Kusaasi

**sāafi**<sup>+</sup> (?tones) n. lock, key ← Twi **safē**

**sàal**<sup>a</sup> pl **sàalb**<sup>a</sup> cb **sàal-** n. human (perhaps ← "hairless" cf **būn-kóñbùg**<sup>pl</sup>); **sàal-biig**<sup>a</sup> pl **sàal-biis**<sup>ε</sup> n. human being

**sàalíjā**<sup>+l</sup> adv. smoothly [17.4](#)

**sàam**<sup>ma</sup> pl **sàam-nàm**<sup>a</sup> cb **sàam-** n. father; **sàam-kpēñm**<sup>m</sup> n. father's elder brother; **sàam-pīt**<sup>a</sup> pl **sàam-pítib**<sup>a</sup> cb **sàam-pīt-** n. father's younger brother

**sāam**<sup>m</sup>/ vv. mash, crumble

**sā'an**<sup>εl</sup> in the presence of, in the opinion of; postposition [17.6](#)

**sāan**<sup>a</sup>/ pl **sāam**<sup>ma</sup> cb **sāan-** n. guest, stranger

**sāannim**<sup>m</sup> n. strangerhood

**sàbēog**<sup>pl</sup> pl **sàbēed**<sup>ε</sup> cb **sàbè-** n. wind, storm

**sābilíg**<sup>a</sup> **sābíl**<sup>le</sup> pl **sābilís**<sup>ε</sup> **sābilá**<sup>+</sup> cb **sābil-** adj. black

**sàbùà**<sup>+</sup> pl **sàbùes**<sup>ε</sup> cb **sàbùà-** n. lover, girlfriend

**Sà'dàbòog**<sup>pl</sup> n. place of the clan Sarabose [32.5](#)

**Sà'dàbùà**<sup>+</sup> pl **Sà'dàbùes**<sup>ε</sup> **Sà'dàbùeb**<sup>a</sup> n. clan name: [32.5](#)

**sādıgım** since, because [28.1.1](#)

**sāeñ**<sup>+</sup> or **sāeñ**<sup>a</sup> pl **sāañb**<sup>a</sup> cb **sàñ-** n. blacksmith

**sākárùg**<sup>pl</sup> pl **sākárid**<sup>ε</sup> cb **sākár-** n. fox

**sàlbur**<sup>ε</sup> n. bridle

**sāluma**<sup>+</sup> cb **sàlum-** n. pl as sg gold; **sàlum-kùes**<sup>a</sup> n. gold merchant

**sām**<sup>ne</sup>/ pl **sāmá**<sup>+</sup> cb **sām-** n. debt; **sām-kpá'às**<sup>a</sup> n. household servant

**sāmán**<sup>ne</sup> pl **sāmánà**<sup>+</sup> cb **sāmán-** n. open space in front of a **zàk**<sup>a</sup> compound;

**Sāmán-píer**<sup>ε</sup> n. traditional New Year ceremony

**sàñ'am**<sup>m</sup> vv. spoil, get spoiled, get broken; destroy

**sāngúnnir**<sup>ε</sup> pl **sāngúnnà**<sup>+</sup> cb **sāngún-** n. millipede

**sānjá**<sup>+</sup> pl **sānsá**<sup>+</sup> cb **sān-** n. time [32.9](#) [9.3.2](#); **sān-kán**<sup>ε</sup> adv. then; when?

**sān-sí'ēn lā** adv. at one time, once ... [24.1.3](#)

**sàŋ-gbàuj**<sup>pl</sup> n. sky, heaven; cf **sāa**<sup>=</sup>

**sāpál**<sup>le</sup> n. Harmattan part of the dry season **úun**<sup>ne</sup>

**sāriğá**<sup>+</sup> n. prison ← Hausa **sarkàa** "chain"

**sàriyà**<sup>+</sup> or **sèriyà**<sup>+</sup> n. law ← Arabic شريعة **fari:ʔa(tun)**; **sàriyà-kāt**<sup>a</sup> n. judge NT

**sāvug**<sup>pl</sup> pl **sāad**<sup>εl</sup> cb **sā-** n. broom, brush

- sàvk**<sup>ɔ</sup> pl *sà'ad*<sup>ɛ</sup> n. mote of dust  
**sāúŋ**<sup>ɔ</sup> n. hospitality  
**sè**<sup>+</sup> ipfv *sèɛd*<sup>a</sup> vv. transplant  
**sēoŋ**<sup>ɔ</sup> n. rainy season  
**sì**<sup>+</sup> vv. skin, flay  
**sī'a**<sup>+</sup> some, any (sg) [16.3.3](#)  
**sīa**<sup>+</sup> pl *sīas*<sup>ɛ</sup> cb *sjà-* n. waist; **sjà-lōɔdíŋ**<sup>a</sup> n. belt ("waist-tying-thing"); **sjà-nīf**<sup>ɔ</sup>  
n. kidney  
**sjà'al**<sup>ɛ/</sup> vv. get to be enough  
**sjà'ar**<sup>ɛ</sup> pl *sjà'a*<sup>+</sup> cb *sjà'-* n. forest (WK), wilderness  
**sjàk**<sup>ɛ</sup> vv. agree (cf Mooré *sàke id*)  
**sjàk**<sup>ɛ/</sup> vv. suffice (cf Mooré *sékè id*)  
**sībɔg**<sup>a/</sup> pl *sībí*<sup>+</sup> cb *sīb-* n. a kind of termite  
**sìd** truly, post-subject particle [24.1.4](#)  
**sìda**<sup>+</sup> pl *sìd-* n. pl as sg truth  
**sìd**<sup>a</sup> pl *sìdib*<sup>a</sup> cb *sìd-* n. husband [32.1](#); **sìd-bīl**<sup>a</sup> n. husband's younger brother;  
**sìd-kpēñm**<sup>m</sup> n. husband's elder brother; **sìd-puāk**<sup>a</sup> n. husband's sister  
**sīe**<sup>+/</sup> vv. descend, be humbled  
**sīaba**<sup>+</sup> some(ones), any (ones) [16.3.3](#)  
**sī'əl**<sup>a</sup> something, anything [16.3.3](#)  
**sī'am**<sup>m</sup> somehow, anyhow [16.3.3](#) [17.7](#)  
**sīg**<sup>ɛ</sup> vv. descend  
**sīgur**<sup>ɛ/</sup> n. guardian spirit, typically but not invariably the *wīn*<sup>ne/</sup> of an ancestor [32.2](#)  
**sīgus**<sup>ɛ/</sup> vv. lower  
**sīgusír**<sup>ɛ</sup> pl *sīgusá*<sup>+</sup> n. stopping-place  
**sīg**<sup>a</sup> pl *sīus*<sup>ɛ</sup> cb *sì-* n. shade, personal spirit (KED); used in NT for "spirit"; in  
traditional belief rather *Lebenskraft* (Haaf) "vital energy", closely associated  
in concept with the individual's tutelary *kikīrus*<sup>ɛ/</sup> (qv); **Sì-sùŋ**<sup>ɔ</sup> n. Holy Spirit NT  
**sīlum**<sup>m</sup> vv. cite proverbs  
**sīlŋ**<sup>a</sup> **sīlúŋ**<sup>ɔ</sup> pl *sīlŋs*<sup>ɛ</sup> *sīlŋm̀s*<sup>ɛ</sup> *sīlŋm̀à*<sup>+</sup> cb *sīlŋ-* n. proverb  
**sīñd**<sup>ɛ/</sup> n. honey  
**sīñf**<sup>ɔ/</sup> **sīñg**<sup>a/</sup> pl *sīñs*<sup>ɛ/</sup> cb *sīñ-* n. bee  
**sī'us**<sup>ɛ/</sup> vv. touch  
**sīlŋsúg**<sup>ɔ</sup> pl *sīlŋsús*<sup>ɛ</sup> n. ghost  
**sīlŋsúñg**<sup>ɔ</sup> pl *sīlŋsúñd*<sup>ɛ</sup> n. spider  
**sìlv**<sup>ɔ</sup> pl *sìl*<sup>ne</sup> *sìlus*<sup>ɛ</sup> cb *sìl-* n. hawk  
**sīm**<sup>m</sup> vv. sink in a liquid  
**Sìmiig**<sup>a</sup> pl *Sìmīs*<sup>ɛ</sup> cb *Sìmì-* n. Fulbe person, Fulani [32.5](#)  
**Sìmiil**<sup>ɛ</sup> n. Fulfulde language  
**Sìmiug**<sup>ɔ</sup> n. place of the Fulbe  
**sīn**<sup>na/</sup> ger *sīnním*<sup>m</sup> iv. be silent

**sīnsáañ**<sup>ƒ</sup> *n.* a kind of tiny ant

**sīŋ**<sup>a</sup> *pl* **sīlŋs**<sup>ƒ</sup> *cb* **sìŋ-** *n.* a kind of very big pot

**sī'ŋ**<sup>ƒ</sup> *vv.* begin

**sīsíbìg**<sup>a</sup> *pl* **sīsíbìs**<sup>ƒ</sup> *cb* **sīsíb-** *n.* neem tree [32.6](#) *Azadirachta indica* (Haaf)

**sīsíbìr**<sup>ƒ</sup> *pl* **sīsíbà**<sup>+</sup> *n.* fruit of neem tree [32.6](#)

**sìsì'əm**<sup>m</sup> *n.* wind, storm

**sìsùvǵū-n**<sup>ƒ</sup> *between, postposition* [17.6](#) KB *svvǵun*

**sī'úŋ**<sup>ǵ</sup> *pl* **sī'imís**<sup>ƒ</sup> *cb* **sī'uh-** *n.* a kind of large dish

**sō**<sup>+</sup> *some(one), any(one), animate sg* [16.3.3](#)

**sōb**<sup>a</sup> *dummy head pronoun, animate sg* [16.10.3.1](#)

**sōb**<sup>ƒ</sup> *vv.* go/make dark; usually write; **sōbir**<sup>ƒ</sup> *n.* piece of writing [12.1.2](#)

**sōbìg**<sup>ƒ</sup> *vv.* blacken

**sōeñ**<sup>+</sup> or **sōeñ**<sup>a</sup> *pl* **sōwñb**<sup>a</sup> *cb* **sòñ-** *n.* witch

**sógjà**<sup>a</sup> *n.* soldier ← English

**sōlŋǵ**<sup>ǵ</sup> *pl* **sōlimá**<sup>+</sup> *n.* story

**sōñ**<sup>+</sup> *vv.* rub

**sōñ'e**<sup>ya</sup> *iv.* be better than; *agt* **sōñ'wɔd**<sup>a</sup> *pl* **sōñ'wb**<sup>a</sup> *cb* **sōñ'wɔd-**

**sōnnur**<sup>ƒ</sup> *pl* **sōnna**<sup>+</sup> *cb* **sòn-** *n.* courtyard dividing wall

**sōñs**<sup>ƒ</sup> *ger* **sóñsìg**<sup>a</sup> *vv.* converse, talk with

**sōwñg**<sup>ǵ</sup> *n.* witchcraft

**sōwñr**<sup>ƒ</sup> *pl* **sōñya**<sup>+</sup> *cb* **sòñ-** *n.* liver

**sòs**<sup>ƒ</sup> *ger* **sōsìg**<sup>a</sup> *vv.* ask; *agt* **sòs**<sup>a</sup> *n.* beggar

**sù**<sup>+</sup> *vv.* take a bath

**sù'ā**<sup>a</sup> *vv.* do secretly, hide

**sùāk**<sup>a</sup> *n.* hiding place

**sūeñ**<sup>+</sup> *vv.* anoint

**sū'e**<sup>ya</sup> *iv.* own; *ger* **sū'ulím**<sup>m</sup> *n.* property, country, realm

**sūgur**<sup>ƒ</sup> *vv.* show forbearance, be patient with; **sūgurú**<sup>+</sup> *n.* forbearance

**sùm**<sup>m</sup> *n.* goodness; well [17.4](#) [21.2](#)

**sùm**<sup>ma</sup> *iv.* be good

**sùmbōgvsím**<sup>m</sup> *n.* peace

**sūmmur**<sup>ƒ</sup> *pl* **sūmma**<sup>+</sup> *cb* **sùm-** *n.* groundnuts; **sūm-dúgudà**<sup>+</sup> *n.* cooked groundnuts

**sùn**<sup>ne</sup> *ger* **sùnnur**<sup>ƒ</sup> or **sùnnug**<sup>ǵ</sup> *vv.* bow one's head [6.2.1](#); *agt* **sūn**<sup>na</sup> *n.* ("someone who goes about with bowed head") deep thinker, close observer WK

**sūñ'e**<sup>+</sup> *vv.* become better than

**sūñ**<sup>ǵ</sup> *pl* **sūñr**<sup>ƒ</sup> *pl* **sūñyá**<sup>+</sup> *cb* **sūñ-** *n.* heart; **sūñ-kpí'òŋ**<sup>ǵ</sup> *n.* boldness [16.10.1](#);

**sūñ-má'asìm**<sup>m</sup> *n.* joy (*M* **sūñf má'e yā**. "My heart has cooled" = I'm joyful);

**sūñ-málsìm**<sup>m</sup> *cb* **sūñ-máls-** *n.* joy; **sūñ-péèn**<sup>ne</sup> *n.* anger (*M* **sūñf pélig nē**. "My heart is whitened" = I'm angry); **sūñ-sáñ'òŋ**<sup>ǵ</sup> *n.* sorrow (*M* **sūñf sáñ'àm nē**. "My heart is spoiled" = I'm sad)

**sùŋ**<sup>ƒ</sup> *vv.* help

**sùŋ<sup>ɔ</sup> sùm<sup>mɛ</sup>** pl sùma<sup>+</sup> cb sùŋ- adj. good  
**sùŋā<sup>+/</sup>** adv. well [17.4](#) [21.2](#)  
**sú'əŋ<sup>a</sup>** pl sū'əmís<sup>ɛ</sup> cb sū'əŋ- n. rabbit  
**sūer<sup>ɛ/</sup>** pl sūēyá<sup>+</sup> cb sūā- n. road; permission in *sūer bé, m̄r sūer* [26.1](#)  
**sù'es<sup>a</sup>** n. yesterday [32.9](#)  
**sù'es<sup>ɛ</sup>** vv. trick  
**sùr<sup>a</sup>** iv. have one's head bowed  
**sùsùm<sup>mɛ</sup>** n. grasshopper  
**Sūtáanà<sup>+</sup>** n. Satan  
**sūvg<sup>ɛ/</sup>** vv. wither (leaves) WK  
**sù'vg<sup>a</sup> sù'vg<sup>ɔ</sup>** pl sù'vs<sup>ɛ</sup> cb sù'- n. knife

## T

**tāa<sup>=</sup> tāas<sup>ɛ</sup>** fellow- as second part of compound [13.1.1.4](#)  
**tāaba<sup>+</sup> tāab** each other [16.3.5](#)  
**tā'adur<sup>ɛ</sup>** pl tā'ada<sup>+</sup> cb tād- n. sandal  
**tàal<sup>lɛ</sup>** pl tādala<sup>+</sup> cb tād- n. fault, sin  
**tá'am<sup>mɛ</sup>** pl tāmá<sup>+</sup> n. shea tree fruit [32.6](#)  
**tá'əŋ<sup>a</sup>** pl tāmís<sup>ɛ</sup> cb tā'əŋ- n. shea butter tree [32.6](#) *Butyrospermum Parkii* (Haaf)  
**tā'as<sup>ɛ/</sup>** vv. help someone to walk; in greetings [31](#)  
**tàb<sup>ɛ</sup>** vv. get stuck to  
**tàbi<sup>y<sup>a</sup></sup>** iv. be stuck to  
**tàbiɣ<sup>ɛ</sup>** vv. get unstuck from  
**tàbi<sup>lɛ</sup>** vv. stick to (*transitive*)  
**tàdiɣ<sup>ɛ</sup>** n. become weak  
**tādım<sup>m/</sup>** pl tādım-nàm<sup>a</sup> cb tādım- n. weak person  
**tādımís<sup>ɛ</sup>** n. weakness  
**Tàlun<sup>nɛ</sup>** n. Talni language  
**Tàlɣ<sup>a</sup>** pl Tàlts<sup>ɛ</sup> cb Tàlɣ- n. Tallensi person [32.5](#)  
**tàm<sup>m</sup>** ipfv tàmɔd<sup>a</sup> vv. forget  
**tàmpūa<sup>+</sup>** pl tàmpōs<sup>ɛ</sup> cb tàmpò- n. housefly [9.3.2](#)  
**tàmpūr<sup>ɛ</sup>** cb tàmpò- n. ashpit, rubbish tip  
**tān<sup>nɛ</sup>** pl tāna<sup>+</sup> cb tād- n. earth; **tān-mēed<sup>a</sup>** n. builder  
**tāŋp<sup>ɔ</sup>** n. war; **tāŋp-sōb<sup>a</sup>** n. warrior  
**tāŋs<sup>ɛ</sup>** ger tāsug<sup>ɔ</sup> vv. shout; *Winnɣ táŋsìd nē*. The sun is shining.  
**tār<sup>a/</sup>** ger tārım<sup>m</sup> iv. have; more typical of Toende Kusaal; NT always has the Agolle word *m̄r<sup>a/</sup>* instead  
**tàsıntàl<sup>lɛ</sup>** n. palm of hand  
**tàtəl<sup>lɛ</sup>** n. palm of hand  
**tāuñ<sup>+/</sup>** pl tāŋp<sup>a/</sup> cb tāuñ- tāŋp- n. sibling of opposite sex [32.1](#)

- tèb<sup>ε</sup>** *ger* **tēbig<sup>a</sup>** vv. carry in both hands  
**tēbig<sup>ε/</sup>** vv. get heavy  
**tēbis<sup>a/</sup>** *iv.* be heavy  
**tēbisíg<sup>a</sup> tēbisír<sup>ε</sup>** *pl* **tēbisá<sup>+</sup>** *cb* **tēbis-** *adj.* heavy  
**tēbisím<sup>m</sup>** *n.* heaviness  
**téebùl<sup>ε</sup>** *pl* **téebùl-nàm<sup>a</sup>** *n.* table ← English  
**tēeg<sup>ε/</sup>** vv. drag (ILK)  
**tè'eg<sup>a</sup>** *pl* **tè'es<sup>ε</sup>** *cb* **tè'-** *n.* baobab [32.6](#) *Adansonia digitata* (Haaf)  
**tēk<sup>ε/</sup>** vv. pull  
**tèñb<sup>ε</sup>** *ger* **tèñbug<sup>ɔ</sup>** vv. tremble, struggle  
**tèñ'es<sup>ε</sup>** vv. remind  
**tēñ'es<sup>ε/</sup>** vv. think; *ger* **tēñ'esá<sup>+</sup>** *n.* thought  
**tèñr<sup>a</sup>** *ger* **tèñrib<sup>ɔ</sup>** or **tèñrím<sup>m</sup>** (*tone sic; ??misheard for tèñrím<sup>m</sup>*) *iv.* remember  
**tēŋ<sup>a</sup>** *pl* **tēñs<sup>ε</sup>** *cb* **tēŋ-** *n.* land; **tēŋ-bīig<sup>a</sup>** *n.* native; **tēŋ-dāan<sup>a</sup>** *n.* traditional earth-priest; **tēŋ-dū'adig<sup>a</sup>** *n.* native land; **tēŋ-gbàun<sup>ɔ</sup>** *n.* earth, land; **tēŋ-pūvug<sup>n-ε/</sup>** *pl* **tēŋ-pūvudi-n<sup>ε/</sup>** *n.* village [17.3](#); **tēŋ-zùŋ<sup>ɔ</sup>** *pl* **tēŋ-zùvñs<sup>ε</sup>** *n.* foreign country  
**tēŋi-n<sup>ε/</sup>** downward; *as postposition* under [17.6](#)  
**tēŋí<sup>ε</sup>** downward; *as postposition* under [17.6](#)  
**tèog<sup>ɔ</sup>** *pl* **tèed<sup>ε</sup>** *n.* nest  
**tè'og<sup>ɔ</sup>** *pl* **tè'ed<sup>ε</sup>** *n.* baobab fruit [32.6](#)  
**tì** we, our (*proclitic*) [16.3.1](#)  
**tì<sup>+</sup>** us (*enclitic object*) [16.3.1](#)  
**tì** *preverb conveying completion or purpose* [19.7.2](#)  
**tjà'al<sup>ε</sup>** vv. come next  
**tjàk<sup>ε</sup>** vv. change  
**tì'əb<sup>ε</sup>** vv. prepare, get ready; heal *in this sense perhaps influenced by Arabic طب t'ibb(un) "medicinal art"; tì'əb<sup>a</sup> n. healer*  
**tìeñ<sup>+</sup>** vv. inform WK (KED remember)  
**tìeñ<sup>+</sup>** vv. stretch out  
**tìəŋ<sup>a</sup>** *pl* **tìəms<sup>ε</sup>** *cb* **tìəŋ-** *n.* beard; **tìəŋ-gōvr<sup>ε</sup>** *n.* chin  
**tìg<sup>ε</sup>** vv. become sated; *ger* **tìgir<sup>ε</sup>** *n.* glut  
**tìi<sup>ya/</sup>** *ger* **tìib<sup>ɔ/</sup>** *iv.* be leaning (object)  
**tìig<sup>a</sup>** *pl* **tìis<sup>ε</sup>** *cb* **tì-** *n.* tree  
**tìil<sup>ε/</sup>** vv. lean something  
**tìum<sup>m</sup>** *cb* **tì-** *n.* medicine; **tì-kōvdím<sup>m</sup>** *n.* poison (killing-medicine); **tì-sābilím<sup>m</sup>** *n.* "black medicine" (a particular traditional remedy); **tì-vōnním<sup>m</sup>** *n.* oral medication  
**tì'in<sup>ε</sup>** vv. begin to lean  
**tìlās<sup>ε</sup>** *n.* necessity ← Hausa *tiilàs* [26.1](#)  
**tìlig<sup>ε</sup>** vv. survive, be saved  
**tìnámì** we (*subject of ñ-clause*) [16.3.1](#)



**tīnám<sup>a</sup>** we, us (*contrastive*) [16.3.1](#)

**tīntōñríg<sup>a</sup>** pl *tīntōñrís<sup>ε</sup>* cb *tīntōñr-* n. mole (animal)

**tìp<sup>a</sup>** pl *tìp-nàm<sup>a</sup>* cb *tìp-* n. healer (see *tī'əb<sup>a</sup>* id)

**tīrāàn<sup>a</sup>** pl *tīrāàn-nàm<sup>a</sup>* cb *tīrāàn-* n. neighbour, peer

**tīrāànnum<sup>m</sup>** n. neighbourliness

**tírìgà** ideophone for *gīŋ<sup>a</sup>* short [16.11.1.3](#)

**tìs<sup>ε</sup>** ipfv *tìsid<sup>a</sup>* *tìt<sup>a</sup>* agt *tìs<sup>a</sup>* vv. give; also *tì* before enclitic pronouns: *tì f* gave you

**tītā'al<sup>ε</sup>** n. proud person

**tītā'alum<sup>m</sup>** n. pride

**tītā'am<sup>m</sup>** n. multitude

**tītā'ug<sup>ɔ</sup>** **tītā'ar<sup>ε</sup>** pl *tītāda<sup>+</sup>* cb *tītá'-* adj. big, great

**tò** OK [25.2.4](#) (= Hausa *tôo*)

**tòd<sup>ε</sup>** vv. give to the poor, share

**tōē<sup>a/</sup>** iv. be bitter, difficult

**tóklàe<sup>+</sup>** n. torch ← English "torchlight"

**tólùlù** ideophone for *wōk<sup>ɔ/</sup>* tall [16.11.1.3](#)

**tólìb** onomatopoeic word [16.11.1.3](#)

**tòñ<sup>+</sup>** vv. shoot

**tòñ'ɔs<sup>ε</sup>** vv. hunt

**tōɔg<sup>ɔ</sup>** pl *tōɔd<sup>ε</sup>* cb *tò-* adj. bitter, difficult

**tōɔm<sup>m/</sup>** vv. depart, disappear

**tò'ɔtō<sup>+/</sup>** adv. straight away [17.4](#)

**tṵà<sup>+</sup>** vv. grind in a mortar; **tṵà-bīl<sup>a</sup>** n. pestle

**tṵ'à<sup>a</sup>** vv. speak, plead in court

**tṵ'al<sup>ε</sup>** vv. condemn in court

**tṵ'as<sup>ε</sup>** vv. talk

**tùbur<sup>ε</sup>** pl *tùba<sup>+</sup>* cb *tùb-* n. ear; **tùb-kpìr<sup>ε</sup>** n. half of jaw; **tùb-yīuŋ<sup>ɔ/</sup>** adj. one-eared

[16.4.2.3](#) [16.11.1.4](#)

**tùl<sup>la/</sup>** iv. be hot

**tùlɔg<sup>ε</sup>** vv. invert

**tùlɔg<sup>ε/</sup>** vv. heat up

**tùm<sup>m</sup>** vv. work; ger *tūum<sup>mε</sup>* n. deed pl **tūuma<sup>+</sup>** n. deeds; work cb *tūum-*; **tūum-bē'ed<sup>ε</sup>**

n. bad deeds; **tūum-bē'ed-dím<sup>a</sup>** n. sinners NT; agt **tùm-tūm<sup>na</sup>** n. worker

**tùm<sup>m</sup>** ger *tītōmìs<sup>ε</sup>* vv. send; compare Hausa *àlkaa* "send", *alkàtaa* "work"

**tūñ'e** iv. be able [23.3](#)

**tūødɪr<sup>ε</sup>** pl *tūøda<sup>+</sup>* cb *tūød-* n. mortar

**tùen<sup>ne</sup>** in front; as postposition [17.6](#); West (KB *yà tùena*) [32.3](#); **tùen-gāt<sup>a</sup>** n. leader

**Tùen<sup>ne</sup>** n. Toende, Western part of Kusaasiland

**Tùennur<sup>ε</sup>** n. Toende dialect of Kusaal

**tūsɪr<sup>ε/</sup>** n. thousand [16.4.2.1](#)

**tòtùl<sup>ε</sup>** n. upside-down thing cf *tùlɔg<sup>ε</sup>*

**tōvlígā<sup>+/</sup>** *adv.* hotly [17.4](#)  
**tōvlóg<sup>ɔ</sup>** *pl tōvlá<sup>+</sup> cb tōvl-* *adj.* hot  
**tō'vs<sup>ε/</sup>** *vv.* meet

## U

**ùdvg<sup>ɔ</sup>** *pl ùt<sup>ε</sup> cb ùd-* *n.* (piece of) chaff  
**ūgvs<sup>ε/</sup>** *vv.* bring up a child  
**ùk<sup>ε</sup>** *vv.* vomit  
**ūk<sup>ε</sup>** *vv.* bloat  
**ùm<sup>m</sup>** *vv.* close eyes  
**úun<sup>nε</sup>** *n.* dry season [32.9](#)

## V

**vābı<sup>ya/</sup>** *ger vāp<sup>ɔ/</sup> KT vābı<sup>ε/</sup> WK iv.* be lying prone  
**vābı<sup>ε/</sup>** *vv.* make lie prone  
**vàbın<sup>ε</sup>** *vv.* lie prone  
**vāvňg<sup>ɔ/</sup>** *pl vāaňd<sup>ε/</sup> cb vāň-* *n.* leaf  
**vē<sup>+</sup>** *vv.* lead  
**vē'εg<sup>ε/</sup>** *vv.* drag  
**vèn<sup>na</sup>** *iv.* be beautiful  
**věň<sup>la</sup>** *iv.* be beautiful  
**věňllıg<sup>a</sup>** *pl věňllıs<sup>ε</sup> věňlla<sup>+</sup> cb věňl-* *adj.* beautiful  
**věňllıg<sup>a</sup>** *pl věňllıs<sup>ε</sup> cb věňllıg-* *adj.* beautiful  
**věnnıg<sup>a</sup> vėnnır<sup>ε</sup>** *pl vėnnıs<sup>ε</sup> vėnna<sup>+</sup> cb vėn-* *adj.* beautiful  
**vėnnım<sup>m</sup>** *n.* beauty  
**vī<sup>+</sup>** *vv.* uproot  
**vīk<sup>ε/</sup>** *vv.* uproot  
**vīug<sup>ɔ/</sup>** *pl vīid<sup>ε/</sup> cb vī-* *n.* owl  
**vū<sup>+</sup>** *ger vūug<sup>ɔ/</sup> vv.* make a noise; **vūud<sup>ε/</sup>** *n.* noise  
**vōg<sup>a/</sup>** *iv.* be alive  
**vōl<sup>ε</sup>** *vv.* swallow  
**vòlınvòuňl<sup>lε</sup>** *n.* mason wasp  
**vōm<sup>m/</sup>** *cb vōm-* *n.* life; **vōm-páàl<sup>lε</sup>** *n.* new life  
**vúeḡ<sup>a</sup>** *pl vūémıs<sup>ε</sup> n.* red kapok [32.6](#) *Bombax buonopozense* (Haaf)  
**vúe<sup>ε</sup>** *pl vūáá<sup>=</sup> cb vūe-* *n.* fruit of red kapok [32.6](#)  
**vūr<sup>ε/</sup>** *pl vūyá<sup>+</sup> cb vūr-* *adj.* alive  
**vū'vg<sup>ε/</sup>** *vv.* come, make alive  
**vū'vs<sup>ε/</sup>** *vv.* breathe, rest  
**vū'vsím<sup>m</sup>** *n.* resting

## W

**wā'**<sup>+</sup> vv. dance

**wāad**<sup>ε/</sup> n. cold weather

**wāaf**<sup>ɸ</sup> pl **wīigí**<sup>+</sup> cb **wā'**- n. snake

**wāal**<sup>ε/</sup> vv. sow, scatter seed

**wā'alím**<sup>m</sup> n. length

**wā'am**<sup>ma/</sup> iv. be long, tall

**wàbig**<sup>a</sup> **wàbir**<sup>ε</sup> pl **wàbis**<sup>ε</sup> **wàba**<sup>+</sup> cb **wàb**- n. lame person

**wàbilm**<sup>m</sup> vv. make, go lame

**wābug**<sup>ɸ/</sup> pl **wābɪd**<sup>ε/</sup> cb **wāb**- n. elephant

**wādir**<sup>ε/</sup> pl **wādá**<sup>+</sup> cb **wād**- n. law (← English "order" via Hausa) plural as sg: law

**wād-tís**<sup>a</sup> n. lawgiver NT

**wà'e**<sup>ya</sup> iv. be travelling

**wālig**<sup>a</sup> pl **wālis**<sup>ε</sup> **wālí**<sup>+</sup> (tone sic) cb **wàl**- n. a kind of gazelle

**wàŋim**<sup>m</sup> vv. waste away

**wàsɪnwàl**<sup>lε</sup> n. a parasitic gall on trees, called "mistletoe" in local English

**wàɹɹ**<sup>ɸ</sup> pl **wàna**<sup>+</sup> cb **wàɹɹ**- adj. wasted, thin

**wèɛd**<sup>a</sup> see **wìd**<sup>a</sup>

**wēɛl**<sup>ε/</sup> vv. be left unsold (KED) but see **wēog**<sup>ɸ/</sup>

**wēl**<sup>ε</sup> vv. bear fruit

**wēl**<sup>lε/</sup> pl **wēlá**<sup>+</sup> cb **wēl**- n. fruit

**wēlá**<sup>+</sup> or **wālá**<sup>+</sup> how? [17.7](#); *nìŋ wēlá kà* how can ...? [26.1](#)

**wēn**<sup>na/</sup> iv. resemble; in KB **wēn nē** appears as **nwɛnɛ**; ger **wēnním**<sup>m</sup> ??misheard for **wēnním**<sup>m</sup>; cf the Pattern O adjective **wēnnur**<sup>ε</sup>

**wēnnur**<sup>ε</sup> adj. resembling (Pattern O, specifically confirmed with WK)

**wèog**<sup>ɸ</sup> n. deep bush

**wēog**<sup>ɸ/</sup> pl **wēɛd**<sup>ε/</sup> n. cheap thing sold in abundance WK

**wìdɪg**<sup>ε</sup> vv. scatter

**wìɸ**<sup>ɸ</sup> pl **wìd**<sup>+</sup> cb **wìd**- n. horse; **wìd-l̄r**<sup>ε/</sup> n. place for tying up horses in a compound;

**wìd-dāvg**<sup>ɸ</sup> n. stallion; **wìd-ñyá'aŋ**<sup>a</sup> n. mare; **wìd-zōvr**<sup>ε</sup> n. horsetail

**wìd**<sup>a</sup> or **wèɛd**<sup>a</sup> pl **wìb**<sup>a</sup> cb **wìd**- n. hunter

**Wiid**<sup>a</sup> pl **Wiid-nàm**<sup>a</sup> cb **Wiid**- n. member of the clan Wiid [32.5](#)

**Wiidvg**<sup>ɸ</sup> n. place of the clan Wiid

**wīig**<sup>a/</sup> n. whistle

**wìim**<sup>m</sup> n. sickness, disease ("worse than **bāñ'as**<sup>ε</sup>" WK)

**wìk**<sup>ε</sup> ipfv **wìid**<sup>a</sup> vv. fetch water [11.1.1](#)

**wìl**<sup>lε</sup> pl **wìla**<sup>+</sup> cb **wìl**- n. branch

**wìlɪsúŋ**<sup>ɸ</sup> pl **wìlɪmís**<sup>ε</sup> cb **wìlɪsúŋ**- n. a kind of snail [9.3.2.1](#)

**wím** ideophone for **zìñ'a**<sup>+</sup> red [16.11.1.3](#)

**wīn**<sup>nε/</sup> pl **wīn**<sup>á+</sup> cb **wīn-** n. God; god; spiritual double, *genius*; destiny; **wīn-tóòg**<sup>ɔ</sup>  
n. misfortune

**Wínà'am**<sup>m</sup> n. God [15.1](#) (usually Christian)

**winnig**<sup>a</sup> cb **wìn-** n. sun; talent; **wìn-līir**<sup>ε</sup> n. sunset; **wìn-kòòñr**<sup>ε</sup> n. sunset

**wiug**<sup>ɔ</sup> **wiir**<sup>ε</sup> pl **wiya**<sup>+</sup> **wiid**<sup>ε</sup> cb **wi-** adj. red

**wōk**<sup>ɔ/</sup> **wā'ar**<sup>ε/</sup> pl **wā'á+ **wā'ad**<sup>ε/</sup> cb **wōk-** **wā'-** adj. long, tall**

**wòm**<sup>m</sup> vv. hear; understand (a language)

**wōsa**<sup>+</sup> q. all [16.4.1](#)

**wōv**<sup>+</sup> q. all [16.4.1](#)

**wōv** like, resembling [18.1](#)

**wō'ug**<sup>ε/</sup> vv. get wet

**wō'vl**<sup>ε/</sup> vv. make wet

## Y

**yà** you, your pl (*proclitic*) [16.3.1](#)

**ya**<sup>+</sup> you pl (*enclitic object*) [16.3.1](#)

**ya**<sup>a</sup> you pl, *enclitic subject after imperative* [8.2.1.2](#) [16.3.1](#) [25.2.3](#)

**yā**<sup>+</sup> *Independent/perfective particle* [19.6.2.1](#)

**yà'** if, when [27](#)

**yáa** adv. whither? [17.7](#)

**yā'a** as for ... [25.1.1](#)

**yáab**<sup>a</sup> pl **yāa-nám**<sup>a</sup> cb **yāa-** n. grandparent, ancestor [32.1](#); **yāa-dáú**<sup>+</sup> n. grandfather;  
**yāa-pu'á**<sup>a</sup> n. grandmother

**yà'ab**<sup>ε</sup> vv. mould clay

**yā'ad**<sup>ε</sup> cb **yà'-** n. clay

**yà'al**<sup>ε</sup> vv. hang up; make perch (bird)

**yà'an**<sup>ε</sup> vv. perch (of a bird)

**Yàan**<sup>nε</sup> n. Yansi language (apparently Mooré now)

**yáa ní**<sup>+</sup> adv. where? [17.7](#)

**yáaŋ**<sup>a</sup> pl irr **yáas**<sup>ε</sup> (*consistently without nasalisation*) cb **yāaŋ-** n. grandchild,  
descendant [32.1](#)

**Yàaŋ**<sup>a</sup> pl **Yàam**<sup>ma</sup> **Yàamɿs**<sup>ε</sup> **Yàas**<sup>ε</sup> cb **Yàaŋ-** n. Yansi person [32.5](#)

**yāar**<sup>ε/</sup> vv. scatter

**yàarum**<sup>m</sup> cb **yàar-** n. salt

**yà'as**<sup>a</sup> **yà'as**<sup>ε</sup> again [23.3](#)

**yā'as**<sup>ε/</sup> vv. open repeatedly

**yàddā** or **yàdā** n. faith, trust ← Hausa *yàrda*; probably ← Arabic *يرضى* *yard'a*: [15.1](#)  
[20.1](#); **yàddā-níŋìr**<sup>ε</sup> n. belief

**yādug**<sup>ε/</sup> vv. scatter; *agt* **yāt**<sup>a/</sup> *irreg. agent noun*: technical term for a participant in a  
housebuilding ritual

**yā'e<sup>+/</sup>** vv. widen, open (mouth)

**yàk<sup>ε</sup>** vv. unhang, unhook

**yàlum<sup>ma</sup>** iv. be wide

**yālum<sup>m/</sup>** pl *yālum-nám<sup>a</sup>* n. worthless person

**yālsúŋ<sup>ɔ</sup>** pl *yālmís<sup>ε</sup>* cb *yālsúŋ-* n. quail [9.3.2.1](#)

**yàlvŋ<sup>ɔ</sup>** pl *yàlvma<sup>+</sup>* cb *yàlvŋ-* adj. wide

**yām<sup>me</sup>** pl *yàma<sup>+</sup>* cb *yàm-* n. hay WK

**yām<sup>m/</sup>** cb *yām-* n. gall; gall bladder; common sense WK *yā'm<sup>m/</sup>*.

**yàmmig<sup>a</sup>** **yàmmug<sup>a</sup>** **yàmmug<sup>ɔ</sup>** pl *yàmmis<sup>ε</sup>* cb *yàm-* n. slave

**yānámì** you pl (subject of *ŋ*-clause) [16.3.1](#)

**yānám<sup>a</sup>** you pl (contrastive) [16.3.1](#)

**Yāriŋ<sup>a/</sup>** pl *Yāris<sup>ε/</sup>* cb *Yār-* n. Yarsi [32.5](#); also called Kantonsi; said to have been originally of Manding/Dyula origin

**Yāt<sup>ε/</sup>** n. Yarsi language (no longer Dyula/Bambara, but a Western Oti-Volta language)

**yàvg<sup>ɔ</sup>** pl *yàad<sup>ε</sup>* n. grave, tomb

**yē** that [26.1](#) [26.3](#) [26.3.3](#)

**yē** be about to ... [19.3.3](#)

**yè<sup>+</sup>** vv. dress oneself; *res* adj **yèelóŋ<sup>ɔ</sup>** worn (e.g. of a shirt)

**yèeg<sup>ε</sup>** vv. undress oneself

**yèel<sup>ε</sup>** vv. dress someone

**yēes<sup>ε/</sup>** vv. betray a secret

**yèl<sup>ε</sup>** ipfv *yèt<sup>a</sup>* ger *yèlvŋ<sup>ɔ</sup>* vv. say, tell

**yēl<sup>lε/</sup>** pl **yēlá<sup>+</sup>** (as postposition: about [17.6](#)) cb *yēl-* n. matter, affair; **yēl-méŋìr<sup>ε</sup>** n. truth; **yēl-náròŋ<sup>ɔ</sup>** n. necessity; **yēl-pákìr<sup>ε</sup>** n. disaster; **yēl-sú'adìr<sup>ε</sup>** n. confidential matter

**yēŋím<sup>m</sup>** vv. oscillate (like waves)

**yèog<sup>ɔ</sup>** pl *yèed<sup>ε</sup>* n. bird's crop; person displaced from family (KED)

**yēóŋ** q. one, in counting [16.4.2.2](#)

**yī<sup>+</sup>** ipfv *yīt<sup>a/</sup>* imp *yìm<sup>a</sup>* vv. go, come out

**yìdɪg<sup>ε</sup>** vv. go astray

**yìdɪg<sup>ε/</sup>** vv. untie

**yìər<sup>ε</sup>** n. jaw

**yīigá<sup>+</sup>** q. firstly [16.4.2.3](#) [17.4](#); former [16.7](#); **yīig-sób<sup>a</sup>** n. first person [16.10.3.1](#)

**yīis<sup>ε/</sup>** ger *yīisíb<sup>ɔ</sup>* vv. make go/come out, extract

**yīimmír<sup>ε</sup>** pl *yīimmá<sup>+</sup>* cb *yīm-* adj. solitary, lone [16.4.2.3](#)

**yīimmú<sup>+</sup>** adv. straight away, at once [16.4.2.4](#)

**yīnní<sup>+</sup>** q. one [16.4.2.1](#)

**yìŋ<sup>a</sup>** adv. outside

**yīr<sup>ε/</sup>** pl *yā<sup>+/</sup>* cb *yī-* n. house; **yī-dáàn<sup>a</sup>** n. householder; **yī-sób<sup>a</sup>** pl *yī-sób-nàm<sup>a</sup>* n. householder; **yī-dím<sup>a</sup>** n. members of the household; **yī-póŋròŋ<sup>ɔ</sup>** pl *yī-póŋrà<sup>+</sup>* n. neighbouring house; **yī-sígudìr<sup>ε</sup>** n. lodging-house; **yín<sup>nε</sup>** at home pl *yáan<sup>ε</sup>*

**yīs<sup>ε</sup>** vv. make go/come out, extract  
**yīuŋ<sup>ɔ/</sup>** pl **yīnā<sup>+</sup>** adj. single- [16.4.2.3](#) [16.11.1.4](#)  
**yò<sup>+</sup>** vv. close; *res adj* **yòɔlúŋ<sup>ɔ</sup>** closed  
**yō<sup>+n</sup>** vv. pay; *ger* **yōɔd<sup>ε/</sup>** n. pay  
**yōls<sup>ε/</sup>** vv. untie  
**yōlsím<sup>m</sup>** n. freedom  
**yōlvɔ<sup>ɔ/</sup>** pl **yōn<sup>nε/</sup>** *cb* **yōl-** n. sack, moneybag, £100, ₣200 (200 cedis)  
**yò'ɔŋ<sup>ε</sup>** vv. open  
**yòɔr<sup>ε</sup>** pl **yòya<sup>+</sup>** *cb* **yò-** n. soldier ant  
**yùà<sup>+</sup>** vv. bleed; *also* fornicate WK  
**yùbɔ<sup>a</sup>** pl **yùbɔs<sup>ε</sup>** *cb* **yùb-** n. small bottle-like pot  
**yūgvɔr<sup>ε</sup>** pl **yūgvɔdā<sup>+</sup>** *cb* **yùgvɔd-** n. hedgehog  
**yōgúm<sup>mε</sup>** **yōgúm<sup>nε</sup>** pl **yōgumá<sup>+</sup>** *cb* **yōgum-** n. camel  
**yùlvɔ<sup>ε</sup>** vv. swing (*transitive*)  
**yūñ'e<sup>+/</sup>** vv. set alight  
**yū'ør<sup>ε</sup>** pl **yūāda<sup>+</sup>** *cb* **yù'ør-** n. penis  
**yùug<sup>ε</sup>** vv. get to be a long time, delay; *Tì yùùg nē tāaba*. It's a long time since we met.  
**yùul<sup>ε</sup>** vv. swing (*intransitive*)  
**yō'um<sup>m/</sup>** vv. sing; *agt* **yōum-yó'ùm<sup>na</sup>** pl **yōum-yó'ùmnɔb<sup>a</sup>** n. singer  
**yó'um<sup>nε</sup>** pl **yó'umá<sup>+</sup>** *cb* **yō'um-** or **yōum-** n. song  
**yòum<sup>mε</sup>** pl **yòma<sup>+</sup>** *cb* **yòum-** n. year; **yòum-pāalíg<sup>a</sup>** n. new year  
**yō'un** then, next [24.1.4](#)  
**yó'uŋ<sup>ɔ</sup>** pl **yó'umís<sup>ε</sup>** *cb* **yó'uŋ-** n. night  
**yō'ur<sup>ε/</sup>** pl **yōdá<sup>+</sup>** *cb* **yō'-** n. name  
**yōur<sup>ε</sup>** pl **yōya<sup>+</sup>** *cb* **yò-** n. water pot

## Z

**zā<sup>+/</sup>** *cb* **zā-** n. millet  
**zāalíg<sup>a</sup>** **záal<sup>ε</sup>** pl **zāalís<sup>ε</sup>** **zāalá<sup>+</sup>** *cb* **zāal-** adj. empty  
**zāalím<sup>m</sup>** adv. emptily  
**zàam<sup>m</sup>** *cb* **zà-** n. evening; **zà-sìsōbur<sup>ε/</sup>** n. evening  
**zàańsim<sup>m</sup>** vv. dream  
**zāańsím<sup>m</sup>** *cb* **zāańs-** n. soup; *soup in general, not "fish soup" despite Mampruli zaasim "fish"; cf Toende zāasím "soupe à viande" (Niggli)*  
**zàańsúŋ<sup>ɔ</sup>** pl **zàańsímà<sup>+</sup>** *cb* **zàańsúŋ-** n. dream  
**zàb<sup>ε</sup>** *ger* **zàbur<sup>ε</sup>** vv. fight; hurt (of body part); *agt* **zàb-zàb<sup>a</sup>** n. warrior;  
*agt* **gbān-záb<sup>a</sup>** n. leather-beater, leather-worker  
**zàbul<sup>ε</sup>** vv. cause to fight  
**zàk<sup>a</sup>** pl **zà'as<sup>ε</sup>** *cb* **zà'-** n. compound; **zà'-nōɔr<sup>ε/</sup>** n. gate; **zà'-nō-gúr<sup>a</sup>** n. gatekeeper  
**zàkɔm<sup>m</sup>** vv. itch

- zàlɔŋ<sup>a</sup>** pl **zàlɔmɪs<sup>ɛ</sup>** cb **zàlɔŋ-** n. electric eel  
**zàm<sup>m</sup>** ipfv **zàmmɪd<sup>a</sup>** vv. cheat; agt **zàm-zām<sup>na</sup>** n. cheat  
**zà'mɪs<sup>ɛ</sup>** vv. learn, teach  
**zāñ'a<sup>=</sup>** q. every [16.4.1](#)  
**zàñ'as<sup>ɛ</sup>** vv. refuse  
**zàñbu<sup>ɛ</sup>** vv. tattoo, mark skin  
**zāñbun<sup>ne</sup>** pl **zāñbuna<sup>+</sup>** cb **zàñbun-** n. tattoo; NT sign [12.1.2](#)  
**Zàngbèèl<sup>ɛ</sup>** n. Hausa language [32.5](#)  
**Zàngbèòg<sup>ɔ</sup>** pl **Zàngbèèd<sup>ɛ</sup>** n. Hausa person [32.5](#)  
**zàngùøm<sup>mɛ</sup>** pl **zàngùøma<sup>+</sup>** cb **zàngùøm-** n. wall  
**zànkù'ar<sup>ɛ</sup>** pl **zànkù'aa<sup>+</sup>** **zànkù'ada<sup>+</sup>** cb **zànkù'à-** n. jackal  
**zāñl<sup>la/</sup>** ger **zāñllím<sup>m</sup>** iv. be holding, carrying in hands  
**zàñl<sup>ɛ</sup>** n. umbilicus  
**zàŋ<sup>ɛ</sup>** vv. pick up, take up  
**zēm<sup>ma/</sup>** ger **zēm̀m̀úg<sup>ɔ</sup>** iv. be equal  
**zē'mɪs<sup>ɛ/</sup>** vv. make equal  
**zēm̀m̀úg<sup>ɔ</sup>** pl **zēm̀m̀á<sup>+</sup>** cb **zēm-** adj. equal  
**zī<sup>+</sup>** ger **zīd<sup>ɛ/</sup>** vv. carry on one's head; agt **zī-zīd<sup>a</sup>** n. carrier on the head  
**zī<sup>+</sup>** ger **zī'ulím<sup>m</sup>** iv. not know [29.1.1](#); agt **zī'ud<sup>a/</sup>** n. ignorant person  
**zì'e<sup>ya</sup>** ger **zī'a<sup>+</sup>** KED; DK KT **zī'əg<sup>a</sup>** (exceptional phonology [15 12.1.1.2](#)) iv. be standing  
**zì'əl<sup>ɛ</sup>** vv. make to stand; **zì'əl nɔɔr<sup>ɛ/</sup>** promise, command; with *n tìs* X: promise to X  
**zì'ən<sup>ɛ</sup>** vv. stand still; **Ò zì'ən nē.** She's pregnant.  
**zīum<sup>m/</sup>** cb **zī-** n. blood  
**zīŋ<sup>a</sup>** pl **zīmí<sup>+</sup>** cb **zīm-** n. fish; **zīm-gbáñ'àd<sup>a</sup>** n. fisherman  
**zìlum<sup>mɛ</sup>** pl **zìluma<sup>+</sup>** cb **zìlum-** n. tongue  
**zīlnzìòg<sup>ɔ</sup>** adj. unknown  
**zím** ideophone for **sābílíg<sup>a</sup>** black [16.11.1.3](#)  
**zíná<sup>+</sup>** today [32.9](#)  
**zìñ'a<sup>+</sup>** **zèñ'ug<sup>ɔ</sup>** pl **zèñ'ed<sup>ɛ</sup>** **zèñ'es<sup>ɛ</sup>** **zèñda<sup>+</sup>** cb **zèñ'-** adj. red  
**zìñ'i<sup>ya</sup>** iv. be sitting; ger **zìñ'ig<sup>a</sup>** pl **zìñ'is<sup>ɛ</sup>** cb **zìñ-** (also place)  
**zìñ'il<sup>ɛ</sup>** vv. make sit, seat  
**zìñ'in<sup>ɛ</sup>** vv. sit down  
**zīnzāuŋ<sup>ɔ/</sup>** pl **zīnzāná<sup>+</sup>** cb **zīnzāuŋ-** n. bat  
**zīrí<sup>+</sup>** n. lie, untruth  
**zò<sup>+</sup>** ipfv **zòt<sup>a</sup>** imp **zòm<sup>a</sup>** vv. run; fear; experience emotion; ger **zūa<sup>+</sup>** **zɔɔg<sup>ɔ</sup>** run;  
 imperfective ger **zòtum<sup>m</sup>** fear [13.1.1.4](#) **Ò zòt-ò nīn-báalìg.** He has pity on him  
**zɔl<sup>ɛ</sup>** vv. castrate  
**zɔlmís<sup>ɛ</sup>** n. foolishness  
**zɔlug<sup>ɔ/</sup>** pl **zɔn<sup>ne/</sup>** cb **zɔl-** n. fool  
**zɔm<sup>m/</sup>** cb **zɔm-** n. flour  
**zɔɔm<sup>mɛ</sup>** **zɔɔm<sup>ne</sup>** pl **zɔɔma<sup>+</sup>** cb **zɔɔm-** n. refugee, fugitive

**zōriḡ<sup>a/</sup>** *n.* small child WK

**zōrvḡ<sup>ɔ/</sup>** *pl* zōrá<sup>+</sup> *n.* piece

**zū<sup>+</sup>** *vv.* steal

**zṷà<sup>+</sup>** *pl* zṷà-nàm<sup>a</sup> *cb* zṷà- *n.* friend

**Zua<sup>+</sup>** *pl* Zùes<sup>ε</sup> *n.* member of clan Zoose [32.5](#); *pl* Zṷà-wiis<sup>ε</sup> Zṷà-wiib<sup>a</sup>, *pl* Zṷà-sābulís<sup>ε</sup> *subclans of Zoose*

**zù'e<sup>+</sup>** *vv.* get higher, more

**zùe<sup>+</sup>** *vv.* perch, get on top (? variant of zù'e<sup>+</sup>)

**zūḡ<sup>ɔ/</sup>** *pl* zūt<sup>ε/</sup> *cb* zūḡ- zū- [9.2.2](#) *n.* head; as postposition [17.6](#); **zūḡ-*n*<sup>ε</sup>** is also used as a postposition; **zūḡ-dáàn<sup>a</sup>** *n.* boss, master (replaces zūḡ-sób<sup>a</sup> in KB for meanings other than "the Lord"); **zūḡ-kōḡur<sup>ε</sup>** *pl* zūḡ-kōḡa<sup>+</sup> *cb* zūḡ-kúḡ- *n.* pillow; **zūḡ-máuk<sup>ɔ</sup>** *pl* zūḡ-má'àd<sup>ε</sup> *adj.* crushed-headed [16.11.1.4](#); **zūḡ-sób<sup>a</sup>** *n.* boss; NT Lord (often read as zū-sób in the audio NT); **zū-péelòḡ<sup>ɔ</sup>** *pl* zū-péelà<sup>+</sup> *adj.* bald [16.11.1.4](#); **zū-píbig<sup>a</sup>** *n.* hat

**zùliḡ<sup>ε</sup>** *vv.* deepen

**zùlim<sup>ma</sup>** *iv.* be deep

**zùlvḡ<sup>ɔ</sup>** *pl* zùlma<sup>+</sup> *cb* zùlvḡ- *adj.* deep

**zùlvḡ<sup>ɔ</sup>** *n.* depth

**zùnzòḡ<sup>a</sup> zùnzòḡ<sup>ɔ</sup>** *pl* zùnzòḡńs<sup>ε</sup> *cb* zùnzòḡ- *n.* blind person

**zūēbúḡ<sup>ɔ</sup>** *pl* zūēbíd<sup>ε</sup> *cb* zūēb- *n.* hair (of human head); see *kōńbug<sup>ɔ</sup>*

**zùed<sup>ε</sup>** *n.* friendship

**zùel<sup>ε</sup>** *vv.* make to perch

**zū'ēm<sup>m/</sup>** *pl* zū'ēmís<sup>ε</sup> *cb* zū'ēm- *n.* blind person

**zū'ēm<sup>m/</sup>** *vv.* go blind, make blind

**zùen<sup>ε</sup>** *vv.* begin to perch

**zūer<sup>ε</sup>** *pl* zūēya<sup>+</sup> *cb* zṷà- *n.* hill

**zùes<sup>ε</sup>** *vv.* befriend

**zūríf<sup>ɔ</sup>** *pl* zūrí<sup>+</sup> *cb* zūr- *n.* dawadawa seed

**zúvńf<sup>ɔ</sup>** *pl* zūvńí<sup>+</sup> *n.* dawadawa seed

**zùuńḡ<sup>ɔ</sup>** *pl* zùuńs<sup>ε</sup> zùuńd<sup>ε</sup> *cb* zùń- *n.* vulture

**zūvr<sup>ε</sup>** *pl* zūya<sup>+</sup> *cb* zù- *n.* tail; **zù-wōk<sup>ɔ/</sup>** *adj.* long-tailed [16.11.1.4](#)