

A Grammar of Agolle Kusaal

Revised Version

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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 on my part to understand Kusaal morphophonemics, an origin which the reader will find reflected in the relative fullness of the treatment. It grew into areas where I was even less sure-footed, and I am very conscious of its deficiencies. A more accurate name for the work would probably be "Some Aspects of Kusaal Morphophonemics with Brief Notes on Syntax." 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. Experts will soon notice that I have worked a small corpus very hard; many of my generalisations are greatly in need of testing against further data, especially in the treatment of syntax.

The customary disclaimer that the work is not written in accordance with the principles of any particular theoretical framework will rapidly be seen to be entirely superfluous. *J'ai pris mon bien là où je l'ai trouvé.*

Until recently, there were almost no linguistic works available on Kusaal. Happily, the situation is changing; in the References and Bibliography below I list, notably, numerous works by Urs Niggli on the Toende Kusaal of Burkina Faso, and more encouragingly still, an account of aspects of the language by Hasiyatu

Abubakari, a native speaker. Most of this recent work is on the Toende dialect, and describes a language different in a good many respects from the Agolle dialect treated here; this has made it less useful for my immediate purposes than I might have hoped, but opens up fascinating avenues for future investigation.

Among the various helpful accounts of Western Oti-Volta languages that I have been able to consult I have found Knut Olawsky's careful study of Dagbani particularly useful, both because of its intrinsic merits and because the language is one of those most closely related to Kusaal.

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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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

Since December 2016 I have made substantial revisions to this grammar.

The orthography now conforms more closely to existing Kusaal written sources; the price of a slight increase in complexity of spelling rules is worth paying for the benefit of Ghanaian readers already familiar with such materials. I have included most of the revisions seen in the 2016 Kusaal Bible, which are improvements in almost all cases, except for an increased ambiguity in the marking of nasalisation [1.3.1](#). Many previous orthographic inconsistencies have been eliminated in the new Bible version.

Interlinear glosses now appear throughout.

I have tried to clarify the presentation of numerous points, and corrected a good many errors, some minor, others involving more systematic problems. I have abandoned the strategy of rigorous separation of description from internal reconstruction and comparative material, which all too often led to explanatory matter being unhelpfully separated from the description it was meant to illuminate.

The unsatisfactory term "Tight Clitic" has been dropped; instead, the familiar name "Liaison" has been pressed into service in an appropriate technical sense.

Tonal nomenclature and notation previously reflected the close structural parallels with the tone systems of other Western Oti-Volta languages, but from a strictly language-internal standpoint it is more natural to describe the system in terms of high, mid and low tonemes. Altering the tone marking to reflect this, I have also made the notation much less abstract: the domain of tone marking is now the word rather than the punctuation group, and low tonemes are marked explicitly.

Reconsideration of the rôle of the focus particle *nē^{+/}* following the morphologically unmarked bare-stem form of the verb [19.2.2.1](#) has led to fairly extensive changes in the description of aspect, with greater stress on the dynamic/stative opposition in the verbal system, and (I hope) a clearer appreciation of the distinction between form and function in this complex area.

David Eddyshaw
Swansea, May 2018

Introduction to the Grammar

Full understanding of any single part of a grammatical system may depend on also understanding the whole. I have tried to address this difficulty by starting with a fairly extensive précis of the language in the Introduction before presenting a standard bottom-up account.

I have included a vocabulary intended to list all words used in the text, along with as many others as possible for which I could adequately determine vowel quality and tone. Brief though it is, this vocabulary may be of some independent value as the only currently available lexicographic source for Agolle Kusaal which attempts to represent both tone and all phonemic vowel contrasts adequately.

I have 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.

Kusaal lends itself readily to internal reconstruction. Illuminating comparative work is also feasible, given that there are quite extensive materials in and about several closely related languages. I have incorporated material of this kind where it seemed likely to be helpful or interesting.

A particular challenge to description is posed by **Apocope**, the deletion of underlying word-final vowels in most but not *all* contexts [2.2](#). Apocope removes the conditioning factors for phonological alternations which would otherwise have been non-contrastive. It affects morphology, rendering word forms which would result from the usual morphonemic rules ambiguous; rule operation is often disrupted to avoid this [6.2.1](#), sometimes so systematically that new regular subpatterns have been created [9.1](#). Apocope greatly complicates questions of phrase-level segmental and tone sandhi [8.5](#) [8.2](#). It causes a number of short clitics to lose segmental representation altogether in most contexts, so that their presence is recognisable only from segmental and/or tonal effects on preceding words [8](#). Non-Africanists may find Kusaal interesting particularly because of these wide-ranging effects.

My working orthography [1.3](#) is close to the revised orthography of the 2016 Bible; as far as Agolle Kusaal is concerned, the revisions seem unlikely to cause much difficulty for readers familiar with older materials.

The missing *ɿ* is added for [ɪ], *ñ* is used for *n* when it is not a consonant but a nasalisation mark, and the writing of diphthongs is systematised by always using *ɛ̃ j̃ ʊ̃* instead of *e i u* for non-moraic segments and *iə uə* rather than *ie uo* for the phonemic monophthongs *realised* [iə] [uə] [4.1.1](#). Word division accords more closely with the analysis of wordhood adopted in this grammar, and tones are marked.

All written sources are cited in their original orthography, with an accompanying transliteration into the working orthography of this grammar. The tone marking of examples drawn from written materials was supplied by me and rarely checked in detail with informants.

This grammar is the outcome of circumstances very different from the systematic fieldwork of a trained linguist. The morphology and such parts of the phonology as are original (essentially all the treatment of tone) derive from elicitation work with informants, for whose extraordinary patience in supplying and endlessly repeating forms I am very grateful. The treatment of phrase-level syntactic phenomena is largely based on work with these informants in elicitation and in exploring puzzling constructions I had encountered while attempting to communicate at work. All, especially WK, were alert to nuances and quick to see where I was going with enquiries; they readily came up with analogous or contrasting forms to help me. All four of my regular informants were first-language speakers of Agolle Kusaal, with essentially first-language level competence in English also. All were male, and around forty years old. I noted examples of conversation from many speakers, but recorded few examples of the usage of younger speakers specifically, though I noticed 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.

Neither I nor my informants had the time to investigate syntactic issues at clausal or higher level adequately together, and I had in any case little understanding of the issues involved at that point. I compensated as far as I could by private study of written materials, storing up problems to discuss later with my teachers. It will be seen below that in these matters I have relied very heavily on the NT versions. I have also drawn on the collection of stories and proverbs *Kusaal Solima ne Siilima*, and to a lesser 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 written materials would not exist.

The Bible versions are regarded by Kusaal speakers as being in good and idiomatic (if sometimes difficult) Kusaal. As translations, they nevertheless cannot be fully representative of the language.

The data on which this account is based are now twenty years old. The New Testament version available then was that of 1976; the 1996 revision adapted most foreign names to accord more closely with ordinary Kusaal spelling, but otherwise made no systematic orthographic changes. A decision was evidently made to replace all instances of the previously common indirect speech construction [26.5.2](#) with direct speech, and many other changes were made to improve the accuracy and clarity of the translation. The 2016 complete Kusaal Bible makes significant orthographic changes and shows considerable improvements in orthographic accuracy. There is some evidence of actual language change over this forty-year period [8.2.2](#), but some divergences between the spelling especially of older sources and the speech of my informants in the 1990's are probably simply matters of orthographic convention [8.5.3](#).

The 1996 Kusaal New Testament is available as [audio and searchable text](#) provided by the organisation "Faith Comes By Hearing." The format is naturally intended for evangelism and Bible study rather than linguistic research; the audio includes distracting background music, and the readers vary noticeably in the naturalness and fluency of their delivery. Nevertheless, this allows interested readers outside Ghana some access to spoken materials which can be used to criticise and improve on my work. The spoken forms consistently agree with my informants' usage against the orthography when differences arise.

The complete 2016 Kusaal Bible is now available as an [Android application](#).

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.

Other studies of Kusaal

The pioneers of Kusaal grammatical study were **David** and **Nancy Spratt**. I owe a great deal to their work in identifying the segmental phonemes of the language and creating a practical orthography. This standard orthography is not adequate for the needs of foreign learners or for scientific description, but its deficiencies are largely remedied with diacritics in David Spratt's "Introduction to Learning Kusaal." I found this work much the most useful previous account of Kusaal, despite its brevity (forty-two pages.) It was especially helpful in getting me started with the tonal system; although the description does not claim to be more than a preliminary sketch, it was invaluable in pointing me in the right direction, particularly as I had no previous experience with tone languages; at the time I first obtained a copy of Spratt's work I had got little farther than determining that tone was lexically contrastive in Kusaal. David Spratt's work has also been helpful in matters of lexicon. His Kusaal vocabulary uses the 1976 New Testament orthography, with its underdifferentiation of vowels, and does not mark tones, but it provided useful data for morphological study, especially of gerund formation.

Aside from this, virtually all of the analysis behind this grammar is original, almost exclusively so in the case of the morphology and syntax, and in all but the most basic aspects of the tonal system. As far as I know, there have been no other attempts to describe the morphology of Agolle Kusaal to the extent attempted here. Previous studies of Kusaal syntax are either very brief or concerned with limited subsystems treated from a theory-intensive standpoint. Almost all of these studies describe the Toende dialect, and there are significant differences from Agolle Kusaal. Here too, my analyses are thus essentially all original. They are far from profound or definitive, and to a great extent are simply derived from study of the New Testament versions, but I hope will at least be useful as a basis for the work of more expert investigators in future.

More recently, numerous wide-ranging 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 "Dictionnaire" has been an excellent resource for Toende comparative material; it marks all vowel contrasts, and the most recent update also marks tone in many headwords. However, the tones are sometimes at variance with those given in Niggli's other works; comparison with Agolle Kusaal and with other Western Oti-Volta languages suggests that this may be because the effects of external tone sandhi have not always been allowed for.

Tony Naden is currently 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.

Abbreviations

(See also Interlinear Glossing Conventions below.)

AdvP	Adverbial Phrase
an	animate gender
ATR	Advanced Tongue Root
BNY	<i>Bunkonbid ne Niis ne ba yela</i> (see Sources)
C	Consonant
cb	combining form (of noun or adjective)
dipf	dynamic imperfective (not stative)
DK	Informant (see Sources)
ger	gerund
H	High toneme
ILK	"An Introduction to Learning Kusaal" (David Spratt)
inan	inanimate gender
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)
pl	plural
rem	Remoteness marker
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 19
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:

ABSTR	Abstract	9.1.1
ADV	Adverbial	12.3
AN	Animate gender	16.2.2
CAT	VP Catenator (underlyingly <i>n</i>)	8.2.2.1.2 23.1
CNTR	Contrastive (personal pronouns)	30.5
COP	Copula <i>àɛñ^a</i>	21.2
CQ	Content question Prosodic Clitic	2.2.1 8.1
DEM	(Short) demonstrative pronoun	16.3.1.2
DEM.DEI	Deictic (long) demonstrative pronoun	16.3.1.2
DIPF	Dynamic imperfective verb form	11.1
EXIST	Existence/location verb <i>bè⁺</i>	21.1
FOC	Focus particle <i>nē^{+/}</i>	30.1.2 19.2
GER	Gerund	12.1.1
IMP	Independent imperative verb form	11.1
INAN	Inanimate gender	16.2.2
INDF	Indefinite pronoun	16.3.1.3
IRR	(alone) Positive irrealis mood marker	19.4
LOC	Locative postposition (<i>nī^{+/}</i> ~ <i>n^ε</i>)	17.3
NEG	(alone) Negative Prosodic Clitic	2.2.1 8.1
NEG.BE	Negative verb to and COP and EXIST	29.1.1
NEG.HAVE	(Another use of the same verb)	29.1.1
NEG.IMP	Negative imperative marker	19.4
NEG.IND	Negative indicative marker	19.4
NEG.IRR	Negative irrealis marker	19.4
NEG.KNOW	Negative verb <i>zī⁺</i>	29.1.1
NEG.LET	Negative verb <i>mīt</i>	29.1.1
NUM	Number prefix <i>à- bà- ò- bù-</i>	14.3
NZ	Nominaliser (underlyingly <i>ò</i>)	8.2.2.1.1 28
OB	Object (Liaison Enclitic pronouns)	8.2.1
PERS	Personifier clitic <i>à-</i>	16.6
PFV	Independent/perfective marker <i>yā⁺</i>	19.6.2.1
PL	Plural	16.2.1
PQ	Polar question Prosodic Clitic	2.2.1 8.1
REL	Relative pronoun	28.2.3
REM	Remoteness marker	27.1.1
SG	Singular	16.2.1
TNS	Tense marker	19.3.1
VOC	Vocative Prosodic Clitic	2.2.1 8.1

Personal pronouns:

1SG 1PL	1st sg/pl	16.3.1.1
2SG 2PL	2nd sg/pl	16.3.1.1
3AN 3INAN	3rd sg Animate/Inanimate	16.3.1.1 16.2.2
3PL	3rd pl	16.3.1.1
2PL.SUB	Postposed 2nd pl Subject	25.2.3

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 Base Form 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 [8](#). Prosodic Clitics [8.1](#) are represented by $^+\emptyset$, and Liaison [2.3.2](#) 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^ε LOC n^ε REM y^a 2PL.SUB* along with the LF of ^o *3AN.OB* [2.3](#). 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. Absent tone marks in these languages represent 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](#).

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Informants

With great reluctance I have omitted the names of my four principal informants, 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 of the four would like to see his name included in its rightful place of honour, I would be delighted to comply.

These abbreviations are not the initials of the informants' names.

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

Texts

From GILLBT (Ghana Institute of Linguistics, Literacy and Bible Translation), Tamale:

Bunkonbid ne Niis ne ba yela
Bŏn-kóŋbìd nē Níis né bà yēlá

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

Kusaal Solima ne Siilima
Kŏsáàl Sólumà nē Síilímà

"Kusaal Stories and Proverbs"
Samuel Akon, Joe Anabah

Kusaas Kuob ne Yir yela Gbauŋ
Kŏsáàs Kùèb nē Yír yélà Gbàũŋ

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

Bible Translations:

Wina'am Gbauŋ
Wínà'am Gbáũŋ

Kusaal Bible
1976 NT © World Home Bible League
1996 NT © The Bible League/GILLBT
2016 Complete Bible © GILLBT

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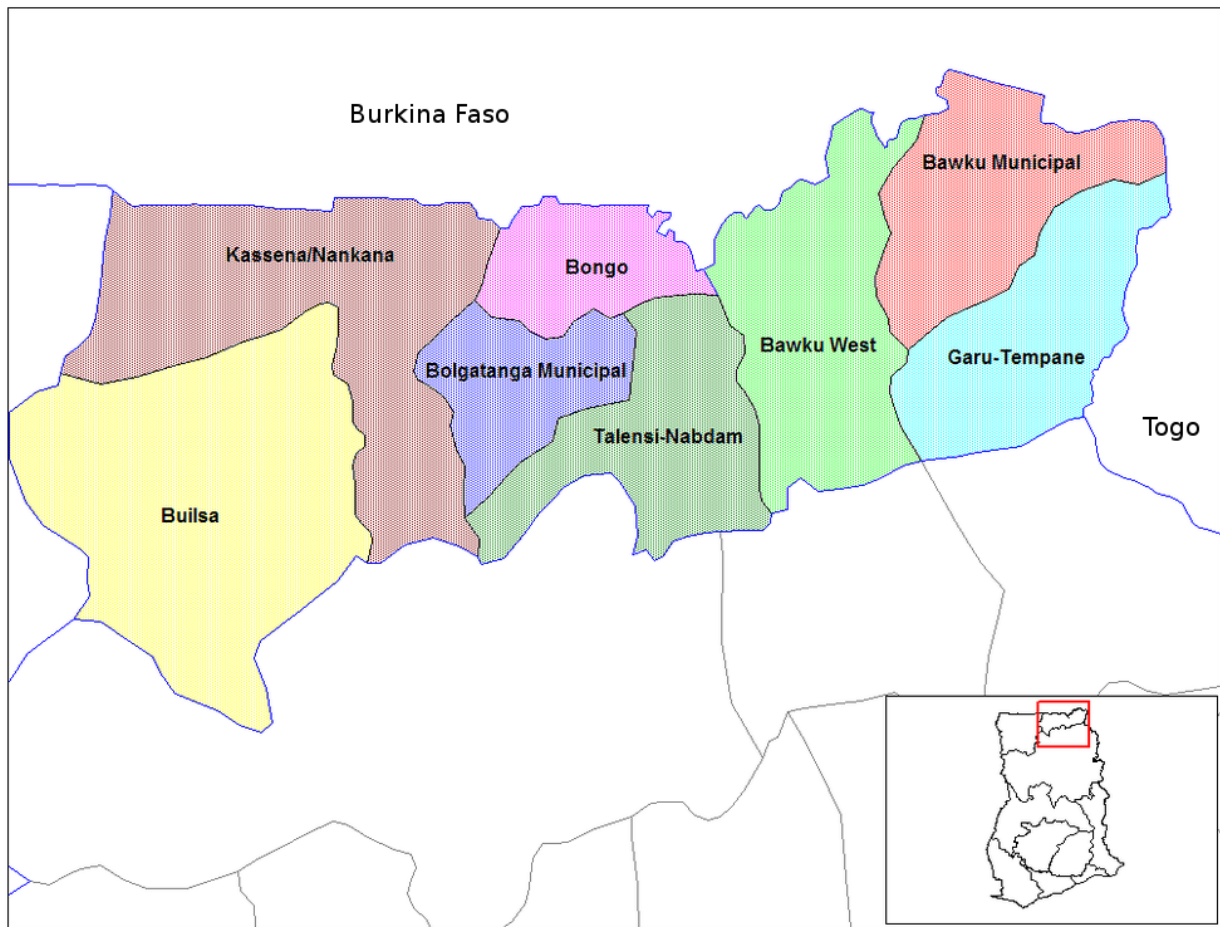
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1 Introduction to Kusaal and the Kusaasi

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-Tempane 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 Kusaal¹ *Tùen*^{NE}. The larger eastern part is **Agolle** (less accurately spelt "Agole"), Kusaal *Agòl*^E "Upper." The Ghanaian districts comprise most of *Kūsáùg*³ "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.

1) Superscript letters represent the parts of Kusaal words deleted in most contexts by Apocope [2.2](#). 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*^ε "Kusaal" and the name of the people *Kūsáàs*^ε "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*^ɔ, called "TZ" /ti:'zɛd/ in local English (from Hausa *tuwon zaafii*, literally "hot porridge"), and the traditional millet beer, *dāam*^{m/}, called "pito" (Hausa *fitoo*) in English.

The Kusaasi are divided into numerous patrilineal exogamous clans (*dɔ̀ɔg*^ɔ, "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 *pɔ̀ɔr*^{ε/} "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 *tɛ̀ŋ-dāan*^a 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 Gur- and Mande-speaking peoples, who nevertheless continued to provide the *tɛ̀ŋ-dāan-nām*^a. The founder of these kingdoms was Na Gbewa, whose seat was at Pusiga (Kusaal *Pūsɪg*^{a/}) 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 have much in common culturally with their neighbours, especially the Mossi and Mamprussi. Traditional Kusaasi dress resembles that of the Mamprussi, Dagomba and Mossi, including the characteristic long-sleeved baggy smock *bānāa*[≡], called a "fugu shirt" in English (cf Kusaal *fūug*^{ɔ̄} "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 southern Ghana; similarly, of the roughly 5% Muslims, most belonged to other ethnic groups.

Traditional belief includes a creator God, *Wīn*^{NE/}, invoked in proverbs and greetings but remote from everyday life and not to be approached in prayer or worship. A characteristic proverb enjoins gratitude to the Creator, saying:

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."

Another warns against evildoing, but in these terms:

Wīn ñyé kà sīn.

God:SG see and be.silent.

"God sees and is silent."

Everyday religious practice is concerned rather with local non-anthropomorphic spirits, also called *wīn*^{NE/}. A *wīn*^{NE/} resides in an object such as a stone or horn, which is a *būgur*^ε, often called a "fetish" in old ethnographic accounts; the implications of this term are however very misleading, as it is the *wīn*^{NE/} that is significant, not its place of attachment.

An important rôle is played by the diviner, *bā'a*[≡], who can seek guidance for a client (*būgud*^a) on all matters by casting lots. This rôle is distinct from that of the traditional healer; such healers themselves show considerable variation in approach from essentially herbalist to frankly occult.

A human being is understood as having four components: *nin-gbīn*^{ɔ̄} "body"; *ñyò-vūr*^{ε/} "life" as opposed to death, possessed by all living animals; *wīn*^{NE/} (in this sense) "genius, spirit, a person's own spiritual self or double"; and *kikīrs*^{ε/}, protective

spirits (called "fairies" in local English.) Men have three *kìkīris*^{ε/}, women a fourth, because of the dangers of childbirth. (Throughout the cultural zone, three is the man's number, and four is the woman's.) There are thought to be wild *kìkīris*^{ε/} in the bush which are hostile and try to lead travellers astray. The term *sīg*^a "life force", used to render "spirit" in Christian materials, is in traditional belief intimately associated with the individual's tutelary *kìkīris*^{ε/}.

The key term *wīn*^{νε/} has yet further senses, overlapping with the European concepts of fate or destiny: *wīn-tṣòg*^ᵛ, literally "bitterness of *wīn*^{νε/}" is "misfortune." Most people have a particular *sīgur*^{ε/} "guardian spirit" which is often the *wīn*^{νε/} of an ancestor; the word *būgur*^ε may also mean "a *wīn*^{νε/} inherited from one's mother's family." Many Kusaasi personal names refer to an individual's *sīgur*^{ε/} [32.2](#).

Sṣoñb^a "witches" exist in the traditional world view; though they cause harm, their condition can be involuntary. As in European tradition, those accused of witchcraft 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.

Although there is an established orthography for the language, 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 Kusaal speakers were proficient in reading or writing the language in the 1990's. On several occasions when I was learning to communicate with patients in Kusaal, my colleagues would interrupt me with the information that the patient was "literate", meaning that he or she knew English.

Despite the fact that 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. The language is the normal medium of communication among Kusaasi of all ages, most of whom are monolingual, and is also used by other local ethnic groups, notably the Bisa, as 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 themselves show numerous small differences in speech. Bawku itself 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 *zangòo* "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 one standard form.

The major dialect division in Kusaal is between Agolle and Toende. The differences are striking, considering the size of the Kusaasi area. The occurrence of 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, all first-language speakers of Agolle Kusaal, reported no difficulty communicating with Toende speakers, though 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, with somewhat equivocal results. 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." Casad-style Recorded Text Tests administered to Burkina Faso Toende speakers showed scores of 93% for comprehension of Ghanaian Toende compared with 80.5% for Agolle, but Ghanaian Toende speakers achieved 94.5% with Agolle, presumably reflecting their greater exposure to the dialect. There is some suggestion in the paper that the situation is asymmetrical, with Agolle speakers finding Toende 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, though perhaps not on strictly linguistic grounds but because of speaker attitudes; though fewer in number, Toende speakers apparently feel their own dialect is "purer." This may affect attitudes to comprehensibility.

The same paper reports a rate of apparent lexical cognates between Toende and Agolle of 84%. Judging by the extensive vocabulary of Toende Kusaal given in Niggli 2014, which shows great resemblance to Agolle Kusaal aside from the regular phonological differences, this figure seems surprisingly low; the explanation is perhaps that the divergence is most marked among the commonest words.

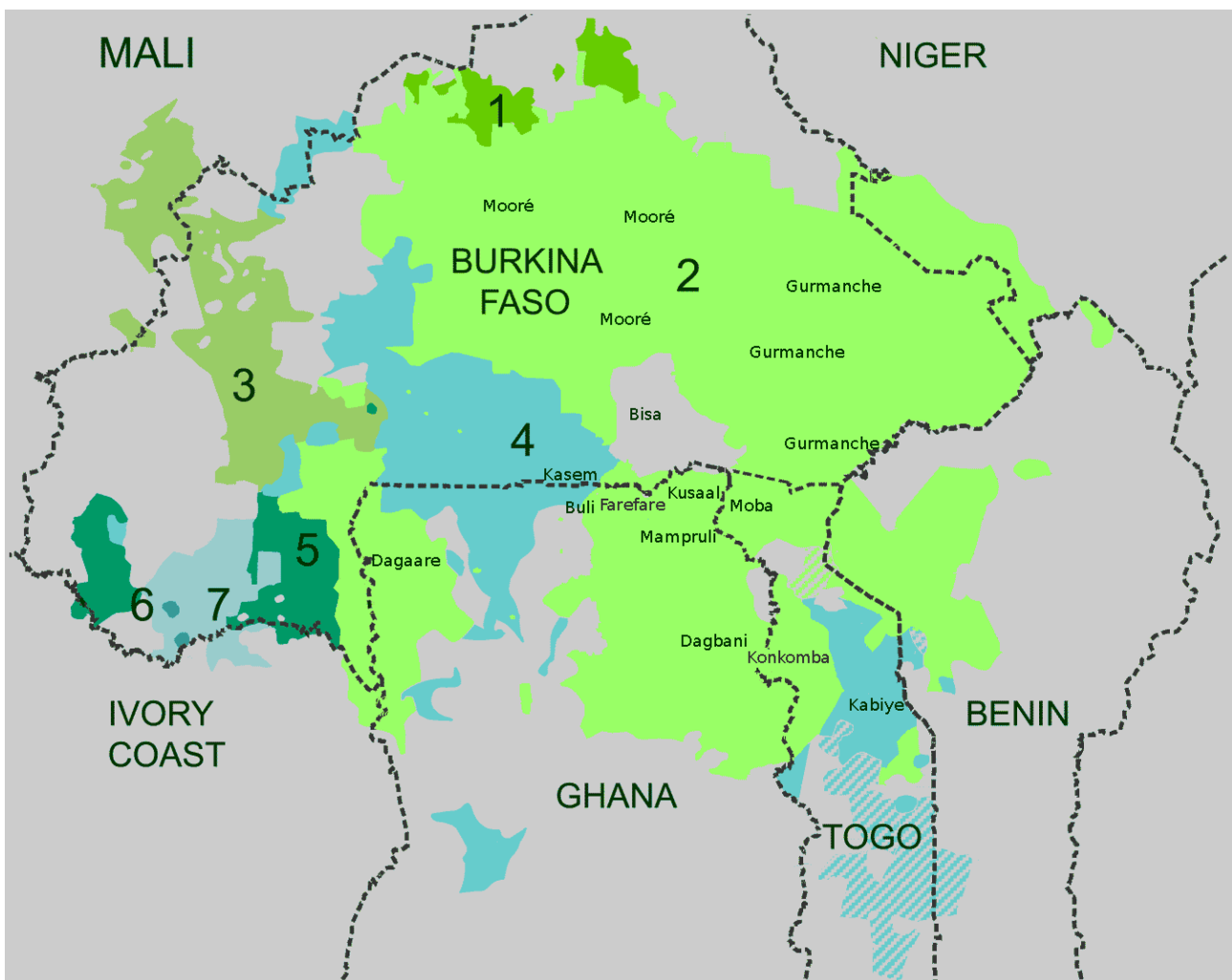
Agolle and Toende Kusaasi themselves agree that they constitute a single ethnic group, and that they speak dialects of a single language; this is perhaps

reinforced by a strong local folk-linguistic 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

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



1 Koromfé

2 Oti-Volta languages

3 Bwamu

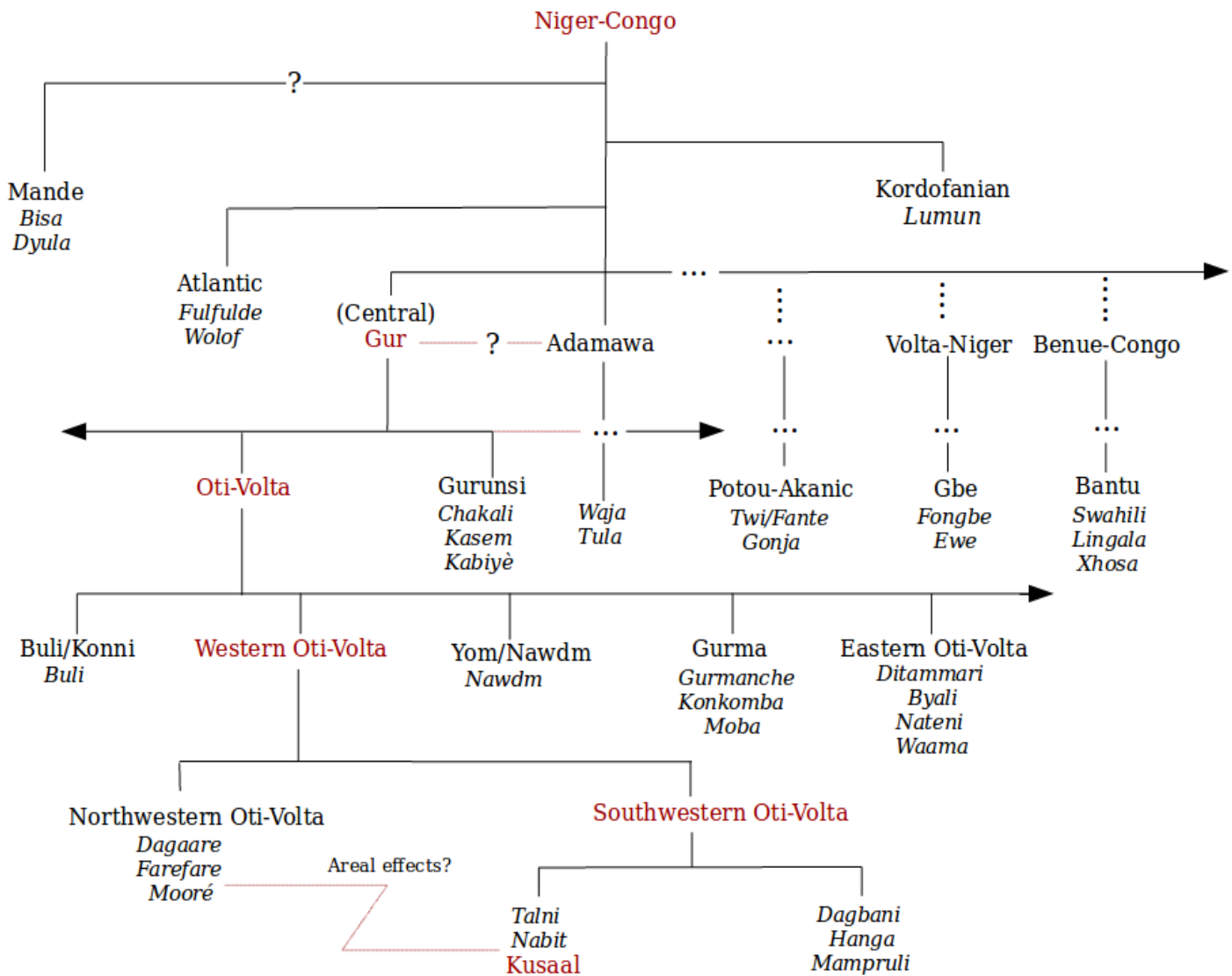
4 Gurunsi

5 Kirma-Lobi

6 Dogoso-Khe

7 Doghose-Gan

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.



This chart shows approximate relationships between some of the Niger-Congo languages mentioned in this account, omitting all but a few branches and individual languages. Precise subclassifications are often uncertain. For example, the Mande languages are the most divergent group, and may well not truly belong to the Niger-Congo phylum at all; neither "Atlantic" nor "Kordofanian" seems to be a real unity; Twi has been said to belong to a "Kwa" branch of Niger-Congo, 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 harder to establish. Much existing work on the phylum is vulnerable to the methodological criticisms expressed in e.g. Campbell 2013. The inclusion in Niger-

Congo of groups like Mande and Kordofanian is at this point a long-range hypothesis, rather than a well-established linguistic grouping like Indo-European or Uto-Aztecan; to some extent, this is true even of Atlantic. Individual Niger-Congo branches can show comparable internal diversity to Indo-European; moreover, West Africa has probably always been characterised by widespread multilingualism and borrowing between languages, not only of lexicon but also of morphology and syntax. For West Africa (and beyond) as a *Sprachbund* see especially Güldemann 2007.

Nevertheless, there is uncontroversial evidence that at least the core of Niger-Congo (Ethnologue's "Volta-Congo", corresponding to the branches after "Atlantic" in the chart above) is a true genetic grouping. Basic lexical items recur frequently, such as the roots seen in Kusaal *bīg*^a "child", *dì*⁺ "eat", *nū*⁺ "drink", *kpi*⁺ "die", *tùg*^a "tree", *àtán*⁺ "three", *tùbur*^ε "ear", corresponding respectively to e.g. Fongbe *ví, qù, nù, kú, átín, àtòn, tó* (Lefebvre 2002.) Guthrie's Proto-Bantu reconstructions parallel all of these except "child": *-dí-* "eat", *-nú-* "drink", *kú-* "die", *-tí* "tree", *-tátò* "three", *-tò* "ear"; his Proto-Bantu *-tóm-* "send" corresponds to Kusaal *tùm*^m. 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."

In morphology, the most salient feature of Niger-Congo is the widespread presence of noun class systems, with frequent congruences in both form and meaning between the various core branches. The Kusaal human-plural noun suffix *-b*^a, for example, seen in *nīdib*^{a/} "people", plural of *nīd*^{a/}, 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, like the suffixes *r^ε|a⁺* seen in Kusaal *tùbur*^ε "ear", *tùba*⁺ "ears", recur not only throughout Gur but much more widely; cognates of this particular pair appear as prefixes in Bantu, labelled 5/6 in the Bleek-Meinhof system (Nurse and Phillipson 2003.) Lingala has the cognate of Kusaal *tùbur*^ε in this very class: *litói* "ear", plural *matói*. In Swahili, the verbal subject prefixes for the corresponding class are singular *li* and plural *ya*; as in Kusaal, names of fruits (for example) usually belong to this class.

This particular correspondence of form and meaning is (so to speak) "cherry-picked"; although certain semantic categories are characteristically found in particular noun classes across Niger-Congo, the classes do not always correspond formally. Tree names in Kusaal nearly all belong to the particular class exemplified in the word for "tree" itself: sg *tùg*^a pl *tùs*^ε, but this does not correspond to the Bantu **mu/*mi* class 3/4 which typically contains tree names: Swahili *mti* "tree", plural *miti*. However, Kusaal, like its close relatives in the Western Oti-Volta subgroup (see below), has lost a class characteristically containing tree names, which is still preserved in other Oti-Volta branches, with the singular suffix **-bv*: Buli *tīb*, Gurmanche *tībū* "tree"; this class probably is related to Bantu 3/4. The Eastern Oti-

Volta language Ditammari has *mu-* for the affixes of this class (*mūtiē* "tree"), and although its close relative Nateni has *-bu* (*tēēbu* "tree"), the corresponding pronoun is *mu* (Sambiéni p219.)

Among unpaired Kusaal flexional suffixes, the *-m^m* characteristically seen with mass and abstract nouns like *kù'em^m* "water" is probably cognate with the Bantu Class 6 prefix **ma-* when used for mass terms and liquids, e.g. Swahili *maji* "water", (Gurmanche *ñíma*) and the *-l^ɛ* of language names like *Kūsáàl^ɛ* matches Bantu Class 11 **lo-* in the same meaning; cf *Luganda*, the language of the *Baganda* people.

Similarities may also be seen in verbal derivation by suffixes, in this context usually called "verbal extensions", after the term used in the study of Bantu languages, in which such processes are typically highly productive. However, at the level of Niger-Congo, there can be problems with correlating the form and function of these suffixes, and some processes may be areal phenomena, found even in Afro-Asiatic and Nilo-Saharan (see Hyman 2007.²)

Mande shows no trace of noun class affixes or Niger-Congo-type verbal extensions, nor much in the way of vocabulary unequivocally cognate to core Niger-Congo. Some Kordofanian languages (e.g. Lumun, well described in Smits 2017) bear a striking typological similarity to core Niger-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 little correspondence in form, and once again, little lexical correspondence. Even with the Atlantic languages, typological resemblances are much more apparent than lexical, and affixes of similar meaning to those of core Niger-Congo often show dissimilar forms. On the other hand, the Potou-Akanic family to which Twi/Fante and Gonja belong is a well-established part of the core, preserving both cognate vocabulary and clearly related noun class affixes.

Many proposals for Niger-Congo subclassification rely heavily on lexicostatistics, a technique which is the more problematic as so many of the relevant languages are poorly documented; only detailed comparative work can provide a basis for accurate subclassification. In the case of some lower-level groupings much has been achieved already, very notably with Bantu; among languages closer to Kusaal, there is the work of Sambiéni 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.

2) For Gur, Hyman cites only Canu 1976 (pp180ff). Some of Canu's extensions involve segmentation of CVC roots as CV+C, where the CV- component is not attested as a root; others involve CVV~CVC alternations of the type described in [6.1.1.1](#), where CVV allomorphs probably arose by lenition of the final consonant. However, Canu's *second*-position suffixes are true verb-deriving suffixes, with numerous cognates in other Western Oti-Volta languages; Kusaal is representative of the group [13.2](#).

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*^a "sibling") as an alternative name. This term, though attractive, is not a "shibboleth" word delineating the Western Oti-Volta group: cf Buli *mà-bīik id*. There are, however, many distinctively Western Oti-Volta lexical items, such as Kusaal *kù'əm*^m "water", Mooré *kòóm* etc; other Oti-Volta languages show forms cognate to e.g. Gurmanche *ñíma* Buli *nyíam* (cf the Kusaal verb *nì*⁺ "rain.") Morphologically, 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 dynamic imperfective. The Western Oti-Volta languages are all closely related to each another, as is evident to the speakers themselves; the group is roughly as diverse as Romance. However, claims of mutual intelligibility are often much overstated; they probably 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 traditionally divided into Northwestern and Southwestern subgroups. Northwestern Oti-Volta includes Mooré (much the largest of all Gur languages 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. 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.

A distinguishing feature of the Southwestern languages is the verbal inflection **-ma* used for positive imperatives. Numerous other isoglosses cut across the Northwestern/Southwestern division, but most of them evidently involve shared retentions, such as the preservation of noun-class based grammatical gender in Talni, Mampruli and Farefare but not Kusaal, Dagbani and Mooré [10](#), the retention of vowel glottalisation in Kusaal, Nabit, Talni and Farefare [4.2.2](#), and the preservation of the contrast between non-initial /r/ and /d/ in Mooré, Agolle (but not Toende) Kusaal, Talni and Nabit. The preverbal particles marking negation [19.5](#) are recognisably similar not only across Southwestern Oti-Volta, but 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. This must represent a retention, as opposed to the shared Mooré and Farefare innovation of negative *ka* for both indicative and irrealis (for another likely common innovation see [4.4](#) on the plural suffix *-do/-ro*.)

Some cases are not so straightforward; the form of 2sg "you" in Kusaal goes with the Northwestern languages, for example:

Dagbani	<i>a</i>	Mampruli	<i>i</i>
Nabit	<i>i</i>	Talni	<i>i</i>
Kusaal	<i>fù</i>	Mooré	<i>fò</i>
Farefare	<i>fɔ</i>	Dagaare	<i>fɔ</i>

Buli *fi* and Nawdm *bé* suggest that once again 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 an original distinction independently levelled in either direction in other languages.

Within Southwestern Oti-Volta, Mampruli, Dagbani, Hanga and some similar smaller languages form a clear subgroup. There is said to be considerable mutual intelligibility within the group. These languages show a great simplification of the inherited vowel system, with loss of contrasts in glottalisation, nasalisation and tenseness, along with lowering of original short *e* in closed syllables to *a*, and the secondary development of a series of contrastively palatalised velars. There are other shared innovations: in lexicon, for example, for the basic kinship term [32.1](#) "sibling of opposite sex (regardless of seniority)", Mooré, Farefare, and Talni all have cognates of Kusaal *tāyñ^{+/}* "man's sister/woman's brother", but Mampruli and Dagbani use the stem "younger sibling of 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⁺*, *tinzɔdoo/tinzɔpɔ'a* = *tāyñ^{+/}*.

This need not imply that Nabit, Talni and Kusaal also form a genetic subgroup, but the Nabit and Talni data from Tony Naden's website (see Sources) suggest as much. In particular, the Nabit materials show a close resemblance to Toende Kusaal. Giffen 2015 is an account of the creation of a Nabit orthography; her interesting discussion of the social and cultural setting suggests that Nabit has been swept up into the cultural and political orbit of the more distantly related Farefare. In passing, she implies that Talni speakers understand Nabit to some extent.

Nabit and Talni resemble Kusaal in having lost inherited final short vowels in citation forms. This is of course very common cross-linguistically (and seen also in Moba, the neighbouring Gurma language), but some sentences in Naden's dictionaries suggest that Nabit and Talni may retain the final vowel at the end of negated clauses and of questions, as with Kusaal Apocope [2.2](#):

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

Nabit	<i>La na bu biige.</i>	"It is not yet ripe."
Toende	<i>La nan bu bi'ige.</i>	
Agolle	<i>Lì nàm pō b'igē +∅.</i>	
	3INAN still NEG.IND ripen NEG.	
Talni	<i>Bunpɔk dɔɣam pu bɔkəra, buraɔ dɔɣam m bɔkət.</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	<i>[Pɥ'ā] dú'àm pō byákìdā +∅, [dāy] dú'amì_∅ byákìd.</i>	
	Woman: SG kindred NEG.IND split: DIPF NEG , man: SG kindred CAT split: DIPF .	

(These 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 may be lexical isoglosses: for example, the common Kusaal verb *nɔk^{ɛ/}* "pick up" (Toende *nɔk*) 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^{a/}</i>	"stranger"	<i>càanō</i>	<i>nícháanoā</i> (<i>ní-</i> "person")
<i>wáa^p</i>	"snake"	<i>wà</i>	<i>wáab</i>
<i>nī^{p/}</i>	"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>m̄ɔɔg</i> ^ɔ	"grass"	<i>múagū</i>	<i>mūub</i> ("blade of grass")
<i>py'ā</i> ^ā	"woman"	<i>púa</i>	<i>nípōk</i> (<i>ní-</i> "person")
<i>tìlg</i> ^ā	"tree"	<i>tībū</i>	<i>tīb</i>
<i>dòɔg</i> ^ɔ	"room"	<i>dīelī</i>	<i>dòk</i>
(<i>dèegò</i>)	Farefare <i>id</i>)		

Exceptions occur; tonal mismatches are bolded in

<i>sā'ab</i> ^ɔ	"TZ"	<i>sāābū</i>	<i>sāāb</i>
<i>bīig</i> ^ā	"child"	<i>bígā</i>	<i>bíik</i>
<i>tùbur</i> ^ɛ	"ear"	<i>tūbīlī</i>	<i>tūri</i>
<i>ñwāan</i> ^ā	"monkey"	<i>ŋmāāmō</i>	<i>wàaung</i>

Evidence from outside Oti-Volta shows that it is the languages with H tone corresponding to Pattern H (like Buli, Nawdm, and Western Oti-Volta) which have innovated: cf Chakali (Gurunsi) *t̄f̄ùò mò* "hare" = Kusaal *sú'əŋ*^ā (Pattern H), *vàà* "dog" = Kusaal *bāa*[̄] (Pattern O); Proto-Bantu *-nùà* "mouth" = Kusaal *n̄ɔɔr*^{ɛ/} (Pattern H), *-t̄ó* "ear" = Kusaal *tùbur*^ɛ (Pattern L). If other innovations could be shown to correlate with this tonal inversion, it might form a basis for subgrouping within Oti-Volta.

Like Gurma, 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 evidently shows much greater internal diversity than Western Oti-Volta. His comparative reconstructions assume that Manessy's Eastern Oti-Volta is a valid node; this is apparently based on the shared initial-consonant developments **g* → *k*, **gb* → *kp* and **j* → *y* along with **v* → *f* (also seen in Gurma.) The Eastern Oti-Volta languages in fact lack *v gb j* altogether, with *g* occurring only word-internally as an allophone of /k/, suggesting an areal development. Manessy has **gb* → *kw* for the neighbouring language Bulba/Nōōtre, which he classifies with *Western* Oti-Volta.

Of the four Eastern Oti-Volta languages Ditammari, Nateni, Byali and Waama, Ditammari resembles Gurmanche and Konkomba in that nouns usually appear with noun class prefixes and suffixes together. All four languages have noun class systems which otherwise seem conservative rather than marked by common innovations.

Ditammari and Nateni probably form a subgroup: like Gurma, they show L tone corresponding to Kusaal Pattern H, and in verb flexion they resemble each other closely, 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, and many individual verbs behaving 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. In verb flexion it shows a small group of verbs opposing final *-i* for perfective to *-u* for imperfective, but most verbs form the imperfective by adding a suffix of the form *-ri* *-di* or *-ti* to the perfective form, again resembling Western Oti-Volta. (However, similar suffixes appear even in the Gurma languages as one of many ways of forming the imperfective, e.g. Konkomba *-dɛ*.) There are also some lexical isoglosses uniting Waama with Western Oti-Volta and Buli over against the other Eastern languages and Gurma, e.g. Waama *wōmmā* "entendre" (= Kusaal *wòm^m*, Buli *wom*) as against Byali *cèsì* or *yō*, Ditammari *kèè* or *yō*, Nateni *yēkà*, Gurmanche *céngì* "écouter"; Waama *cáárō* "forgeron" (= Kusaal *sāḡñ⁺*, Buli *chò-a-bíik* [*chùōk* "forge"]), versus Byali *má-máárāū*, Ditammari *ōmáátà*, Nateni *málō*, Gurmanche *mááno*; Waama *yété* pl *yéyā* "maison" (= Kusaal *yīr^{el}*, Buli *yéí*), versus Byali *tápúú*, Ditammari *tācīētà*, Nateni *hǒǒtā*. Waama also shares the change *ʎ → y with Western Oti-Volta and Buli over against Gurma and Nawdm: Waam *yění* "deux" (= Kusaal [*à*]yí⁺, Buli [*ngà*]yè), versus Byali *dyā*, Ditammari *dīání*, Nateni *déń*, Gurmanche *lé*, Nawdm [*ʔé*]ré.

There is much less similarity between Oti-Volta as a whole and the other main group of Central Gur languages, the Gurunsi languages like Chakali, Kasem and Kabiye. The division between Gur in a broader sense and the Adamawa languages has been called into question, with suggestions that Oti-Volta and Gurunsi may even be essentially coordinate members of a continuum of families including at least some "Adamawa" subgroups: see e.g. Kleinewillinghöfer 1996, which references studies suggesting that the Adamawa languages Waja and Tula are closer to the Gurunsi languages than to other parts of "Central Gur." This supposed Gur-Adamawa group is sometimes called "Savannas"; most accounts still retain Central Gur as a node, comprising at least Oti-Volta and Gurunsi. Further progress on this issue will probably only come about after more descriptive work on Adamawa languages.

A few languages are usually classified as belonging to Central Gur, but not included in either Oti-Volta or Gurunsi. For the most part they are poorly documented; an exception is the Koromfe language of Burkina Faso (Rennison 1997), which is usually said to be closer to Oti-Volta as a whole than to Gurunsi, though Manessy's work often shows lexical correspondences between Koromfe and Gurunsi rather than Koromfe and Oti-Volta; he himself makes it a coordinate branch of Central Gur alongside Oti-Volta and Gurunsi.

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

1.2.4 External influences

In general, the languages of neighbouring regions have not obviously influenced Kusaal. Moba, for example, the neighbouring eastern language, has had no evident effect on Kusaal. The northern neighbours of the Kusaasi are the Bisa; indeed one Kusaal word for "North" is literally "Bisa Country" [32.3](#). Bisa territory is largely in Burkina Faso but extends just over the Ghanaian border, and many Bisa people have also settled in the villages among the Kusaasi, and in Bawku. However, Bisa people in Ghana use Kusaal as the areal lingua franca, and few others can communicate in their Mande language, which is at most remotely related to its Gur neighbours; once again, there seems to be no evidence of influence on Kusaal. In the west, Nabit and Talni resemble Kusaal closely enough that it is difficult to distinguish borrowing from common inheritance, but there is reason to suspect **Farefare** influence on Nabit and perhaps on Toende Kusaal too [1.2.3](#). With the neighbouring southern language, **Mampruli**, the issue is further complicated by the political history of the area [1.1](#), and by the fact that many local Mamprussi speak Kusaal rather than Mampruli, but some likely loanwords are identifiable. However, most loanwords in Kusaal [15.1](#) come from the two other languages most widely spoken within the Kusaasi area itself: Mooré and Hausa.

Mooré is the language of the Mossi, the largest single ethnic group of Burkina Faso. Many Mossi 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. Examples include *Wínà'am*^m "God" and *fāaŋíd*^a "saviour", where the forms may be borrowed via Toende Kusaal rather than from Mooré directly. A number of West African *Wanderwörter* have probably also reached Kusaal via Mooré rather than Hausa.

Most identifiable loanwords in Kusaal come from **Hausa**. The major centres of Hausa are in northern Nigeria and in Niger; it is the largest African language after Arabic by number of first-language speakers and is used by millions more as a lingua franca in the savanna zone of West Africa. In northern Ghana it has strong associations with Islam and with trade; it is usually a good guess to use Hausa to greet a stranger wearing Muslim dress. Hausa is an Afro-Asiatic language of the Chadic family, and is thus remotely related to Arabic and Hebrew but completely unrelated genetically to Kusaal; nevertheless, in matters of idiom, semantic range and even the kinds of distinctions encoded in its syntax and morphology, it shows numerous resemblances to its Niger-Congo neighbours. There are many ethnic *Hàusàawaa* in the Kusaasi area, especially in Bawku, but the language which has influenced Kusaal is the vehicular *Gaanancii* of northern Ghana. Though mutually intelligible with Standard (Kano) Hausa, *Gaanancii* among other differences lacks

gender, uses [z] for [d͡ʒ], monophthongises diphthongs, and drops the distinction between the glottalic consonants and their plain counterparts: for example, Standard Hausa *Kin jì kôo?* "Do you understand?" (addressing a woman) becomes *Kaa zì kôo?* Such features are largely the result of simplification by second-language speakers, rather than characteristic of Western Hausa dialects.³ Kusaal has far fewer Hausa loans than Dagbani or Mampruli, probably due to a much slighter exposure to Islam. (The Dagomba royal clan has been Muslim for centuries, though most Dagomba people are still, like the Kusaasi, adherents of traditional African beliefs and customs.) The use of Mooré alongside Hausa as an interethnic language in the far north of Ghana is probably also a factor.

The other major lingua francas of Ghana, Twi/Fante ("Akan") and English, have contributed comparatively 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, and very few native speakers of those languages can speak Kusaal. 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.⁴

As throughout the West African savanna, there are nomadic Fulbe in the Kusaasi area, chiefly engaged in cattle-raising. Traditional cataract surgery ("couching") is a Fulbe speciality in this region; the payment asked for is often a cow. There seems to be no evidence of borrowing from Fulfulde; *nagge*, plural *na'i* "cow" strikingly resembles Kusaal *náaʔ* (← **nāáǵfū*) plural *nīǵí*⁺, but this cannot be a loan into Kusaal itself, because the word and its distinctive flexion can be reconstructed to a stage prior to the Western Oti-Volta protolanguage (cf Buli *nááb* pl *nīǵā*.)

3) The far-western dialect of Ader in Niger (Caron 1991) has grammatical gender, though this is lacking in the eastern Hausa of Zaria and Bauchi (Caron 2013) which nevertheless still use feminine pronouns for female persons. Even in Nigeria, Hausa as an interethnic language lacks grammatical gender: I was once actually corrected by a Hausa mother-tongue speaker in Nigeria for using grammatical gender, on the grounds that it sounded unnatural in the speech of a foreigner.

4) I once communicated (after a fashion) with a patient via three intermediaries, the last of whom, a colleague, translated between Mooré and English for me. None of my colleagues could even identify the patient's language. The "middle" language was Dyula, a Mande language which is itself an important West African lingua franca; it is part of a dialect continuum which also includes Bambara, Maninka and Mandinka.

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 [2.3](#).

y represents [j]; *kp gb* represent [k̄p] [ḡb].

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 ɔ i u* have IPA values, while *ɪ ʊ* represent [ɪ] [ʊ] respectively. The allophony [ɪ]~[i] and [ʊ]~[u] seen in non-root syllables [4.3](#) is ignored, only *ɪ ʊ* being used. The symbols *e o* always represent [ɪ] [ʊ]; they are 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* [2.3.2](#).

	<i>dīe</i>	"receive"	[d̄iɪ]
	<i>pāe</i>	"reach"	[p̄ ^h aɪ]
	<i>bēog</i>	"tomorrow"	[bɛʊg]
	<i>kpīoŋ</i>	"strong"	[k̄p̄iʊŋ]
but	<i>dāvog</i>	"male"	[daʊg]
	<i>ò bīig</i>	"her child"	[ʊbi:g]
	<i>zú·o</i>	"steal him"	[zuʊ]
	<i>dà'·o</i>	"bought for him"	[d̄aʊʊ]

ɛ̄ j̄ both represent [ɪ̄]; *j̄* is used before vowel symbols and after *u*. The symbol *ɥ* is used for [ʊ̄].

	<i>gbàɥŋ</i>	"book"	[ḡbaʊŋ]
	<i>sōɛñ</i>	"witch"	[s̄ɔ̄ɪ̄]
	<i>mùj̄</i>	"rice"	[m̄ũj̄]

Long vowels are written by doubling the vowel symbol.

	<i>bāa</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 *j̄*:

<i>dà'</i>	"buy"	[d̩]
<i>dà'a</i>	"market"	[d̩:]
<i>kù'əm</i>	"water"	[kʰu̩əm]
<i>pɥ'ā</i>	"woman"	[pʰɥ̩]
<i>dīā'</i>	"get dirty"	[d̩]

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>tēñs</i>	"lands"	[tʰɛ̃:s]
<i>áñsìb</i>	"mother's brother"	[ãsɪb]
<i>gēñ</i>	"get tired"	[gɛ̃]
<i>gēñ'</i>	"get angry"	[gɛ̃']
<i>gēñ'ɛd</i>	<i>id</i> (dipf)	[gɛ̃:d]
<i>āñ·o</i>	"be him/her"	[ãũ]

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

<i>ñwām</i>	"calabash"	[w̃ām]
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The sequences [ɪ̩] [ɥ̩] [iə] [uə], with their nasalised and glottalised counterparts, arise from **Agolle Vowel Breaking**. *ɪ̩ ɥ̩ iə uə* are digraphs for *phonemic* monophthongs, though realised *phonetically* as diphthongs [4.1.1](#).

<i>p̩iəɪg</i>	"white"	[pʰiəɪg]
<i>bū'əs</i>	"ask"	[bu̩əs]
<i>t̩àk</i>	"change"	[tʰɪ̩ak]
<i>p̩ɥ̩āk</i>	"female"	[pʰɥ̩ak]
<i>k̩p̩j̩à'</i>	"shape wood"	[k̩p̩j̩]
<i>k̩j̩à</i>	"cut"	[kʰɪ̩]

Contrast the *phonemic* diphthongs in e.g.

<i>k̩p̩j̩à'</i>	"neighbour"	[k̩p̩j̩]
<i>s̩iā</i>	"waist"	[sia]

1.3.1 Written materials

Written materials are cited in their original orthography; differences from the working orthography of this grammar are discussed below.

Tone is not marked. Groups of words hyphenated in this grammar are written solid, and the raised dot symbol · is replaced by word division [2.3](#).

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 *ε 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* = *tɪɪg* "tree", *biig* = *bɪɪg* "child."

Word-final short *-ɪ* after *m n* is usually written *ε* in KB: *pebanε* for *pɛ̄'-báni* "sheep which ..." Mk 6:34; so in all cases with the relative pronouns *one kanε line banε* [28.2.3](#) and with *anɔ'ɔnε* "who?" before Liaison.

The root-vowel is consistently written as *e* in KB in the words *ye* "that" *teŋ* "land" *keŋ* "go" (base) *ken* "go" (dipf) 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 *tɪŋ* "land", Mampruli *tiŋŋa* "land" versus Toende *meŋ*, Mampruli *maŋŋa* = *mɛ̄ŋ* "self."

The demonstrative and pronoun forms *ɔn/ɔn/ɔn ɔŋā* 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>pɪəlɪg</i>	"white"	[p ^h iəlɪg]
<i>bu'os</i>	<i>bū'əs</i>	"ask"	[bʊəs]

ie uo are also used to write the phonemic diphthongs *ie uo* [iɪ] [ʊʊ] 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>di'e</i>	<i>dɪ̄'e</i>	"receive"	[dɪ̄ɪ]
<i>zu o</i>	<i>zú·o</i>	"steal him"	[zʊʊ]

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

The diphthong *io* [iʊ] is written *io* in the 1976 NT but *ieu* later: thus *kp̄'ɔŋ* "strong" [k^hp̄iʊŋ] is *kpi'ɔŋ* in the 1976 NT, *kpi'eʊŋ* in the 1996 NT and KB.

Traditional orthography uses *e i u* for non-moraic *ɛ ɪ ʊ* 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/aɛ* is expressed by writing *aae* (or *aaɛ*) for *ae* versus *ae* for *aɛ*:

<i>paae</i>	<i>pāe</i>	"reach"	[pʰaɪ]
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The contrast *av/ay* before *ŋ* is not marked. KB uses both *au* and *av*, spelling each individual word consistently, but not as marking any length distinction: thus *yavŋ* "grave" for *yàvŋ*, but *na'araug* "ox" for *nā'-dávŋ*; *dau* for *dāu* "man" but *tavn* for *tāvŋ* "sibling of opposite sex." Thus the ambiguity remains in

<i>gvaŋ</i>	<i>gbāŋ</i>	"skin"	[g̃bavŋ]
<i>mavaŋ</i>	<i>màngávŋ</i>	"crab"	[mavavŋ]

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>kʊā</i>	"hoe"	[kʰʊa]
<i>sabua</i>	<i>sàbùa</i>	"lover"	[sabua]

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

<i>kpi'a</i>	<i>kpi'a⁺</i>	"neighbour"	[kpi̯a]
<i>kpi'a'</i>	<i>kpi'à⁺</i>	"shape wood"	[kpi̯aʰ]

Before 2016, *ɪ'a* [ɪ̯a] was usually written *o'a*, but did not even then contrast consistently with *u'a* representing *ʊ'a* [ʊ̯a]. All *u'a ɪ'a* and *o'a* are now written *u'a*.

<i>po'a</i> or <i>pu'a</i>	<i>pʊ'ā</i>	"woman"	[pʰʊ̯a]
<i>po'ab</i> or <i>pu'ab</i>	<i>pō'ab</i>	"women"	[pʰʊ̯ab]

NT/KB write *-ey-* in Long Forms [2.2](#) corresponding to Short Forms where final *-y* has become *-ɛ*: *vveya* = *v̄v̄yá* Long Form of *v̄v̄ɛ* "be alive." Older NT versions also write *b̄n-v̄v̄yà* "living things" as *bunvoeya*, but KB has the expected *bunvuya*.

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

<i>sa(n)rega</i>	<i>sāriǵá</i>	"prison"	[sarɪǵa]
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The 2016 orthography writes *bieya* for *bjēyá* "elder same-sex siblings" etc, but *suoya* for *suēyá* "roads", *zuoya* for *zūyēya* "hills" etc by analogy with the singulars. *suor sūer* and *zuor zūer*. Older sources write *sueya*, *zueya*.

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

<i>tεεns</i>	<i>tēēñs</i>	"lands"	[tʰē:s]
<i>gen'</i>	<i>gēñ'</i>	"get angry"	[gē]
<i>gen'εd</i>	<i>gēñ'εd</i>	<i>id</i> (dipf)	[gē:d]
<i>nwam</i>	<i>ñwām</i>	"calabash"	[wām]

As prefix [14](#) vowels show no contrastive nasalisation [4.4](#), *n* ending a prefix (not a combining form) in traditional orthography must represent the consonant *n*:

<i>dunduug</i>	<i>dùndùug</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>kεn</i> (older <i>kenn</i>)	<i>kēñ</i>	"come" (base)	[kʰē]
<i>kεn</i> (older <i>ken</i>)	<i>kēn</i>	"coming" (gerund)	[kʰεn]

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 *ãaròn*), and *malek* for *màljāk* "angel" (Toende *màlék*); KB has the expected *anrun* and *maliak* throughout, corresponding to the consistent usage of all my informants and of the audio 1996 version.

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

Traditional **word division** differs somewhat from that adopted in this grammar. Beside the issues discussed in [2.3](#), focus-*nē*^{+/} is always written solid after *à(ñ)* from *àḗñ*^a "be", and aspectual *nē*^{+/} is usually written solid with a preceding verb:

O anε biig. "He/she's a child."

Ò à nē biig.

3AN COP FOC child:SG.

Bipuŋ la pu kpji, o gbidnε.

Bī-púŋ lā pū kpjī^{+∅}, ò gbìsd nē.

Child-girl:SG ART NEG.IND die NEG, 3AN sleep:DIPF FOC.

"The girl is not dead, she is sleeping." (Mt 9:24)

Nē "with" is written solid after *wēn*^{na/} "resemble":

Ka o nindaa wenne nintan 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)

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

Texts sometimes mistake the stressed [2.4](#) final syllable of a Long Form [2.2](#) for a segmentally homophonous particle; this is rare in KB, however.

O ku nyaje liebi m nya'andol la.

Ò kù ñyāŋɿ_∅ líabì_ ñ ñyà'an-dòllā^{+∅}.

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 pu tci yaa

Àrazánà nē dūnɿya gáadùg pū tōyá^{+∅}.

Heaven with world passing NEG.IND be.difficult NEG.

"The passing of heaven and earth is not difficult" (Lk 16:17, 2016)

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.

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 2.2**), 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*^a 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 *bien* ← Latin *bene*; 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 8.1**, which have no segmental form of their own but show their presence by this effect on the preceding

word form. There are three different Prosodic Clitics, Negative **NEG**, Vocative **VOC** and Interrogative (**PQ/CQ**), with different effects on preceding vowel length and tone. With interlinear glossing they are represented by $^+\emptyset$, as above.

In citing word forms, superscripts [2.2.1](#) will be used to write the parts of words which are dropped everywhere except before Prosodic Clitics and Liaison: *bīig*^a "child", *gbīgim*^{ne} "lion", *kōk*^a "chair", *dōk*^ɔ "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

āañdiga "black plum tree"

has the default epenthetic vowel *ɪ* before the flexion, and appears as *āañdig* 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 [8.2.1](#) 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:

<i>Ṃ p̄</i> <i>bɔ́ɔdā</i> +∅. 1SG NEG.IND want NEG.	"I don't want to." Long Form <i>bɔ́ɔdā</i> preceding Negative Clitic.
<i>Ṃ</i> <i>bɔ́ɔdī</i> <i>bá</i> . 1SG want 3PL.OB.	"I love them." Modified Long Form <i>bɔ́ɔdī</i> before Liaison.
<i>Ṃ p̄</i> <i>zábē</i> +∅. 1SG NEG.IND fight NEG.	"I haven't fought." Long Form <i>zábē</i> preceding Negative Clitic.
<i>Ṃ</i> <i>zábī</i> <i>bá</i> . 1SG fight 3PL.OB.	"I've fought them." 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 *bɔ́ɔd*^a "wants, loves" and *f*^p "you (sg)":

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

The locative postposition *n*^ε 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>kūka</i> +∅. 3INAN NEG.BE chair: SG NEG.	"It's not a chair."
<i>Lì</i> <i>kā'</i> <i>kūki-né</i> +∅. 3INAN NEG.BE chair: SG-LOC NEG.	"It's not in a chair."
<i>kūki-n</i> chair: SG-LOC	"in a chair"
<i>Lì</i> <i>kā'</i> <i>dūkó</i> +∅. 3INAN NEG.BE pot: SG NEG.	"It's not a pot."
<i>Lì</i> <i>kā'</i> <i>dūkí-nē</i> +∅. 3INAN NEG.BE pot: SG-LOC NEG.	"It's not in a pot."

dōkí-n "in a pot"
 pot:SG-LOC

The 3sg animate object pronoun ^o "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)"

M̄ pō bɔ́ɔdī_ f̄ +∅. "I don't love you."
 1SG NEG.IND want 2SG.OB NEG.

M̄ bɔ́ɔdī_ f. "I love you"
 1SG want 2SG.OB.

with the forms with ^o "him/her":

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

M̄ bɔ́ɔd·ō_ ∅. "I love him/her." [ɱbɔ:dɔ]
 1SG want 3AN.OB. Short Form ∅ of the pronoun "him/her"

A Liaison Word form ^{ya} 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 [2.2](#):

Gòsim! "Look!"
 Look:IMP!

Gòsimī_ ∅! "Look ye!" by Apocope from *gòsimī-yá*
 Look:IMP 2PL.SUB!

Liaison words are not all enclitic. Personal pronouns used as subjects or as proclitic determiners of a following noun or postposition also cause this inhibition of Apocope in the *preceding* word, as does one proclitic particle of the form *à* and all words beginning with certain derivational prefixes [8.2.2](#).

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.

m̃ zūgú_ ø zàbɪd lā zúg

1SG head:SG NZ fight:DIPF ART upon

"because my head hurts" (Nominaliser-*h̃*)

M̃ zūgu_ ø zábɪd.

"My head hurts." (Catenator-*n*)

1SG head:SG CAT fight:DIPF.

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." Sometimes such words are mistaken for clause-final type Long Forms and written accordingly.

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 [4.2.2](#).

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 $\epsilon \text{ } \text{ɔ}$ vowels, still preserved as phonetic monophthongs in the Toende Dialect. This has produced four monophthongal phonemes *ja ɥa iə uə* which are realised phonetically as diphthongs; as in the traditional orthography they are written in accordance with the realisation, but the orthography is to be regarded for phonemic purposes as using *digraphs* to write monophthongs. On top of these complications, Kusaal has developed an elaborate and asymmetrical system of 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 in the morphophonemics.

Kusaal is **tonal**, like its relatives and neighbours, and indeed the vast 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. Thus, original H has become M (Mid), and the new toneme takes the place of H.

There is a frequent **tone overlay** [19.6.1.1](#) affecting Verbal Predicators in main clauses, and pervasive **tone sandhi** phenomena, one only affecting nominals within

Noun or Adverb Phrases [8.4](#), and one which occurs regardless of syntax after most unbound words [8.3](#).

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 [5.3](#).

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

<i>dī̄əsídìb</i>	"receivers"
<i>bā̄ŋɪdɪb</i>	"wise men"
<i>gbī̄gɪmɲɛ</i>	"lion" (longer form, as above)
<i>áñsìb</i>	"mother's brother"

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. Consonant clusters cannot occur word-initially or finally, except for final geminate -*mm* in Long Forms [8.1](#) (including "Apocope-Blocked" [6.4](#) forms like the quantifier *pā̄mm* "a lot") where there has been loss of syllabicity in an originally syllabic final *m*. (On *kp gb ñ '* see the note on orthography above.)

Many nouns, and one adjective, have a **noun prefix** beginning a stem which in other respects has just the same structure as an unprefixed stem. Noun prefixes take the forms CV- or CVn-, less often CVlɪn- or CVsɪn-. Nouns with prefixes can thus contain -nC- clusters at the junction between the prefix and the rest of the stem:

<i>pī̄pī̄rɪg</i>	"desert"
<i>dì̄ndēog</i>	"chameleon"

Other word-internal clusters are confined to loanwords, though two-member consonant clusters occur freely within compounds, reflecting the fact that these are formed of component words with Apocope after each one.

Flexional **suffixes** have only a three-way vowel contrast *a/ɪ/ʊ*; this is also true of prefixes. Flexional 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*. Many different two-member consonant clusters may occur across word division because of the deletion of word-final short vowels by Apocope:

Gb̄igim lā dāa kūvd búŋ lā.

Lion:SG ART TNS kill:DIPF donkey:SG ART.

"The lion (*gb̄igim*^{nɛ}) was killing (*kūvd*^{a/}) the donkey (*bùŋ*^a) ."

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. Productive stem derivation is also effectively all suffixal. Noun prefixes do not usually have identifiable meanings and are not involved in regular derivational processes, but derivational prefixes derived from older flexions do occur in some quantifiers and adverbs [14.2](#) [14.3](#).

Kusaal flexional morphology is underlyingly fairly straightforward, but there are numerous surface complications due to word-internal consonant deletions, cluster simplifications, and to the pervasive effects of final vowel deletion. These words, given in the usual Short Forms, all belong to the same *g^a|s^ɛ* Noun Class:

<i>bīig</i>	"child"	<i>bīs</i>	"children"
<i>būvg</i>	"goat"	<i>būs</i>	"goats"
<i>sàbùa</i>	"lover"	<i>sàbùes</i>	"lovers"
<i>nūa</i>	"hen"	<i>nōvs</i>	"hens"
<i>kūk</i>	"chair"	<i>kūgvs</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>tēēŋs</i>	"lands"

Noun flexion is typically Gur, with noun stems inflected for 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 but very far from complete 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 **post-determining pronoun**:

<i>būvg^a</i> "goat"	+ <i>piəliɡ^a</i> "white"	→ <i>bù-piəliɡ^a</i>	"white goat"
<i>būvg^a</i> "goat"	+ <i>sī'a⁺</i> "another"	→ <i>bù-sī'a⁺</i>	"another goat"
<i>kūk^a</i> "chair"	+ <i>piəliɡ^a</i> "white"	→ <i>kùg-piəliɡ^a</i>	"white chair"
<i>kūk^a</i> "chair"	+ <i>kàŋā^{+/}</i> "this"	→ <i>kùg-kàŋā^{+/}</i>	"this chair"

In this grammar compounds are hyphenated, as above.

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** or **resultative** aspects and marking the **dynamic imperfective** aspect with a single suffix *-d^a*. There are few real irregularities, though unobvious consonant changes and vowel deletions again complicate the surface picture:

<i>kō⁺</i>	perfective	"kill" (+ means that the vowel is long in the LF)
<i>kōvd^{a/}</i>	imperfective	
<i>ñyē⁺</i>	perfective	"see"
<i>ñyēt^{a/}</i>	imperfective	
<i>vōl^ε</i>	perfective	"swallow"
<i>vōn^{na/}</i>	imperfective	

Variable verbs also have an imperative flexion *-m^a*, 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 **descriptive** stative or dynamic imperfective aspect depending on the verb:

<i>Ò dīgɪ</i>	<i>nē.</i>	"She's lying down."
3AN	be.lying.down	FOC.
<i>Ò mərə</i>	<i>búŋ.</i>	"She has a donkey."
3AN	have donkey:SG.	
<i>Ò gīm.</i>		"She's short."
3AN	be.short.	

There are two **verbs "to be"**: *bē* "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 bīg. "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' bīga +∅. "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^{ɔ'} "killing"
kōvd^{a'} "killer"
kōvdíŋ^a "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:

gbìgum-kōvd^{a'} "lion-killer"

Syntactically, Kusaal is quite representative of Gur in general. It is strictly **SVO**, with indirect objects preceding direct objects:

Ì 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.) However, 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:

téɛbùl lā zūg "onto the table" (*zūg* "head")

The Liaison Word *n^ɛ* 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'arɛ* "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 [see [25.2.3](#) for a marginal exception for some speakers]:

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

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

Gbīguma lā dāa kū búŋ lā.
Lion:**PL ART TNS** kill donkey:**SG ART**.
"The lions killed the donkey."

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

M̄ dāa ñyē gbīgum lā. "I saw the lion."
1SG TNS see lion:**SG ART**.

Bà dāa ñyē gbīgum lā. "They saw the lion."
3PL TNS see lion:**SG ART**.

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

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

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

The particle generally has this meaning when the verb allows it and no unbound words intervene between verb and particle, but with Descriptive verbs, which by default express an abiding state, like *àɛñ* "be something/somehow" above, the aspect-focus 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 *tīs* "give" is used, as very often, simply as means of adding an indirect object:

M dāa kùès bònɔ_ ø tīs dɥ'átà.
 1SG TNS sell donkey:SG CAT give doctor:SG.
 "I sold a donkey to Doctor."

Kusaal is interesting in that the Verbal Predicate is specifically marked not for subordination but for its absence. Main clauses and Content clauses have **Independency marking 19.6** of the first Verbal Predicator, marked by a **tone overlay** affecting the first word of the Predicator, by 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 in narrative:

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

Ò gòs dɥ'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 the different tones on the verbs in

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^a*:

Dā gōs dɥ'átāa +∅!

NEG.IMP look.at doctor:**SG NEG!**

"Don't look at the doctor!" (Overlay absent with the negative)

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, m̄ ná t̄isɿ_f búŋ.

2SG if want, **1SG IRR** give **2SG.OB** donkey:**SG.**

"If you want, I'll give you a donkey."

Manner or place adjuncts can only be placed before the subject by preposing them with *kà* via an elliptical clefting construction (see below.)

Clauses are often downranked by insertion of the Nominaliser particle *ñ* (very frequently realised as segmental *∅*) after the subject:

gbīgim lá_∅ kō búŋ "the lion having killed the donkey"

lion:**SG ART NZ** kill donkey:**SG ART**

Relative clauses show a number of interesting features. They can be internally-headed:

[Paul ñ sōb gbàŋ-sī'a n t̄is Efesus d̄im 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)

where *gbàŋ-sī'a* is *gbàŋ* "book" compounded with the post-determining 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* (tonally distinct from Catenator-*n*) which follows the subject, so that the functions of a relative pronoun are here formally divided into two separate parts. Kusaal has, however, also developed an antecedent-initial relative clause type where the nominaliser has fused with a preceding demonstrative to form a relative pronoun:

dà̀y-kà̀nɪ pu'ā kpí lā "the man whose wife has died"
 man-REL.SG wife:SG die ART

Subordinate clauses may also be introduced by linker particles. The clause linker *kà*, which often means "and", is also frequently formally subordinating. The sense is often that of a non-restrictive relative clause:

Lì à nē gbīgum lá kà m̀ ñyēt.
 3INAN COP FOC lion:SG ART and 1SG see:DIPF.
 "It's the lion I see."

Even when *kà* is coordinating, it has effects on clause structure which resemble those seen in subordination, with Independency marking absent.

Kusaal **narrative** links clause after clause with *kà* in a way somewhat reminiscent of Biblical Hebrew, 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 bìg mà'aa.

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

Kà dāar yīnní kà bìg lā né ò sàam zín'i_∅ sōñsid.

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

Kà bìg 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

Kusaal **Content clauses** are formally identical to main clauses, including Independency marking, but they contain personal pronouns altered as in indirect speech. Content clauses are used not only for reporting speech but very generally with verbs expressing communication or thought. Most often they are introduced by *yē* "that." There are special **logophoric** uses of the contrastive free personal pronouns within Content clauses.

Ò yèl yē ɔ̃n ñyé gbīgim.

3AN say that 3AN.CNTR see lion:SG.

"He said that he (himself) saw a lion."

Ò yèl yé ò ñyè gbīgim.

3AN say that 3AN see lion:SG.

"He said that he (someone else) saw a lion."

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_ø mārí_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 lé̃m bòɔd yé ò sīd lā dí pɔ̀'ā yá'asē +ø.

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:

Gbīgim_ø kōvd búŋ lā.

Lion:SG CAT kill:DIPF donkey:SG ART.

"A lion is killing the donkey."

Ṁ zūgv_ø zábìd.

1SG head CAT fight:DIPF.

"My head is hurting."

(Reply to "Where is the pain?")

Gbīgím kà ì dāa ñyē.

Lion:SG and 1SG TNS see.

"It was a lion that I saw."

These patterns derive by ellipsis of *Lì à nē* "It is ..." before a VP Chaining construction or before an Adnominal *kà*-clause respectively.

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 bóòd b́ +ø?

2SG want what CQ?

"What do you want?"

B́ kà fù ñyētá +ø?

What and 2SG see:DIPF CQ?

"What can you see?"

Gbīgima_á *álá* *kà fù ñyētá* + \emptyset ?

Lion:PL NUM:how.many and 2SG see:IPVF CQ?

"How many lions can you see?"

Ànó'wà *∅* *kū búŋ* *lā* + \emptyset ?

Who CAT kill donkey:SG ART CQ?

"Who has killed the donkey?"

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

Mām *bé* *nē* *mōwɔ-n*. "I'm in the bush." BNY p8

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

or *Mōwɔ-n* *kà* *mām* *bé*. "I'm in the bush." BNY p10

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

not **Mōwɔ-n* *mām* *bé*. "I'm in the bush."

The particle *nē* seen in several of the above examples interacts with verb aspect, but may also focus either VP constituents or the entire VP [30.1.2](#). The rules determining its rôle in each case admit some ambiguity, but the aspectual meaning is normally preferred whenever it is syntactically and semantically possible [19.2](#).

Morphophonemics

2 Words, morae and syllables

2.1 Word classes

The open word classes comprise **verbs** and **nominals**, the latter subdivided into **nouns** and **adjectives** along with closed subclasses of **quantifiers**, **adverbs**, and **pronominals**. Pronouns used as post-determiners behave like adjectives, following a head noun which appears as a Combining Form, forming a compound in which the last element inflects to show the number of the head [16.9](#). **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*^{+/} and the deictic *ñwà*⁺ "this", the locative marker *nī*^{+/}~*n^ε*, the prepositions *nē* "with" and *wōv* "like" [18](#), preverbal adverbs and markers of tense, aspect and mood in Verbal Predicators [19](#), the focus particle *nē*^{+/}, the clause linkers *kà* and *yē*, Nominaliser-*h̄*, Catenator-*n*, VP-final *nā*^{+/} "hither" and *sà*⁺ "hence", and a number of clause-level words such as conjunctions [24.1.3](#) and emphatics [30.6](#).

2.2 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 à *nē bīg*. "She's a child."
3AN COP FOC child:SG.

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

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

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

The Long Form also appears as a **derivational** feature in the *citation* form of some words [6.4](#). In proverbs and other archaic materials, a LF may be found ending a *yà'*-clause [8.1.1 27](#). Direct commands sometimes end in a LF [25.2.3](#).

The LF is not predictable in general from the shape of the SF alone (but see [2.2.2](#)); however, the SF is always deducible 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 short back vowels and zero elsewhere

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

<i>ia</i> → <i>ja</i>	<i>ua</i> → <i>ɥa</i>	<i>ja'a</i> → <i>ja'</i>	<i>ɥ'aa</i> → <i>ɥ'a</i>
<i>ae</i> → <i>aɛ</i>	<i>av</i> → <i>aɥ</i>	<i>ui</i> → <i>uj</i>	
<i>Vaa</i> → <i>Va</i>	<i>Vee</i> → <i>Ve</i>	<i>Vuv</i> → <i>Vu</i>	

The term "Apocope" will be used throughout this grammar to refer exclusively to this specific phenomenon. It is treated descriptively as a single process, but historically the matter was certainly more complex; comparison with other Western Oti-Volta languages and internal evidence both suggest that loss of final vowel quality contrasts preceded complete vowel deletion clause-internally. Clause-internal total deletion (seen also in Mooré) was probably itself a stress-related process distinct from the clause-final Apocope characteristic of Kusaal, Nabit and Talni.

Examples:

<i>Lì à nē kōk.</i>	"It's a chair."
3INAN COP FOC chair:SG.	
<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."
3INAN NEG.BE chair:SG NEG.	
<i>Lì à nē kúkàa +∅?</i>	"Is it a chair?"
3INAN COP FOC chair:SG PQ?	
<i>Àń'ɔ̀nì_∅ ñyē kúkà +∅?</i>	"Who saw a chair?"
Who CAT 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 dōkóv?</i>	"Is it a pot?"
<i>Àń'ɔ̀nì ñyē dōkóv?</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 gbìgìmmne?</i>	"Is it a lion?"
<i>Àń'ɔ̀nì ñyē gbìgìmmne?</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>Àń'ɔ̀nì ñyē yáarimm?</i>	"Who saw salt?"

<i>Bà à nē gbīgɪma.</i>	"They're lions."
<i>Bà k̄ā' gbīgɪmaa.</i>	"They're not lions."
<i>Bà à nē gbígɪmàa?</i>	"Are they lions?"
<i>Ànó'ɔ̀nì ñyē gbígɪmà?</i>	"Who saw lions?"
<i>Ò à nē dāυ.</i>	"He's a man."
<i>Ò k̄ā' dāυ.</i>	"He's not a man."
<i>Ò à nē dáυυ?</i>	"Is he a man?"
<i>Ànó'ɔ̀nì ñyē dāυ?</i>	"Who saw a man?"
<i>Ò à nē sāēñ.</i>	"He's a blacksmith."
<i>Ò k̄ā' sāēñ.</i>	"He's not a blacksmith."
<i>Ò à nē sáèēñ?</i>	"Is he a blacksmith?"
<i>Ànó'ɔ̀nì ñyē sáēñ?</i>	"Who saw a blacksmith?"
<i>Lì à nē múj.</i>	"It's rice."
<i>Lì k̄ā' múj.</i>	"It's not rice."
<i>Lì à nē mújì?</i>	"Is it rice?"
<i>Ànó'ɔ̀nì ñyē múj?</i>	"Who saw rice?"
With verbal forms:	
<i>Kà ò sják.</i>	"And he agreed."
And 3AN agree.	
<i>Ò p̄ū sjákē +∅.</i>	"He didn't agree."
3AN NEG.IND agree NEG.	
<i>Kà ò dīgɪ.</i>	"And she's lying down."
And 3AN be.lying.	
<i>Ò p̄ū dīgɪyá +∅.</i>	"She isn't lying down."
3AN NEG.IND be.lying NEG.	
<i>Kà ò vūē.</i>	"And she's alive."
<i>Ò p̄ū vūyá.</i>	"She's not alive."
<i>Kà ò kɪyā.</i>	"And he farmed."
<i>Ò p̄ū kūa.</i>	"He hasn't farmed."

Kà ò kǎ́. "And she cut (it)."
Ò pō kǎ́. "She hasn't cut (it)."

Kà ò pāe. "And he reached (it)."
Ò pō pāée. "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 *bédugō* "a lot":

Lì à nē bōn-bédùg. "It's a big thing."
3INAN COP FOC thing-big:SG.

Lì kǎ' bōn-bédugō +∅. "It's not a big thing."
3INAN NEG.BE thing-big:SG NEG.

M pú'ùs yā bédugō. "Thank you very much."
1SG greet PFV much.

2.2.1 Superscript Notation

The exact shape of a surface Long Form differs in different contexts: final vowel length may be neutralised; there may be tonal changes; lowering of final short *ɪ ʊ* to *ɛ ɔ* is not seen in LFs used as derived forms, and so on.

Such differences are regarded as changes produced in the form of the Long Form by following particles. Clause-final LF types will be regarded as induced by following **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. The derivational LF types are taken as showing **Apocope Blocking** 6.4.

The Long Form is thus 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 type of clitic. For convenience, the LF form preceding the Negative Prosodic Clitic 8.1 will be taken as canonical. 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; see below on tonemes.

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

When the LF ends in a long vowel or diphthong, Superscript Notation writes the SF followed by the mark ⁺:

<i>gbīgıma</i> ⁺	"lions"	SF <i>gbīgıma</i>	LF <i>gbīgımaa</i>
<i>mòli</i> ⁺	"gazelles"	SF <i>mòli</i>	LF <i>mòlīu</i>
<i>gòñ</i> ⁺	"hunt"	SF <i>gòñ</i>	LF <i>gōɔñ</i>
<i>tìeñ</i> ⁺	"inform"	SF <i>tìeñ</i>	LF <i>tìēeñ</i>
<i>kjà</i> ⁺	"cut"	SF <i>kjà</i>	LF <i>kīa</i>
<i>kūā</i> ⁺	"hoe"	SF <i>kūā</i>	LF <i>kūa</i>
<i>dāu</i> ⁺	"man"	SF <i>dāu</i>	LF <i>dāu</i>
<i>sāeñ</i> ⁺	"blacksmith"	SF <i>sāeñ</i>	LF <i>sāeñ</i>

(This use of ⁺ exploits the extent to which LFs can be predicted synchronically from SFs [2.2.2](#). More radical simplifications could be made: ⁺ ^ε ^m = ^o are in complementary distribution, as are ^a ^y^a. Separate symbols are used for clarity.)

Superscript ^a is written after a vowel symbol in two cases.

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

	<i>kpjà</i> ⁺	"shape wood"	SF <i>kpjà'</i>	LF <i>kpī'a</i>
but	<i>djā</i> ^a	"get dirty"	SF <i>djā'</i>	LF <i>djā'a</i>
	<i>kūā</i> ⁺	"hoe"	SF <i>kūā</i>	LF <i>kūa</i>
but	<i>pu'ā</i> ^a	"woman"	SF <i>pu'ā</i>	LF <i>pu'āa</i>

Words with LFs in *-ya* where the SFs changes the word-final *-y* to *-e* are also written with superscript ^a:

<i>vūe</i> ^{a/}	"be alive"	SF <i>vūe</i>	LF <i>vūyá</i>
<i>tōe</i> ^{a/}	"be bitter"	SF <i>tōe</i>	LF <i>tōyá</i>

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

dà'a⁼ "market"

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.)**

The final M or H tone is realised on the rightmost vocalic mora of the LF; however, if a pitch rise would otherwise result within a single syllable, the first mora is delinked and the second toneme links to both morae [5.2](#); this process is tacitly assumed in Superscript Notation:

<i>fūug</i> ^{ɔ/}	"shirt, clothes"	SF <i>fūug</i>	LF <i>fūugó</i>
<i>pāe</i> ^{+/}	"reach"	SF <i>pāe</i>	LF <i>pāée</i>
<i>nūa</i> ^{+/}	"hen"	SF <i>nūa</i>	LF <i>nūáa</i>
<i>yā</i> ^{+/}	"houses"	SF <i>yā</i>	LF <i>yáa</i>
<i>lā</i> ^{+/}	article 16.5	SF <i>lā</i>	LF <i>láa</i>
<i>bèdʊgū</i> ^{+/}	"a lot"	SF <i>bèdʊgū</i>	LF <i>bèdʊgúu</i>
<i>gāañ</i> ^{=/}	"Nigerian ebony"	SF <i>gāañ</i>	LF <i>gáañ</i>
<i>dāam</i> ^{m/}	"millet beer"	SF <i>dāam</i>	LF <i>dáamm</i>
<i>tāyũ</i> ^{+/}	"opposite-sex sib"	SF <i>tāyũ</i>	LF <i>táyũ</i>
<i>mòli</i> ⁺	"gazelles"	SF <i>mòli</i>	LF <i>mòlĩ</i>

If the sequence HM would result in one syllable, the M is delinked:

	<i>Lì kā' yáarĩmm.</i>	"It's not salt (<i>yàarĩm</i> ^m)."
	<i>Lì ká' ò tĩmm.</i>	"It's not her medicine."
but	<i>Lì kā' tĩmm.</i>	"It's not medicine (<i>tĩm</i> ^m)."
	<i>Lì ká' bà dā'a.</i>	"It's not their market."
but	<i>Lì kā' dá'a.</i>	"It's not a market (<i>dà'a</i> ⁼)."

Similarly, when the Liaison enclitic ^o "him/her" is attached to a verb Base 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> ^o	"see him/her"	SF <i>ňyē·o</i>	LF <i>ňyē·ó-o</i>
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Note that *kū·ó*⁼ "kill him/her" represents the identical SF and LF *kú·o*.

Words like *náaf*^ɔ and *nú'ùg*^ɔ coincide tonally in the surface LF because of H Spreading [5.3](#); such words are written in Superscript Notation with the SF tonemes.

<i>Lì kā' nú'ugō</i> ^{+∅.}	"It's not a hand."
3INAN NEG.BE hand:SG NEG.	
<i>Lì kā' náafō</i> ^{+∅.}	"It's not a cow."
3INAN NEG.BE COW:SG NEG.	

2.2.2 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 [6.3.2](#), 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 [8](#).

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 [5.3](#). 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 Base Forms end in *-mm* if the the SF ends in *-m* and in *-ε* otherwise; dynamic imperfectives and Invariable verbs end in *-a* with gemination of preceding *n* *l* *m*. Dynamic 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* [1.3.1](#); KB *ka pu tumma*.)

The default LF ending corresponding to SFs ending in a consonant is *-ε*. Thus with loans like *tīlās^ε* "necessity", cf Hausa *tīlās 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^{+∅}.

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 [1.3.1](#)].

Pū'abí_ ∅ dū'à sīāba lā wūsa, sɔ' kā'e_∅ gát Joonε^{+∅}.

Woman:**PL NZ** bear **INDF.PL ART** all, **INDF.AN NEG.BE CAT** pass:**DIPF** John **NEG**.

"Of all those born of women, none surpasses John." (Lk 7: 28)

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>sīā</i> ⁺	"waist"	<i>sàbùā</i> ⁺	"girlfriend"
<i>bāā</i> ⁼	"dog" 8.1	<i>pāē</i> ^{+/}	"reach"
<i>niē</i> ⁺	"appear"	<i>dūē</i> ^{+/}	"raise/rise"
<i>kūgá</i> ⁺	"stones"	<i>wìdɪ</i> ⁺	"horses"
<i>kū</i> ⁺	"kill"	<i>mà</i> ⁺	"mother"
<i>bèdvgū</i> ^{+/}	"a lot" 6.4		

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

<i>djā</i> ^{'a}	"get dirty"	← * <i>djagɪ</i> 6.1.1.1	Farefare	<i>dēgē</i>
<i>pjāñ</i> ^{'a}	"speak, praise"	← * <i>pjãgɪ</i>	Farefare	<i>pěgě</i>
<i>du'à</i> ^{'a}	"bear, beget"	← * <i>duagɪ</i>	Farefare	<i>dògè</i>
<i>zò</i> ⁺	"run"	6.1.1.1	Farefare	<i>zòè</i>
<i>dāy</i> ⁺ LF <i>dāv</i>	"man"	← * <i>dawa</i>	Mooré	<i>ráoa</i>
<i>tāyñ</i> ^{+/} LF <i>távñ</i>	"opposite-sex sib"	← * <i>tãwa</i>	Mooré	<i>tãoa</i>

A marginal exception to predictability is the fact that words ending in *ja'* may have LFs in *ja'a* like *djā*^{'a} "get dirty" or in *'a* like *kpjā*^{'+} "shape wood with an axe."

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

<i>sāēñ</i>	"blacksmith"	LF <i>sāēñ</i> or <i>sāñya</i>
<i>sōēñ</i>	"witch"	LF <i>sōēñ</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>dīgɪ</i> ^{ya/}	"be lying down"	<i>wà'e</i> ^{ya}	"be en route for"
<i>vūē</i> ^{a/}	"be alive"	<i>sū'e</i> ^{ya/}	"own"

Before Liaison, Invariable verbs follow the *general* rule, prolonging any final short diphthong and then applying phrase-medial loss of fronting [8.5.3](#):

<i>sū'e</i> ^{ya/}	"own"	+ <i>l</i> ⁺	"it"	→	<i>sú'v lī</i> ^{+/}
<i>vūē</i> ^{a/}	"live"	+ <i>n</i> ^ε	rem	→	<i>vūv-n</i> ^{ε/}

Before Liaison [8.2.1](#) [8.2.2](#) final affix-vowel quality is neutralised, but the same issues arise with verbs like *djā*^a versus *kpjà*⁺, gemination of *l m n*, and *mn ~ mm*:

ya zuobid wusa kalli an si'em

yà zūébíd wōsa 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)

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

wēn nē tīnámì_ ∅ két bání tùm̄mī_ tí tàallì_ ∅

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

básìd sī'əm lā.

throw.out:**DIPF 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 láafiya

and **REL.PL** and fairy-bad-**PL** trouble:**DIPF 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*)

2.3 Word division

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*⁺. 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*. 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 distinction between clitics and flexions is made along the lines suggested in Zwicky and Pullum 1983.

Traditional word-division conventions do not correspond to the grammatical analysis adopted here in all cases. Problematic areas relate to compound Noun Phrases and to Liaison Enclitics.

Traditional word division can be obtained from the orthography of this grammar by writing all hyphenated groups solid, and by replacing the raised dot symbol · by word division. (See also on the object pronouns *m f* [2.3.2](#).)

2.3.1 Compound Noun Phrases

Kusaal is typical of the Oti-Volta languages in constantly using compounds within NP structure, often where most languages would employ independent nominals [16.9](#). The first element is a "Combining Form" (cb [9.1](#)), part of the regular paradigm of the open classes of nouns and adjectives, and typically a bare stem which has undergone word-final Apocope. Such Combining Forms occur freely and productively as pre-modifiers of following nouns, producing compounds of a type familiar in Indoeuropean languages, such as

<i>zīm-gbáñ'àd</i>	"fisherman"	(<i>zíŋ</i> "fish")
<i>wāb-kúùd</i>	"elephant-killer"	(<i>wābug</i> "elephant")
<i>bì-fūug</i>	"children's shirt"	(<i>bīŋ</i> "child")
	(i.e. suitable for children, child-sized)	

Specialised meanings are common:

<i>py'à-sāñ'am</i>	"adulterer", literally "wife-spoiler"
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Besides this, Kusaal forms with complete freedom compounds where the preceding combining form is the head, and the following nominal is a dependent. This is the normal construction for both adjectives and post-determining pronouns:

<i>būug</i>	"goat"
<i>bù-pìəlìg</i>	"white goat"
<i>bù-kàŋā</i>	"this goat"
<i>bù-pìəl-kàŋā</i>	"this white goat"
<i>wāb-píəlìg</i>	"white elephant"
<i>wāb-títā'ar</i>	"big elephant"

There is no phonological difference between head-initial and modifier-initial compounds (the tonal sandhi rules, for example, are identical [8.4 8.3](#)).

Compounds are **hyphenated** in this grammar; traditionally, they are written solid, whether the first element is dependent or head, unless a cb as head is segmentally identical with the singular, when it is written as a separate word:

<i>ziŋban'ad</i>	<i>zīm-gbáñ'àd</i>	"fisherman"
<i>bukaŋa</i>	<i>bù-kàŋā</i>	"this goat"
<i>yamug bipuŋ</i>	<i>yàmmug-bī-púŋ</i>	"slave girl"
		(Acts 16:16, 1976) 9.2.2

Combining forms are, however, not word fragments but clitic words, and compounds are not single words but a particular type of noun *phrase*. This accords with the structure of the language, in which compounding occurs continually where other languages would use uncompounded phrases. Compounds may even incorporate uncompounded elements [16.9.1](#):

[*ānzúru fà lá'*]-*māan* "silversmith" ("[silver goods]-maker")

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

<i>kpòkparig</i>	"palm tree"	<i>tītā'ar</i>	"big"
<i>wāb-tītā'ar</i>	"big elephant"	<i>Ńwāmpūrl</i>	"Mampruli"
<i>bòrkìn</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](#).

2.3.2 Liaison

A number of Kusaal words, including all the non-contrastive personal pronouns, share the common phonological peculiarity that whether they are themselves bound or free, they prevent Apocope from applying to the *preceding* word, which appears as a Long Form but with loss of all original vowel quality distinctions in the final vowel mora, like a word-internal epenthetic vowel [8.2](#).

When such words have a SF which has a vowel of its own, they are written as separate words both in the traditional orthography and in this grammar:

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

<i>Ò yèli àmēŋá.</i>	"She spoke truly."
3AN say ADV:self:ADV.	

<i>tì bàtáñ'</i>	"we three"
1PL NUM:three	

<i>bīisá àyí</i>	"two children"
child:PL NUM:two	

So are all proclitic pronouns:

Bà gòsí_ bà bīis. "They looked at their children."
3PL look.at **3PL** child:**PL**.

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](#).

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

The VP Catenator *n* [8.2.2.1.2](#) and the clause Nominaliser *ḥ* [8.2.2.1.1](#) are in some texts usually written *n*, sometimes preceded by a modified LF. For my informants, and in most texts, they are segmentally zero, with the preceding modified LF as the only sign of their presence apart from tone. In such cases the particles are represented by \emptyset in interlinear glossing.

tīnámì_∅ zàb nà'ab lā "our having fought the chief" (*ḥ*-clause)
1PL **NZ** fight chief:**SG** **ART**

Tīnámì_∅ záb nà'ab lā. "We fought the chief." (*n*-focus)
1PL **CAT** fight chief:**SG** **ART**

m̄ zūgú_∅ zàbɪd lā zúg
1SG head:**SG** **NZ** fight:**DIPF** **ART** upon
 "because my head hurts"

M̄ zūgυ_∅ zábɪd. "My head hurts."
1SG head:**SG** **CAT** fight:**DIPF**.

Three clitic object pronouns are reduced by Apocope to forms without any vowel. The 1sg pronoun SF is realised as consonantal [m]. In KB it is written solid with the preceding word, but in the orthography of this grammar it is written separately, as in the traditional orthography prior to 2016.

Fυ bɔɔdim. "You love me." [fʊbɔ:dim]
F̀ bɔɔdīm.
2SG want **1SG.OB**.

The 1sg Liaison Enclitic pronoun itself occurs before Liaison in

Fu nonji mi n gat bamaa?

Fù nónjī_mī_ n gát bámmáa +ø?

2SG love 1SG.OB CAT pass:IPFV DEM.DEI.PL PQ?

"Do you love me more than these?" (Jn 21:15, 1976)

The LF of the 2sg pronoun is written as a separate word:

M pu bɔɔdi fɔ.

"I don't love you."

Ṃ pū bɔɔdī_f +ø.

1SG NEG.IND want 2SG.OB NEG.

I write the SF separate as well, but 2016 orthography writes it solid with the preceding verb. Traditional orthography previously separated the final mora of the verb and joined it to the pronoun, creating spurious pronouns *if uf*.

2016 *M bɔɔdif.*

"I love you."

[ɱbɔ:dɪf]

1996 *M bood if.*

Ṃ bɔɔdī_f.

1SG want 2SG.OB.

1996 *M nye uf.*

"I've seen you."

[ɱjẽøf]

Ṃ ñyéø_f.

1SG see 2SG.OB.

1996 *M gban'e uf.*

"I've grabbed you."

[ɱgbãøf]

Ṃ gbán'v_f.

1SG seize 2SG.OB.

(See [8.5.3](#) for the -e)

The 3sg animate object pronoun ^o [ɔ] "him/her" loses its entire segmental form when subject to Apocope [2.2](#), after causing the host final vowel mora to become [ɔ]; this rounded final mora remains to signal the silent presence of the pronoun. This LF-final vowel has traditionally been mistaken for the pronoun itself and written as a separate word. As a concession to tradition, the final vowel mora will be separated from the rest of the host by a raised point ·o. This always represents [ɔ] in the Short Form; in the Long Form the rounded LF-final mora unites with the [ɔ] of the pronoun to form long [ɔ:]. The LF will be written as ending in ·o-o.

The pronoun ^{ya} loses its entire segmental form in the SF [2.2](#), and its presence is revealed only by the word-final *-l* on the preceding LF:

	<i>gòsim^a</i>		"look!"	
SF	<i>gòsimī</i> _∅		"look ye!"	Traditional: <i>gosimi</i>
LF	<i>gòsimī</i> _{yá}		25.2.3	Traditional: <i>gosimiya</i>
	Look.at:IMP 2PL.SUB			

2.4 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*, where the first element is a non-vocalic mora, e.g. *sú'əŋ* SF "rabbit" has three morae, while the LF *sú'əŋā* has four.

A vocalic mora followed by a non-vocalic mora in the same word is **closed**; all others are vocalic **open morae**. Vocalic morae are the domain of **tone**, but not all vocalic morae bear a toneme [5.2 5.3](#).

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 actually disyllabic, with syllable division following the first mora: LF *nū-áa* "hen."

Word stress falls on the root, except in LFs before a Prosodic Clitic, where it falls on the final affix vowel (unless this has been deleted in the surface LF [8.1](#).) 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" (perfective) *bùŋ* "donkey" *ɔn* "he/she." Monosyllables with a long vowel, like *mèéd* "build" (dynamic imperfective) do have intrinsic stress.

Before pause, all intrinsically unstressed words acquire stress, including clitics like the article *lā^{+/}*. Even Liaison Enclitics [8.2.1](#) acquire stress, independent of their host, which retains its own stress.

Stress is important in allotony; downstepping before H tonemes is dependent on syllable structure and stress. See [5.4](#) for examples.

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

<i>dítúŋ^ɔ</i>	[ˈdɪt:ʊŋ]	"right hand", probably a derivative of <i>dì⁺</i> "eat"
<i>dàtìŋ^ɔ</i>	[daˈtʰɪʊŋ]	"right hand"

	<i>bōtɪŋ</i> ^a	['bɔt:ɪŋ]	"cup" (from <i>būd</i> ^ε "plant seeds" via the semantic development "planting implement" → "seed cup" → "cup in general")
pl	<i>bōtɪs</i> ^ε	[bɔ'tʰɪ:s]	with a wholly exceptional apparent lengthening of an epenthetic vowel 6.2.1 ; probably reanalysis of the sg as prefix <i>bō</i> + stem <i>tɪŋ</i> ^a

2.5 Ordering of morphophonemic rules

Agolle Vowel Breaking [4.1.1](#) and Primary Diphthongs [4.2.3](#) are 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.

Comparative material shows that Consonant Assimilation preceded deletion of **g* and Vowel Fusion historically, but synchronically there is no need for ordering. After **CVVg*- roots, flexions beginning with **g* are systematically avoided [12.1.1.1 9.1](#), and before other suffixes former **g* is reflected only in toneme allocation [7.2.1.1](#). Deletion of **g* after *short* vowels, resulting in cases like sg *zàk*^a ← **zagga* "compound" pl *zà'as*^ε ← **zagsi*, can be regarded synchronically as a subtype of *CVV~CV~CVC* allomorphy [6.1.1.1](#). Internal evidence still shows its recent origin, however: stems in *a'a ja'a u'a aň'a jaň'a uň'a* in the *r^ε|a⁺* Class may still behave as consonant-final [9.3.4](#): *bà'ar*^ε "idol" (Farefare *bàgrè*), plural *bà'a⁺* or *bàda⁺*; glottalisation is found in affix vowels only in *pà'* ← **pag* "earlier today" [4.4](#); and LF-final long vowels can be predicted from the SF everywhere except where *i'a u'a* fall together in Apocope with the *ja'a u'a* resulting from historical **g* loss [2.2.2](#). The lateness of this change is supported by Haaf 1967, which has *baga* for *bā'a* "diviner" and *winbagr* for *wīn-bá'àr* "altar", alongside *bab* for the plural *bā'ab*^a "diviners."

External Sandhi of all types [8](#) naturally follows Apocope.

Tone Patterns [7.1](#) are described by allocating tonemes before Consonant Assimilation/Epenthetic Vowel Insertion and Vowel Fusion. The tonal overlay of Independency marking [19.6.1.1](#) creates a new set of intrinsic tones; this needs only to precede external tone sandhi.

The tonal effects produced by Prosodic Clitics [8.1](#) and Liaison Enclitics [8.2.3](#) occur *prior* to L/M Raising and the effects of Fixed-L words, as is shown by the fact that the all-L tonemes resulting from the effect of the Interrogative Clitic on an all-M word are subject to L Raising [8.1](#). Tone delinking within syllables [5.2](#) and H Spreading [5.3](#) precede the insertion of downsteps before H tonemes [5.4](#).

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 [k^h] [t^h] [p^h] 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 in Agolle Kusaal (unlike Toende) still contrast with the unaspirated word-final *k t p*.

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. As with *k t p*, *ŋŋ* is realised single except in very slow speech, and is written with single *ŋ*.

The velars show considerable **allophony**, which will be ignored even in narrow transcription elsewhere.

Before front vowels, they are palatalised, for some speakers even becoming palatal stops or affricates.

Velars may represent original palatal stops or affricates in loanwords:

<i>tóklàe</i> ⁺	"torch"	← English "torchlight"
<i>sógjà</i> ^a	"soldier"	(probably via Hausa <i>soojà</i>)

Before rounded vowels, the velars are labialised. Synchronically, there is never a contrast between labialised and unlabialised velars, but velars are transparent to vowel rounding processes [6.3.2](#) [4.3](#).

Before *a* and *ɔ* velars are pronounced further back, with some speakers even as uvulars:

<i>kòbɪgā</i> ⁼	"hundred"	[q ^w ɔbɪga]
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Underlying **g* is deleted after *aa iə uə aañ ɛɛñ ɔɔñ* and their glottalised counterparts unless it stands before a rounded vowel; diphthongs may result [6.3.1](#). The effect of this **g* is still apparent in stem tone patterns [7.2.1.1](#). Historically, **g* has also been deleted after short oral or nasal *a ja ɤa*, which then became glottalised [6.1.1.1](#).

f v are labiodental fricatives, found only word initially, after prefixes, and in the noun class suffix *-f*:

<i>fōfōm</i> ^{mɛ}	"envy"
<i>náaf</i> ^f	"cow"

z is only found word initially and after prefixes.

s is often realised as [h] word-internally. It sometimes represents *h* in loanwords:

<i>Áláasìd</i> (<i>dáar</i> ^ɛ)	"Sunday"	← Hausa <i>Lahàdì</i> (← Arabic)
<i>Dàsmáani</i> ⁺	عبد الرحمن	ʔAbdu-r-Raḥma:n(i)

h as a phoneme *h* itself is marginal, occurring only syllable-initially in loanwords; however these include the very common word *hā́lì*⁺ "as far as." In the personal name *Dàhamáani*⁺ عبد الرحمن ʔAbdu-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> ^ɔ	"cock"	[nɔɾaʊg]
	<i>nā'-dáàd</i> ^ɛ	"oxen"	[nɔ̄ɾa:d]
but	<i>wìd-dāvg</i> ^ɔ	"stallion"	[wìd: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> ^ɛ	"unplug"
<i>èñrɪg</i> ^ɛ	"shift along"
<i>mōd</i> ^ɛ	"swell"
<i>mōr</i> ^{a/}	"have"
<i>yàad</i> ^ɛ	"graves"
<i>yāar</i> ^{ɛ/}	"scatter"

r itself is the alveolar flap [ɾ], except after an epenthetic vowel (e.g. in the *r*^ɛ 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> ^a	"neighbour"
<i>àrazàk</i> ^a	"riches"
<i>àrazánà</i> ⁺	"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>Gòsím 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*^a "palm tree" where other speakers have *k̀̀kp̀̀arig*^a 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> ^m	"death"	cf <i>kp̠</i> ⁺	"die"	
<i>kõba</i> ⁺	"bones"	cf Gurmanche	<i>kpábá</i>	<i>id</i>
<i>kp̀̀k̀̀ur</i> ^{ε/}	"tortoise"	cf Dagbani	<i>kp̀̀kp̀̀lí</i>	<i>id</i>

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

<i>bákp̀̀è</i> ⁺	"week" ← Hausa <i>bakwà</i> "seven" (also "week" in <i>Gaanancii</i> Hausa)
-----------------------------	--

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> ⁺	"see"	[j̃ɛ]
<i>ñwādiḡ</i> ^{a/}	"moon"	[w̃ãdiḡ]
<i>ñwè</i> ⁺	"beat"	[w̃ɛ]

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

Dagbani		Kusaal	
<i>ɲariɲ</i>		<i>àñruɲ</i> ^ɔ	"boat"
<i>nyá</i> [ɲa]		<i>ñyē</i> ⁺	"see"
<i>ɲme</i> [ɲ̃me]		<i>ñwè</i> ⁺	"beat"

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

Y and *w* occur only syllable-initially. They are in complementary distribution with the glides *j/ɟ* and *ɥ* respectively, which do not form syllable boundaries but appear only after vowel symbols to mark short diphthongs [4.2.3](#) and before vowel symbols as part of the digraphs *ja ya* (*je ye* before *y*) which are realised as written but represent single vowels phonemically [4.1.1](#).

Consonantal *w* occurs only root-initially, i.e. word-initially and after prefixes: *wìɛɸ* "horse", *dàwān*^{nɛ/} "pigeon", but consonantal *y* occurs not only root-initially (*yáan*^a "grandchild", *dàyūug*^{ɔ/} "rat") but also word-medially, before the vowel *a*: *nōyá*⁺ "mouths."

When Apocope leaves *-y-* as word-final after a short back vowel, it is replaced by *ɟ* [2.2](#), and a short fronting diphthong results [6.3.2](#).

Synchronically, it is possible to regard all non-root-initial *-y-* as epenthetic. Historically, *-y-* probably reflects an original root-final palatal consonant in *r^ɛ|a⁺* Class plurals and *a^a|b^a* Class singulars [6.1.1.1](#), *ʎ in the suffix *-ya* of Invariable verbs [11.2](#), and *ɲ in the initial of the postposed 2pl subject pronoun ^{ya} [8.2.1.2](#).

Traditional orthography omits word-internal *y* after *i*, except with Long Forms ending in *-ya*; thus *dūnɪya*⁺ "world" and *láafɪya*⁺ "health" are written *dunia* and *laafia* although they end in [ɪja], not in the diphthong *ia*.

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^a</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^a</i>	"jackal"	
<i>gūmpōzēr^{ε/}</i>	"duck"	
<i>dànkòŋ^ɔ</i>	"measles"	[daŋkʰɔŋ]
<i>zùnzòŋ^a</i>	"blind"	[zʊŋzɔŋ]

Loanwords may include clusters not found elsewhere.

<i>bòrkìn^a</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 [5.3](#) [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 *dŋll-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 verb dynamic imperfectives:

kàrum^m "read" → *kàrum*^{ma} 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 1.3.1]
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 1.3.1] *ba daa nye laafiya*
kà bàn kà kīkīr-bé'éd-nàm dáàmñī *bá dāa ñyē láafiya*

and **REL.PL** and fairy-bad-**PL** trouble:**DIPF 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^ε|a⁺* Class *m*-stems:

<i>gbīgim</i> ^{nε}	SB	<i>gbīgim</i> ^{mε}	WK	"lion"
<i>dūm</i> ^{nε}	SB	<i>dūm</i> ^{mε}	WK	"knee"

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

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

Cf 1976 NT *kobkennib* = *kòñb-kīmmɪb*^a ← **kǒb-kɪmdɪba* "herdsmen."

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

pe'es bane ka' konbkemma
pē'εs bání kā' 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 [1.3.1](#)].

m̄ nāan kú āa-n Kiristo túm-tūmna ^{+∅}.

1SG then **NEG.IRR COP-REM** 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-tūmmir^ε "useful thing"; plural *tūmna⁺* is cited by some informants.

bò-sāñ'ammur^ε "goat for destruction, scapegoat" WK

The great majority of cases *-mn-* within words precede high front vowels; compare Focus-*nē^{+l}*, 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^a "mole" (animal) ← **tītōñrrígā*

píñf^p "genet" ← **píñfō*

nís^ε "birds" ← **nĩnsĩ*

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 [2.4](#) 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.

Epenthetic 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]. Because ATR harmony is non-contrastive and is ignored in the orthography, *ɪ ʊ* may also represent [i] [u] in epenthetic and affix vowels [4.3](#).

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* [16.3.1.1](#). The sequence *·o* represents [ʊ] when it is a vowel mora rounded before the enclitic pronoun ^o [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 ʊe* [jɪ] [ʊɪ] 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 ʊe* 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 *ia ue*, realised with the corresponding IPA values, pattern throughout as long *monophthongs*, with *ja ya* 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.

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* $\varepsilon \text{ } \text{ɔ} \text{ } \varepsilon\varepsilon \text{ } \text{ɔ}\text{ɔ}$:

	Toende	Agolle	
	<i>déém</i>	<i>diəm</i> ^{ma}	"man's parent-in-law"
	<i>sēēs</i>	<i>sīəs</i> ^ε	"waists"
but	<i>té'ét</i>	<i>tè'εδ</i> ^ε	"baobab fruits"
	<i>pē'ēs</i>	<i>pē'εs</i> ^{ε/}	"sheep" plural
	<i>bó'ɔs</i>	<i>bū'əs</i> ^{ε/}	"ask"
	<i>tɔ̄n</i>	<i>tūn</i> ^{nε}	"before, in front"
	<i>kí'ɔm</i>	<i>kù'əm</i> ^m	"water"
	<i>sábɔ̄ɔ</i>	<i>sàbùa</i> ⁺	"lover, girlfriend"
but	<i>póók</i>	<i>pɔ̄ɔg</i> ^{ɔ/}	"farm, field"
	<i>tōom</i>	<i>tɔ̄ɔm</i> ^{m/}	"depart, disappear"
	<i>zò</i>	<i>zɔ̄</i> ⁺	"run" (Mooré <i>zòe</i>)

The original Common Kusaal system probably preserved older diphthongs, like Mooré. While the $\text{ɔ}\text{ɔ}/ua$ sets usually correspond to Mooré *oo*, there is a different Toende/Agolle pairing when the Mooré cognates have *ao*:

<i>bòòt</i>	<i>bòɔd</i> ^a	"want, wish" (Mooré <i>bàoda</i>)
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There are gaps in the distribution of Agolle long oral $\varepsilon\varepsilon \text{ } \text{ɔ}\text{ɔ}$ probably connected with their diphthongal origins. Some occurrences of $\varepsilon\varepsilon \text{ } \text{ɔ}\text{ɔ}$ seem, however, to be due to levelling within paradigms which feature a suffix ending in *ɔ*. The short vowels $\varepsilon \text{ } \text{ɔ}$ do not contrast underlyingly with *ja ya*, as explained below.

ia ue only occur word-finally as the result of monophthongisation of word-final *ia ua ie ue* within a phrase before another closely connected word [8.5.3](#); this is not marked in writing in the case of *ia ua*:

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

<i>sīa lā</i>	"the waist"	[siəla]
<i>sàbùà lā</i>	"the girlfriend"	[sabuəla]

All other sequences beginning with written *i u* are *diphthongs* both phonetically and phonemically.

Word-final *iə uə* diphthongise to *ia ua* before Prosodic Clitics (not Liaison):

LF	<i>kīa</i>	"cut" base form	[k ^h ia]	cf <i>kìəd^a</i>	dipf
LF	<i>kūa</i>	"hoe" base form	[k ^h ua]	cf <i>kūəd^{a/}</i>	dipf

Nasalised *iə̃ uə̃* occur only in the inflexion and gerund formation of Fusion verbs [6.3.1](#). In all other contexts *iə̃ uə̃* and *ε̃ə̃ ɔ̃ə̃* have fallen together; this applies also to long vowels automatically nasalised after *m n* [4.2.1](#). The vowels were distinct historically: compare *nɔ̃ɔ̃* "times" (Mooré *náooré*) with *nɔ̃ɔ̃* "mouth" (Mooré *nóorè*) [16.4.2.4](#).

The 1-mora vowels corresponding to 2-mora *iə uə* are *ja ɥa* [ɪa] [ʊa].

These, too, pattern as simple vowels throughout: *sjàk^ε* "agree" and *bɥàk^ε* "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>kɥā</i>	"hoe"	SF of <i>kūa</i>

Short *ε ɔ* appear instead of *ja ɥa* everywhere except before *k* (and historical underlying **g*, which has been deleted with lengthening and glottalisation of the preceding vowel [6.1.1.1](#).)

Almost all short *ε ɔ* are either of this origin, or derive from Apocope of *εε ɔɔ*.

bɔ̀k^ɔ "pit" contrasting with *bɥàk^ε* "split" is due to the rounding change **ɥakkv* → *ɔkkv*, see [6.3.2](#), while *tĕk^{ε/}* "pull", contrasting with *tjàk^ε* "change" is due to shortening of a long vowel before an original plosive cluster (**tεεkkɪ*), see [6.3.3](#). Presumably *nɔ̀k^{ε/}* "pick up" is similarly derived by shortening of **nɔ̀ɔ̀kkɪ*; Toende Kusaal has *nɔ̀k*, with a variant form *nɔ̀'ɔ* (for **nɔ̀'ɔg*.)

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

<i>bīər^{ε/}</i>	"elder same-sex sib"	pl <i>bjēyá⁺</i>
<i>sūər^{ε/}</i>	"road"	pl <i>sɥēyá⁺</i> KB <i>suoya</i> 1.3.1

4.2 Root vowels

In root syllables the symbols *a* *ε* *ɔ* *ɪ* *ʊ* *i* *u* have their default values of [a] [ε] [ɔ] [ɪ] [ʊ] [i] [u] respectively.

ɪ is more central after velars and labials, and *ʊ* is slightly more front after alveolars and *y*; *u* in turn is noticeably fronted after alveolar consonants, which themselves may be realised as palato-alveolars before *u*. 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 [1.3](#).

Several distinctions are underlyingly confined to long vowels, and are found in short vowels only when they are produced from long vowels by Apocope [2.2](#).

4.2.1 Nasalisation

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

mĕɛd^a "build" dipf [mĕ:d]

Nasalised high root vowels after *m n* are always tense: *i ii u uu*.

Contrastive nasalisation is confined to root vowels. For the marking of nasalisation by the symbol *ñ* in the working orthography of this grammar see [1.3](#).

Nasalisation is lost on short vowels followed by nasal consonants, unless they are preceded by *ñy* or *ñw*: *ñyīn*^{nɛ/} "tooth" *ñwām*^{nɛ} "calabash." This is only a synchronic process in external sandhi [8.5.2](#).

Contrastive nasalisation often represents originally automatic nasalisation following original initial **ŋ* **ɲ* **ŋm*, or arises before underlying **ns* **nf* [6.2.1](#).

Long vowels show the contrasts *iiñ/uuñ* *uuñ/vvñ* exclusively as a consequence of the change of **nf* **ns* to *fs* with nasalisation of the preceding vowel [6.2.1](#):

	<i>nīiŋ</i> ^a	"bird"		
but	<i>pīiñf</i> ^p	"genet"	cf plural	<i>pīiñí</i> ⁺
	<i>zūuñd</i> ^ɛ	"vultures"		
but	<i>zūvñf</i> ^p	"dawadawa seed"	cf plural	<i>zūvñí</i> ⁺
	<i>tĕŋ-zūvñs</i> ^ɛ	"foreign lands"	cf singular	<i>tĕŋ-zūvñ</i> ^ɔ

Nasalised *iāñ uāñ* occur only in Fusion verbs [6.3.1](#).

The vast majority of short nasalised vowels are *añ ɛñ jañ ɔñ yañ*. Shortening of *uuñ iiñ vvñ uuñ* by Apocope leads to *iñ iñ vñ vñ* respectively, with no tenseness distinctions:

<i>sīĩŋʰ/</i>	"bee"	cb	<i>sīĩŋ-</i>
<i>zùuŋgʷ</i>	"vulture"	cb	<i>zùũŋ-</i>

Short nasalised *ɪ* also appears in *ńyĩn^{nɛ/}* "tooth", and *uŋ* in *sũĩŋʰ/* "heart" pl *sũĩnyá⁺* cb *sũĩŋ-*, but there may be no robust contrasts with *ɛĩ ɔĩ*.

High nasalised vowels left word-initial by the loss of historical initial **ŋ* have been lowered to *ɛĩ ɔĩ*: cf *ũĩb^ɛ* "chew" and Dagbani *ŋubi id.*

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 and not a consonant (cf *ɛ/ɪ ʊ* versus *y w* below [4.2.3](#).) The flapping of initial *d* mentioned above [3.1](#) occurs after *V'* as well as after *V*; and in general glottalised vowels pattern exactly like unglottalised vowels. The glottalisation which arises from deletion of **g* after *a ja ʊa* [6.3.1](#) does not differ phonetically from other types.

Tonal considerations confirm that ' is not a consonant. Thus

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

differ in whether the H toneme is realised with a preceding downstep, because the sequence *-lɪ-* 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 [5.4](#).

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

	<i>Kà bà gēĩ.</i>	"and they got tired"	is homophonous with
	<i>Kà bà gēĩ'.</i>	"and they got angry"	
but	<i>Bà gèĩ nē.</i>	"they're tired"	differs in realisation from
	<i>Bà gèĩ' 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'ur^{ε/}</i>
	Farefare	<i>kó'om</i>			
and	Talni	<i>kwoʔm</i>	"water"	Kusaal	<i>kù'əm^m</i>
	Nabit	<i>kpa'uŋ</i>	"guinea fowl"	Kusaal	<i>kpa'uŋ^ɔ</i>
	Nabit	<i>nɔnya'aŋ</i>	"hen"	Kusaal	<i>nō-ñyá'àŋ^a</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^ɔ*; *ráʔm* "bile" = Kusaal *yā'm^{m/}* (WK), Farefare *yá'am*. Vowel glottalisation is thus clearly inherited from Oti-Volta. Manessy reconstructs implosive or glottalised consonants for Proto-Oti-Volta; vowel glottalisation may be a reflex of glottalised consonants lenited after a root vowel, cf [6.1.1.1](#).

Glottalised short vowels are almost all the result of Apocope. Besides *kā'e⁺* "not be" (← **kagɪ*) all other cases precede *m* or *ŋ* in closed syllables in some words for some informants.

<i>kpè'ŋ^ε</i>	"strengthen"	<i>lā'ŋ^{ε/}</i>	"set alight"
<i>nī'm^{nε/}</i>	"meat"	<i>kō'm^{m/}</i>	"hunger"
<i>yā'm^{m/}</i>	"gall bladder; sense"	<i>sù'ŋā⁺</i>	"well"
<i>sù'm^m</i>	"goodness"		

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

The vowels are written as if long in KB: *kpε'εŋ la'aŋ ni'im kɔ'ɔm ya'am su'ʊŋa*. Toende Kusaal, Farefare, Nabit and Talni lack this phenomenon in all the cognate words, except Farefare *yá'am* "bile." It has probably arisen from gemination of *m ŋ*; KB has 385 examples of *an sum* to 47 of *an su'ʊm* (*àñ súm* "is good"), but 30 of *ka' sum* to 40 of *ka' su'ʊm*, which would be *kā' súmm* "is not good" when clause-final. *Yā'm^{m/}* is perhaps genuinely *yā'am^{m/}*; 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 [2.4](#), are structurally extra-long diphthongs. Length contrasts among phonemic diphthongs in identical contexts can occur only with word-final *ae/aε* and with *av/au* before *ŋ*, but the use of *ia ua* for *ja ŋa* as well as *ia ua* in the standard orthography creates potential ambiguity word-finally [1.3.1](#).

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

j and *ε* are both realised [ɪ] except in *uj* and in the monophthong *je*, where the realisation is [j]; [ʊ] is always written *ɹ*.

<u>1-Mora</u>		<u>2-Mora</u>		<u>3-Mora</u>
		<i>ia</i> [ia]		<i>iaa</i> [ia:]
		<i>ja'a</i> [ja̠:]		
		<i>ua</i> [ua]		<i>uaa</i> [ua:]
		<i>ɥ'aa</i> [ɥ̠a:]	word-finally	
		≡ <i>ɥ'a</i> [ɥ̠]	before consonants	
<i>aɛ</i> [aɛ̠]		<i>ae</i> [aɛ]		<i>aeē</i> [aɛ:]
<i>ɔɛ</i> [ɔɛ̠]				
<i>ʊɛ</i> [ʊɛ̠]		<i>ue</i> [ʊɛ]		
<i>ui</i> [ui̠]		<i>ui</i> [ui]		<i>uii</i> [ui:]
		<i>ie</i> [iɛ]		<i>iee</i> [iɛ:]
		<i>ue</i> [ʊɛ]		<i>uee</i> [ʊɛ:]
<i>aʊ</i> [aʊ̠]		<i>av</i> [aʊ]		<i>avv</i> [aʊ:]
		<i>iu</i> [iu]		
<i>ɪʊ</i> [ɪʊ̠]		<i>ɪo</i> [ɪʊ]		
<i>ɛʊ</i> [ɛʊ̠]		<i>ɛo</i> [ɛʊ]		
<i>jaʊ</i> [jaʊ̠]				
		<i>io</i> [iʊ]		

All diphthongs also occur nasalised; 2- and 3-mora diphthongs also occur glottalised. *ja'a ɥa'a ɥ'a* are always glottalised; Apocope shortens them to *ja' ɥa'*.

The diphthongs *ɥ'a ʊñ'a* appear as *ɥ'aa ɥñ'aa* respectively when LF-final.

The digraphs *ja ɥa* represent single segments phonemically, but are *realised* as written. Written *iə* [iə] and *uə* [uə], 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.

Apart from the Primary Diphthongs (*av avñ ui ja'a jañ'a ɥ'a ʊñ'a* [6.1.1.1](#)), all diphthongs are the result of active morphophonemic processes: Fusion [6.3.1](#), and Fronting and Rounding both word-internally [6.3.2](#) and before Liaison Enclitics [8.2.1.1](#). Rounding diphthongs occur only word-finally and before velars; fronting diphthongs only word-finally and before *y*.

There is agreement in ATR between the morae of a diphthong, except with diphthongs resulting from fusion, fronting and rounding of *iə uə*, where second and third morae always remain [-ATR], and with the **additional diphthongs** which arise as the result of the attachment of Liaison Enclitics after a word ending in a root vowel [8.2.1](#). The enclitic ^o [ʊ] "him/her" causes the preceding vowel mora to assimilate totally to [ʊ], never [u]; the rounded mora is written *·o* [4.1 8.2.1.1](#):

<i>zū·ó-o</i>	[zuɔ:]	"steal him"	LF
<i>zú·o</i>	[zuɔ]	"steal him"	SF

When the 2pl subject enclitic *y^a* is added to verb forms ending in *-ε* like *bε⁺* "be somewhere, exist", it creates the diphthong *ει*, found only in this context:

<i>bειyá</i>	[bεija]	"be ye!"	LF
<i>bει</i>	[bεɪ]	"be ye!"	SF

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

<i>bjāɥñk^ɔ</i>	[bɿǎɥk]	"shoulder"	CVC
<i>bɥàk^ε</i>	[bɥak]	"split"	CVC
<i>dāɥ⁺</i>	[daɥ]	"man"	CV
<i>gbàɥŋ^ɔ</i>	[ɡb̥aɥŋ]	"book"	CVC
<i>sɔ̣ɥñ</i>	[sɔ̣ɿ]	"blacksmith"	SF CV
<i>tɔ̣ɥ</i>	[tʰɔ̣ɿ]	"be bitter"	SF CV
<i>mùj⁺</i>	[mũj]	"rice"	CVCV

Word-final *-Vε -Vj -Vɥ* behave exactly like word-final short root vowels in being followed by [ʔ] before pause in statements [4.2.2](#):

Ò à nē dāɥ. [ʋanɛdaɥʔ] "He is a man"

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

<i>jā⁺</i>	[ɿa]	"seek"
<i>yā^{+/}</i>	[ja]	"houses"

The contrast is not [ʔja] vs [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 [ɔ̣]. Kusaal, too, has no contrast of initial *wa/ɥa*.

4.3 Epenthetic vowels

As with the second morae of long vowels, the quality of epenthetic vowels would be predictable if it were not for Apocope deleting final rounded vowels.

The default epenthetic vowel is *ɪ*.

Before LF *-g^ɔ -ŋ^ɔ* the epenthetic vowel is *ʊ*, remaining as such in the SF.

	<i>āañɪg^a</i>	← * <i>āādɪga</i>	"black plum tree"
but	<i>gàadvɔ^ɔ</i>	← * <i>gaadɪgʊ</i>	"(sur)passing" (gerund)
pl	<i>mālɪma⁺</i>	← * <i>malɪmaa</i>	"sacrifices"
but	<i>mālʊɔ^ɔ</i>	← * <i>malɪŋɔ</i>	"sacrifice"

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

	<i>gb̄ɪgɪm^{nɛ}</i>	[ḡb̄ɪgɪm]	"lion"
	<i>yōgú^{nɛ}</i>	[jōgʊm]	"camel"
	<i>kūgʊr^{ɛ/}</i>	[k ^h ugur]	"stone" (ATR harmony, see below)
	<i>wābɪd^{ɛ/}</i>	[wabɪd]	"elephants"
	<i>dōgʊd^{ɛ/}</i>	[dōgʊd]	"cooking pots"
	<i>dōgʊdɪb^a</i>	[dōgʊdɪb]	"people who cook"
	<i>pōʊgʊ-n^{ɛ/}</i>	[p ^h ʊ:gʊn]	"belly" (<i>pōʊg^a</i>) + <i>n^ɛ</i> locative

WK also 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>nōbʊg^{ɛ/}</i>	"grow" (but <i>nóbɪr^ɛ</i> "leg")
	<i>kōlʊg^a</i>	"river"
	<i>yàmmʊg^a</i>	"slave"
or	<i>yàmmʊg^ɔ</i>	

There is significant variation between speakers with rounding of epenthetic vowels after rounded root vowels. NT, ILK and KED have *poogin* for *pōʊgʊ-n^{ɛ/}* "inside", KB *puugin*. The variation is not contrastive, and is significant only before word-final velars, where it can lead to reanalysis of the *g^a* sg suffix as *g^ɔ* 9.3.2.1.

Nasalisation is absent on epenthetic vowels where parallel morphological processes would have caused contrastive nasalisation of a root vowel:

	<i>tēŋ^a</i>	"land"	pl <i>tēēñs^ɛ</i>	← * <i>tɛnsɪ</i>
but	<i>kùlŋ^a</i>	"door"	pl <i>kùlɪs^ɛ</i>	← * <i>kuɫɪnsɪ</i>

ATR harmony appears between a short root vowel and a following epenthetic vowel; it is not contrastive and is ignored in the orthography:

	<i>tìsɪd^a</i>	[tʰɪsɪd]	"gives"
but	<i>sīgɪd^{a/}</i>	[sigɪd]	"lowers"
	<i>būgʊr^ɛ</i>	[bʊgʊr]	"spirit's dwelling"
but	<i>kūgʊr^{ɛ/}</i>	[kʰugʊr]	"stone"
	<i>yūgʊdɪr^ɛ</i>	[jugʊdɪr]	"hedgehog"
	<i>yōgúm^{nɛ}</i>	[jɔgʊm]	"camel"

4.4 Affix vowels

Except for Combining Forms, and some preverbal adverbs [19.7.2](#), post-subject particles [24.1.4](#), and emphatics [30.6](#), clitics have vowels showing the same set of vowel contrasts as the *flexions* of full words, as do prefixes [13.2.2](#); collectively, these are Affix Vowels.

There are three short affix vowels *a i u*, and three long *aa ii uu*.

Prosodic Clitics cause short LF-final *i u* to be lowered to *ɛ ɔ*, here realised somewhat closer than as root vowels; the only context in which underlying LF-final short *i u* appear as such is with Apocope Blocking [6.4](#).

When the long affix vowels *ii uu* are shortened by Apocope the resulting *i u* are realised exactly like epenthetic vowels. Both short and long affix *i u ii uu* are subject to **ATR harmony** under the same conditions as epenthetic vowels:

	<i>mòlīu</i>	[mɔ̃lɪ:] LF	"gazelles"
	<i>mòli</i>	[mɔ̃lɪ] SF	
	<i>wìdīu</i>	[wɪdɪ:] LF	"horses"
	<i>wìdi</i>	[wɪdɪ] SF	
but	<i>nīgíu</i>	[nĩ:gɪ:] LF	"cows"
	<i>nīgí</i>	[nĩ:gɪ] SF	(<i>long</i> root vowel)

Harmony also occurs with *i u* in prefixes, which are realised [i] [u] when the first mora of the root is *i* or *u*:

	<i>tītā'ar^ɛ</i>		"big"
	<i>kòkōr^{ɛ/}</i>		"voice"
	<i>kìkīrig^{a/}</i>	[kʰikʰirig]	"protective spirit"
	<i>sìsì'əm^m</i>	[sisjəm]	"wind"
	<i>dòndùug^ɔ</i>	[dundu:g]	"cobra"
	<i>sīlɪnsíùǵ^ɔ</i>	[silɪnsĩũg]	"spider"
	<i>vòlɪnvùuǵ^ɛ</i>	[vulɪmvũ:l]	"mason wasp"

In *nìn-tāa*^ʷ "co-wife" [nintʰa:] the tense vowel probably reflects ATR harmony not crossing word division with the "bleached" prefix/cb *nin* 14.1.4.

ATR harmony is not contrastive (except in *iu/io* 6.3.2) and is ignored in the orthography, with *ɪ* *ʊ* used throughout.

The vowel *ɛ* appears for expected *ɪ* in various particles realised *nē*, with *nī*^{+/} found only as the non-Liaison Word allomorph of the locative marker. This may be due to phonetic nasalisation following *n*; nasalisation of affix vowels is never phonemic.

Glottalisation occurs in proclitic particles only in *pà*' ← **pag* "earlier today."

LF-final *aa* *u* appear in the *r^ɛ|a⁺* and *ʃ|ɪ⁺* Class plural flexions. The SF-final vowels *-a* *-ɪ* in these plurals behave like Apocope-Blocked forms before Liaison, with no prolongation of the vowel, except with *yáan^ɛ*, plural of *yín^{nɛ}* "(at) home", the irregular locative of *yīr^{ɛ/}* "house" 17.3.

LF-final *aa* *u* *ʊʊ* also arise from secondary prolongation in the LF of forms with Apocope Blocking 6.4, and LF-final *ʊʊ* by Liaison with the enclitic pronoun ^o 8.2.1. All other cases are probably loanwords, like *sūgʊrú⁺* "forbearance."

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^ɔ* "cobra") and *ɪ* instead of *ʊ* before root *i/ɪ/ɛ* (*kpīkpīn^{na/}* "merchant.") In flexions *-mm* appears in place of **-mʊ*; *ɪ* appears after labial consonants only in the base forms of Variable verbs like *zàb^ɛ* "fight" where it is probably analogical. Velars followed by affix-vowel *ʊ* could be internally reconstructed throughout as labiovelars (with 3sg *ò* ← **ɲmò* 16.3.1.1 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^ɔ|d^ɛ* 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, similarly, seems to have a three-way contrast in affix vowels only after velars and initially.

Farther afield, Gurmanche has singular *-o*, Konkomba *-u* in the equivalent of the *a^ɔ|b^a* Class. It is likely that this suffix has lost a historic labiovelar initial consonant, like the corresponding personal pronoun. The suffixes of the old Oti-Volta *u~i* Class appear in Nawdm as *ʔu* and *ʔi*, and again it is possible that the rounded vowel in the sg is due to a lost labiovelar; Manessy reconstructs **ɲu*.

Final *-u* appears as an imperfective verbal flexion after alveolars in most of the Eastern Oti-Volta languages. From evidence outside Gur, it is clear at least that two-vowel systems must be due to historical simplification: cf Swahili *tu-* 1pl pronoun, Kusaal *tì* and the Toende Kusaal contrastive form *tun*.

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

5.2 Levelling within syllables

Only closed syllables may carry two different tonemes. Before word-final *-mm*, a syllable behaves as *open* tonally [7.2.1](#).

A pitch rise is not permitted within a syllable; the first toneme is delinked and the second applies to both morae. This process follows all external tone sandhi processes. It occurs 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 [2.2.1](#); it applies also when the Remoteness marker Liaison Enclitic *n^ε* imposes M toneme on the second mora of a LL root vowel [8.2.3](#).

	<i>sám^{ma}</i>	← * <i>sāámmā</i>	"guests"
LF	<i>dáamm</i>	← * <i>dāámm</i>	"beer"
LF	<i>tīimm</i>	← * <i>tīimm</i>	"medicine"
	<i>mēε-n^{ε/}</i>	← <i>mēē-n^{ε/}</i>	"build" <i>mē⁺</i> + rem <i>n^ε</i>

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

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

Levelling precedes the insertion of downsteps before H tonemes [5.4](#), but does not need to be ordered with respect to H Spreading [5.3](#). It would be possible to take Levelling as a realisation rule, but writing it into the orthography avoids having to write the same surface tones in several different ways.

5.3 H Spreading

If two successive open morae [2.4](#) carry the tonemes HL, and the L mora is either the second mora of a root vowel or an epenthetic vowel (*not* a vowel preceding Liaison, which is not epenthetic [8.2.1](#)), the L is delinked, and the H is realised across both morae.

Lì kā' mólif̄ +∅. "It's not a gazelle."
 3INAN NEG.BE gazelle:SG NEG.

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

The rule does not apply if either mora is closed:

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

Bà à nē dī̄əsídɪb. "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* represent the clusters *kk tt pp*; thus

Ka ya pu siakida. "But you did not agree." (Lk 13:34)
Kà yà pū sjákìdā +∅.
And 2PL NEG.IND agree:DIPF NEG.

Intervocalic *ŋ* is sometimes treated as single; so in the 1996 NT of Rom 1:28

dine ka ba pu nar ye ba niŋida. "things they should not be doing"
lìni kà bà pū nār yé bà níŋìdā/níŋìdā +∅.
REL.INAN and 3PL NEG.IND must that 3PL do:DIPF NEG.

H Spreading does not occur if the L mora falls on a root or an affix vowel:

Lì k̄ā' dágòbìgā +∅. "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*)

H Spreading does not occur if the L mora precedes Liaison:

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

- cf *Lì à nē mólìf.* "It's a gazelle."
3INAN COP FOC gazelle:SG.
- but *Ò pō zábì f̄ +∅.* "He didn't fight you."
3AN NEG.IND fight 2SG.OB NEG.
- cf *Lì k̄ā' mólif̄ +∅.* "It's not a gazelle."
3INAN NEG.BE gazelle:SG NEG.

H Spreading causes the LF tones of words like *nú'ùg^ɔ* "hand" to coincide with those of words like *náaf^ɔ* "cow" which have H attached to both morae of a long vowel as a result of a deleted underlying mora [7.2.1.1](#):

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

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

Superscript Notation [2.2.1](#) writes such words with the SF tones: *náaf^ɔ nú'ùg^ɔ*. The syllable-based nature of the rule for downstepping before H [5.4](#) means there is no downstep when the H and L do not fall in the same syllable:

Lì k̄ā' nóbir̄ē +∅. "It's not a leg."
3INAN NEG.BE leg:SG NEG.

Thus *nú'ùg^ɔ* matches *nóbir̄ē*^ε tonally in the SF but *náaf^ɔ* in the LF:

Lì à nē nóbir̄. "It's a leg."
Lì à nē nú'ùg. "It's a hand."
Lì à nē náaf. "It's a cow."
Lì k̄ā' nóbir̄ē. "It's not a leg."
Lì k̄ā' ↓nú'uḡ. "It's not a hand."
Lì k̄ā' ↓náaf̄. "It's not a cow."

The rule for H Spreading given above raises certain theoretical problems.

The clusters *kk tt pp ηη* are in fact realised as single except in very slow speech, yet close the preceding syllable for the purposes of the rule. This could be encompassed by setting up a rule of degemination applying later than H Spreading, or by adding the condition that the HL morae should not be separated by an unvoiced plosive. The fluctuation in behaviour of *η* may reflect that the rule is in fact changing

in this way. In Tone Patterns *kk tt pp ηη* also behave as clusters [7.2.1](#) [7.3.1](#) but this can be explained in the same way as the tonal anomalies due to the simplification of impermissible consonant clusters [7.2.1.1](#).

A more serious difficulty is that H Spreading is sensitive to word division even before Liaison:

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

but Lì k̄á' mólí f̄ +∅. "It's not a gazelle."
3INAN NEG.BE gazelle:SG NEG.

This is problematic because there is no phonological marker of word division in such cases *apart* from tones. However, the tone system can simply be regarded as sensitive to word divisions for which there is no segmental correlate, especially as these divisions are in any case justifiable morphologically and syntactically [2.3.2](#).

An alternative analysis dispenses with H spreading, and regards the mora following H in such cases not as L but as *intrinsically toneless*. A vocalic mora is intrinsically toneless if its vowel is *epenthetic*, open in the LF, and preceded by a mora with an intrinsic tone (L, M or H), which is then realised over both morae. Medial *kk tt pp ηη* are again treated as clusters. Second stem morae may unexpectedly carry H tonemes, when underlying segments have been deleted [7.2.1.1](#). When Tone Patterns are overridden by Independency marking [19.6.1.1](#) or M Raising [8.4](#), new tonemes are allocated on the basis of the surface segmental shape. After Apocope, but before tone levelling within syllables, a toneme is allocated to the last vocalic mora of a SF if it was toneless, with M following preceding M, and L following H or L. Words like *náaf* "cow" do not become **náàf* (contrast *nú'ùg* "hand") because the tonemes are still *nāáf* at the time of toneme allocation to toneless SF-final morae.

The distribution of tonemes within words is so constrained [7.1](#) that no contrast in *realisation* between these intrinsically toneless vocalic morae and those with M or L could ever occur except after H, the very case addressed by the H Spreading rule. These analyses are therefore descriptively equivalent: H spreading is preferred because, as with the writing of Levelling within syllables as having already applied [5.2](#), it avoids any need for multiple notations for identical surface tone patterns.

5.4 Downstepping before H

Downstep insertion applies after Levelling and H Spreading.

Downstep is inserted before H after:

H: always

M: if the next syllable is stressed and no L 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 [2.4](#). Where relevant, **bold** type marks stressed and *green* marks unstressed syllables.

Kà m̃ gōs ↓búŋ lā.

And **1SG** look.at donkey:**SG ART**.

"And I looked at the donkey."

but *Kà m̃ gōs búŋ lā bēogv-n.*

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

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

Bīig lā ↓sá mēəd yīr lā.

Child:**SG ART** **TNS** build:**DIPF** house:**SG ART**.

"The child was building the house yesterday."

but *Bīig lā sá mē 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."

Yō↓gúm kā'e +∅. "There's no camel."
 Camel:SG **NEG.BE NEG.**

but *Yōgúm lā kā'e* +∅. "The camel's not there."
 Camel:SG **ART NEG.BE NEG.**

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 dǝ̀g 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.**

LFs before pause 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' púkòǝñrē +∅. "It's not a widow."
3INAN NEG.BE widow:SG **NEG.**

Ànǝ̀ʝnì_∅ ñyē púkòǝñrē +∅?
 Who **CAT** see widow:SG **CQ?**
 "Who saw a widow?"

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

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

Ò p̄ yādi ↓gídā +∅. "He isn't scattering."
3AN NEG.IND scatter:DIPF NEG.

but Ànó'ɔ̀nì_∅ yādi gídā +∅? "Who is scattering?"
 Who **CAT scatter:DIPF 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 p̄ ñyē ↓sú'ugā +∅. "She didn't find a knife."
3AN NEG.IND see knife:SG NEG.

but Ànó'ɔ̀nì_∅ ñyē sú'ugā +∅? "Who found a knife?"
 Who **CAT see knife:SG CQ.**

and Ò p̄ dúgèε +∅ +∅? "Didn't she cook?"
3AN NEG.IND cook NEG PQ.

Downstep is inserted between any two adjacent H tonemes:

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

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

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

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

6 Word segmental structure

This section treats the structure of free words, along with various categories of bound words [2.3](#) which have the same segmental and tonal form as free words. These comprise Combining Forms, and also some emphatics [30.6](#), conjunctions [24.1.3](#), preverbal adverbs [19.7.2](#) and post-subject particles [24.1.4](#).

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 [2.3.2](#), or even a SF with no segmental form at all [8](#). 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](#) *ňyɛɛ* "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> ^{a/}	"stranger"	[sa:n]
<i>úun</i> ^{nɛ}	"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 [4.1.1](#), 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 *ňy ŋw* ← *ŋ ŋm*, however [4.2.1](#).

A few words contain **primary diphthongs**, comprising *av avñ uj* [4.2.3](#) along with the *ja'a ʊ'a jañ'a uñ'a* which arose by historical lenition of root-final *g [6.1.1.1](#).

Long vowels frequently undergo fronting or rounding of their second morae before fronted or rounded segments [6.3.2](#) [8.2.1.1](#); deletion of final vowels by Apocope may then remove conditioning factors, creating contrastive diphthongs:

vīid^{ɛ/} "owls" but sg *vīug*^{ɔ/} "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 comprise the consonants *g s n l d m*, with *r* only in a few words which are probably loans. *G s n* 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^ɛ "big" *bùmbàrig*^a "ant"
sīl^hnsíùṅ^ɔ "spider" *tàsintàl*^ɛ "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> ^a	pl <i>bīs</i> ^ɛ
	<i>dòɔ-</i>	"hut"	sg <i>dòɔg</i> ^ɔ	pl <i>dòɔd</i> ^ɛ
	<i>kù'ə-</i>	"water"	sg <i>kù'əm</i> ^m	

Before vowel-initial flexions CVV root-stems become CVC; in productive forms always CVy or CVd [6.1.1.1](#):

Stem	<i>nɔ̄ɔ-</i>	"mouth"	sg <i>nɔ̄ɔr^{ɛ/}</i>	pl <i>nɔ̄yá⁺</i>
	<i>yū'v-</i>	"name"	sg <i>yū'vr^{ɛ/}</i>	pl <i>yūdá⁺</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^a</i>	"jackal"
<i>gòmpòzēr^{ɛ/}</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-bí^a</i>	"star" (for the hyphen see above 2.3)
<i>bòrkìn^a</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

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

	<i>āañdɪg^a</i>	← <i>*āāɪdɪga</i>	"black plum tree"
but	<i>gàadʊg^{ɔ̄}</i>	← <i>*gaadɪgʊ</i>	"(sur)passing" (gerund)

6.1.1 Root alternations

6.1.1.1 CVV~CVC

The majority of roots ending in a root vowel show a long vowel before all consonant-initial flexional and derivational suffixes: *kō*⁺ "kill" dipf *kōud*^{a/}.

Some root-stems with short CV- throughout are probably single-mora roots:

<i>yīr</i> ^{ε/}	"house"	<i>yā</i> ^{+/}	plural
<i>zā</i> ^{+/}	"millet"		
<i>kī</i> ^{+/}	"cereal, millet"		
<i>mūj</i> ⁺	"rice"		
<i>bīl</i> ^a	"little"	<i>bībīs</i> ^ε	plural
<i>zūg</i> ^{ɔ/}	"head"	<i>zūt</i> ^{ε/}	plural

The cbs of some of the words may behave tonally like noun prefixes [7.2.4](#), probably because, unlike all other cbs, they have not undergone Apocope.

Various words showing short CV- stems throughout have most likely levelled the short vowel which has arisen by phonological rule in one form [9.2.1](#).

Some roots ending in a vowel show short vowels before some consonant-initial suffixes and long vowels before others. Such roots fall into two categories.

If the long vowel is **glottalised** it must be *a'a ja'a* or *u'a*, or nasalised *a'añ jañ'a uñ'a* (with *u'a uñ'a* appearing as *u'aa u'ña* word-finally [4.2.3](#).)

Before flexional and derivational suffixes beginning with *g, the vowel is shortened and loses its glottalisation, while the *g becomes *kk*:

<i>zàk</i> ^a	"compound"	<i>zàas</i> ^ε	plural	(<i>g^a s^ε</i> Class)
<i>lāuk</i> ^ɔ	"item of goods"	<i>lāad</i> ^ε	plural	(<i>g^ɔ d^ε</i> Class)
<i>yàk</i> ^ε	"unhang"	<i>yàal</i> ^ε	"hang up"	
<i>pjàuñk</i> ^ɔ	"word"	<i>pjàñad</i> ^ε	plural	(<i>g^ɔ d^ε</i> Class)
<i>pūāk</i> ^a	"female" (adj)	<i>pūas</i> ^ε	plural	(<i>g^a s^ε</i> Class)
<i>pūā</i> ^a	"woman"	<i>pūab</i> ^a	plural	(<i>a^a b^a</i> Class)
<i>bòk</i> ^ɔ	"pit"	<i>bòad</i> ^ε	plural	(<i>g^ɔ d^ε</i> Class)

With roots in *ja'a u'a jañ'a uñ'a* this is invariable. These vowels contrast with long *i'a u'a*, though not with the corresponding short vowels created from *i'a u'a* by Apocope [2.2.2](#). However, root-stems in *a'a* or *añ'a* may either pattern like this or show the same behaviour as regular *aa aañ* roots, as a lexical matter in each case:

<i>dàa</i> ⁼	"market"	<i>dàas</i> ^ε	plural	(<i>g^a s^ε</i> Class)
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Comparative evidence shows that the glottalisation in the alternating root-stems is secondary to the deletion of underlying historical root-final *g, and the *kk* forms are the outcome of the regular consonant assimilation *gg → *kk* 6.2.1; compare the deletion of *g after *aa iə uə aañ εεñ ɔɔñ* (and their glottalised counterparts) treated in 6.3.1, where the process of deletion is regarded as a synchronic rule. This deletion of *g after short vowels is probably quite recent historically 2.5.

The LFs of Base Forms of verbs of this type end in a long vowel as usual:

piāñ^a "speak" base form *piāñ^aad^{a/}* dipf

The sole verbal form which is not a Variable verb shows a fronting diphthong:

kā⁺ε⁺ "not be"

Non-glottalised roots of this kind show the long vowel before suffixes beginning with *g and the short vowel elsewhere, with following *d changed to *tt*, and *b changed to *pp*:

<i>fūug^{ɔ/}</i>	"clothing"		pl <i>fūt^{ε/}</i>
<i>pōɔg^{ɔ/}</i>	"field"		pl <i>pōt^{ε/}</i>
<i>dòɔg^ɔ</i>	"hut"		pl <i>dòt^ε</i>
<i>dāvug^ɔ</i>	"male"	cf	<i>dāp^a</i> "men"
<i>tōɔg^ɔ</i>	"bitter"	cf	<i>tōε^{a/}</i> "be bitter"
<i>gāañ^{=/}</i>	"ebony tree"	cf	<i>gāñr^{ε/}</i> "ebony fruit"
	(← *gāãga)		

Idiosyncratic singular forms are seen in the two ^a|*b*^a Class nouns 2.2.2

<i>dāy⁺</i>	"man"	pl <i>dāp^a</i>
<i>tāyñ^{+/}</i>	"opposite-sex sib"	pl <i>tāñp^{a/}</i>

The long vowel before a singular Noun Class suffix -*g^a* or -*g^ɔ* is usually generalised throughout the flexional paradigm. Thus alternative plurals occur in

<i>fūug^{ɔ/}</i>	"clothing"	pl <i>fūud^{ε/}</i>
<i>pōɔg^{ɔ/}</i>	"field"	pl <i>pōɔd^{ε/}</i>
<i>dòɔg^ɔ</i>	"hut"	pl <i>dòɔd^ε</i>

and the plurals *always* show long vowels in

<i>dāvug^ɔ</i>	"male"	pl <i>dāad^ε</i>
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<i>tōɔg</i> ^ɔ	"bitter"	pl <i>tōɔd</i> ^ɛ
<i>gāaň</i> ^{=/}	"ebony tree"	pl <i>gāaňs</i> ^{ɛ/}

Similarly, the *-m^a* imperative of verbs with dipf *CVt^a* takes the form *CVm^{ma}*:

<i>ňyē</i> ⁺	"see"	dipf <i>ňyēt</i> ^{a/}	imp <i>ňyèm</i> ^{ma}
<i>dō</i> ⁺	"rise"	dipf <i>dōt</i> ^{a/}	imp <i>dòm</i> ^{ma}
<i>lù</i> ⁺ or <i>lì</i> ⁺	"fall"	dipf <i>lùt</i> ^a or <i>lit</i> ^a	imp <i>lùm</i> ^{ma} or <i>lim</i> ^{ma}
<i>zò</i> ⁺	"run"	dipf <i>zòt</i> ^a	imp <i>zòm</i> ^{ma}
<i>dì</i> ⁺	"eat"	dipf <i>dìt</i> ^a	imp <i>dìm</i> ^{ma}
<i>yī</i> ⁺	"emerge"	dipf <i>yīt</i> ^{a/}	imp <i>yìm</i> ^{ma}

There is no gemination of the consonant of the irregular imperative suffix in

<i>kē</i> ⁺	"allow"	dipf <i>kēt</i> ^{a/}	imp <i>kè</i> ^a
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Before *derivational* suffixes the vowel is usually long, but with some exceptions with *-s*:

<i>dìs</i> ^ɛ	"feed"	cf	<i>dì</i> ⁺	"eat"
<i>vō'ug</i> ^{ɛ/}	"come alive"	cf	<i>vōē</i> ^{a/}	"be alive"
<i>dàalim</i> ^m	"masculinity"	cf	<i>dāp</i> ^a	"men"

but	<i>gōs</i> ^ɛ	"look"	dipf <i>gōt</i> ^{a/} or <i>gōsɪd</i> ^{a/}	imp <i>gòm</i> ^{ma} or <i>gòsim</i> ^a
	<i>tìs</i> ^ɛ	"give"	dipf <i>tìt</i> ^a or <i>tìsɪd</i> ^a	
	<i>yīs</i> ^ɛ	"make go/come out"	<i>yī</i> ⁺	"emerge"

The causative *yīs*^ɛ has a by-form *yīs*^{ɛ/} which is clearly shown to be analogical by its gerund *yīs(b)*^ɔ, the sole 3-mora stem in the *b*^ɔ Class.

Regularly formed *gerunds* show long vowels: *dīb*^ɔ "food", *ňyēb*^{ɔ/} "seeing."

<i>nō-lór</i> ^ɛ	"fasting" ("mouth-tying")
<i>fū-yéér</i> ^ɛ	"shirt-wearing" (WK, nonce-form)

There are two instances of a short vowel before *-r*^ɛ:

<i>nā-lór</i> ^ɛ	"place in the compound for tying up cows" WK
<i>wìd-lōr</i> ^{ɛ/}	"place in the compound for tying up horses" WK

As with glottalised alternating CVV~CV types, the explanation probably lies in the deletion or assimilation of historical root-final consonants, but any such consonants have been lost in the related languages too, in most cases without trace. Nevertheless, evidence of original forms in *CVC appears in Mooré, which often shows CVy CVw in such cases:

<u>Mooré</u>	<u>Kusaal</u>	
<i>zòe</i>	<i>zò⁺</i>	"run"
<i>kóεεgà</i>	<i>kòkɔ̄r^{ε/}</i>	"voice"
<i>lùì</i>	<i>lù⁺</i> or <i>lì⁺</i>	"fall"
<i>ráoa</i>	<i>dāy⁺</i>	"man"
<i>rápa</i>	<i>dāp^a</i>	"men"
<i>tāo</i>	<i>tāñ⁺</i>	"shoot"
<i>tāpo</i> ["bow"]	<i>tāñp^{ɔ̄}</i>	"war"

Here /y/ /w/ are presumably reflexes of original palatals (or alveolars) and labiovelars (or labials) of some kind. For simplicity I write them below just as *y and *w; *y may be partly or wholly identifiable with the suffix *ʎ hypothesised for Dynamic Invariable verbs [6.2.1.1](#). Allomorphs with a short vowel and a following geminate consonant would have originated from assimilation of root-final *y with following alveolars and root-final *w with following labials, while the CVV allomorphs seen before velars would result via a sequence of epenthetic vowel insertion, lenition of *y and *w and development of a long vowel by Fusion. The monophthongs in verb base forms would be accounted for by levelling [2.2.2](#), as would long vowels in noun plurals and short vowels in -m^{ma} imperatives as described above.

Roots ending in *y *w may preserve the final consonant before a vowel-initial suffix. Thus in the singulars of the ^a|b^a nouns

<i>dāy⁺</i>	"man" 2.2.2	pl <i>dāp^a</i>
<i>tāyñ^{+/}</i>	"sib of opposite sex"	pl <i>tāñp^{a/}</i>
<i>sāyñ⁺</i>	"blacksmith"	pl <i>sāañb^a</i>
or <i>sāyñ^a</i>		
<i>sōyñ⁺</i>	"witch"	pl <i>sōwñb^a</i>
or <i>sōyñ^a</i>		

Similarly, root-final *y is preserved before the flexion -a of the Invariable verbs *tōy^{a/}* "be bitter" and *vōy^{a/}* "be alive, *àyñ^a* "be something/somehow" [11.2](#).

Preservation of root-final *y probably underlies the regular formation with root-stems in CVV or CV before the Noun Class plural suffix -a⁺:

<i>kùkōr</i> ^{ε/}	"voice"	pl <i>kùkōyá</i> ⁺
<i>gāñr</i> ^{ε/}	"fruit of Nigerian ebony"	pl <i>gāñyá</i> ⁺
<i>bàlàar</i> ^ε	"stick, club"	pl <i>bàlàya</i> ⁺
<i>nōɔr</i> ^{ε/}	"mouth"	pl <i>nōyá</i> ⁺
<i>zōv</i> ^ε	"tail"	pl <i>zōya</i> ⁺

The words with sg *CVr*^ε show the expected assimilation of **yr* → **rr* → *r*. The singulars in *CVVr*^ε would represent the expected outcome for **CVw* root-stems. This implies that plurals have been levelled throughout on the **CVy* type: Mooré *náooré* "leg", plural *náoa* may represent a survival of older variation. Some singulars may owe their short vowels to the analogy of the plural: plausible candidates are *gāñr*^{ε/} "fruit of Nigerian ebony" (above) and *gbēr*^{ε/} "thigh."

Synchronically, all of these are just *CV* or *CVV* stems, and the rule is simply that any long final root vowel is shortened in the plural before *-ya*; analogical shortening of *iə uə* has given rise to *je ue* vowels [jɪ] [uɪ] found solely in this context:

<i>bīər</i> ^{ε/}	"elder same-sex sibling"	pl <i>bjēyá</i> ⁺
<i>sūər</i> ^{ε/}	"road"	pl <i>sūēyá</i> ⁺
<i>zūər</i> ^ε	"hill"	pl <i>zūēya</i> ⁺

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

<i>yū'v</i> ^{ε/}	"name"	pl <i>yūdá</i> ⁺
<i>pòñ'ɔr</i> ^ε	"cripple"	pl <i>pòñda</i> ⁺
<i>tītā'ar</i> ^ε	"big"	pl <i>tītāda</i> ⁺
<i>yū'ər</i> ^ε	"penis"	pl <i>yūāda</i> ⁺

Stems in historical **-ag-* **-jag-* **-uag-* may inflect as *CVC-* stems, or may show analogical forms with *-d-*:

<i>sjà'ar</i> ^ε	"forest"	pl <i>sjà'a</i> ⁺
<i>bà'ar</i> ^ε	"idol"	pl <i>bà'a</i> ⁺ or <i>bàda</i> ⁺ * <i>bagri</i> ; Farefare <i>bàgrè</i>
<i>bjāñ'ar</i> ^{ε/}	"mud, riverbed"	pl <i>bjāñ'a</i> ⁺
<i>mù'ar</i> ^ε	"reservoir, dam"	pl <i>mų'àa</i> ⁺ or <i>mù'ada</i> ⁺
<i>zànkù'ar</i> ^ε	"jackal"	pl <i>zànkų'àa</i> ⁺ or <i>zànkù'ada</i> ⁺

Toneme allocation reveals that surface *r* after a short root vowel frequently represents an original consonant cluster 7.2.1.1, with exceptions mostly explicable as analogical. "Epenthetic *d*" can be accounted for by supposing that original single consonant **ɟ* (say) was deleted after short root vowels, with glottalisation and

lengthening of the vowel, unless it was followed by an affix vowel or by *y; subsequently single *ɹ became *d* before *a*, and the cluster *ɹy gave rise to a new geminate *rr. Current CVr- stems in the $r^{\epsilon}|a^{+}$ Class might all reflect *ɹy : they comprise deverbal nouns and adjectives from Invariable verbs in -r^a 13.1.1.1, along with the adjective in $y\bar{i}-p\check{o}\check{n}\check{r}\grave{a}^{+}$ "nearby houses" and the noun $k\grave{u}k\check{p}\grave{a}r^{\epsilon}$ "palm fruit."

Cognates in languages without glottalised vowels show no -d- or -r-: Mooré $y\acute{u}y\grave{a}$ = Kusaal $y\bar{o}d\acute{a}^{+}$ "names." This is most straightforwardly taken as levelling on the basis of *CVy root-stems. Evidence that the languages without glottalisation did share the development *Ja → da appears in the cognate words for "young woman"

Agolle Kusaal	sg $p\check{u}'\grave{a}-s\grave{a}d\check{r}^{\epsilon}/$	pl $p\check{u}'\grave{a}-s\grave{a}d\acute{a}^{+}$ (but $p\bar{e}'-s\acute{a}'a^{-}$ "ewe lamb")
Toende Kusaal	sg $p\check{c}'\check{c}-s\grave{a}'a$	pl $p\check{c}'\check{c}-s\grave{a}'as$
Farefare	sg $pug-sarga$	pl $pug-sars\iota$
Mooré	sg $p\grave{u}gs\acute{a}d\grave{a}$	pl $p\grave{u}gs\acute{a}db\grave{a}$
Mampruli	sg $p\check{c}'\acute{a}s\grave{a}r\grave{a}g\grave{a}$	pl $p\check{c}'\acute{a}s\grave{a}r\grave{a}$ [sic, $r^{\epsilon} a^{+}$ pl]

where the various forms in *d/r* may have arisen from a $^a|b^a$ sg of the form now preserved only in Mooré $p\grave{u}gs\acute{a}d\grave{a}$.

There must also be other sources of Kusaal vowel glottalisation. Before the -y- of Invariable verbs, many glottalised vowels remain as such: $s\bar{u}'e^{y\grave{a}/}$ "own", cf $s\bar{u}'ul\acute{i}m^m$ "possession" with no change of *ɹy to *r(r)*, versus $g\bar{u}r^{\grave{a}/}$ "guard", cf the agent noun $g\bar{u}'ud^{\grave{a}/}$. Vowel-final roots become glottalised before derivational *g and *s in

$k\grave{a}^{+}$	"break" intrans	$k\grave{a}'\check{c}g^{\epsilon}$	"break" trans/intrans
$k\grave{a}\check{c}l\acute{u}g^{\check{c}}$	"broken"	$k\grave{a}'\check{c}s^{\epsilon}$	"break several times"
$t\grave{a}\check{n}^{+}$	"shoot"	$t\grave{a}\check{n}'\check{c}s^{\epsilon}$	"hunt"
$p\grave{a}\check{c}d^a$	"be few"	$p\grave{a}'\check{c}g^{\epsilon}$	"diminish"
$v\bar{u}\check{e}^{\grave{a}/}$	"be alive"	$v\bar{u}'\check{v}g^{\epsilon}/$	"make, come alive"
$v\bar{u}\check{e}^{\grave{a}/}$	"be alive"	$v\bar{u}'\check{v}s^{\epsilon}/$	"breathe, rest"
$n\bar{i}n-m\acute{u}a^{+}$	"concentration"	$m\grave{u}'e^{+}$ (*m\check{c}\check{c}g\iota)	"intensify" 6.3.1

Mooré has *ao* corresponding to the *cc* in these roots, perhaps suggesting changes in derivation of *CVwg → *CV'Vg and *CVws → *CV'Vs, but this would not account for the forms from $v\bar{u}\check{e}^{\grave{a}/}$. At any rate, all examples seem to involve the vowels *c* or *v*; contrast e.g.

$y\grave{e}^{+}$	"dress oneself"	$y\grave{e}\check{e}g^{\epsilon}$	"undress oneself"
$d\grave{i}^{+}$	"eat"	$d\grave{i}\check{s}^{\epsilon}$	"feed"

Most other cases of CVV roots alternating with CVC involve alternations between root-final *y *w and *d b* respectively. Some may reflect a change *y*g* → *dg* (or **ʌg* → *dg*) in derivation:

	<i>l̄ɔ</i> ⁺	"tie"		<i>l̄ɔdɪg</i> ^{ɛ/}	"untie"	
cf	<i>lɔ</i>	"tie"	(Dagbani)	<i>lɔrgi</i>	"untie"	(Dagbani)
	<i>lɔe</i>	"tie"	(Mooré)	<i>lókè</i> or <i>lódgè</i>	"untie"	(Mooré)

	<i>p̄ɔ</i> ⁺	"divide"		<i>p̄ɔdɪg</i> ^{ɛ/}	"divide"
cf	<i>p̄ɔi</i>	"divide"	(Mooré)		

				<i>b̄ɔdɪg</i> ^ɛ	"lose, get lost":
cf	<i>b̄ɔi</i>	"perdre, disparaître"		<i>bóríg</i>	"fondre, disparaître"
		(Toende)			(Toende)

Other alternations appear in

w/b:	<i>dāy</i> ⁺	"man"		<i>bī-díbiŋ</i> ^a	"boy"
				cf <i>bíríblá</i>	"boy" (Mooré)
				with <i>bipúglá</i>	"girl" (Mooré)
				and <i>p̄y'ā</i>	"woman" (* <i>p̄yag-</i>)

w/b:	<i>n̄ɔ</i> ⁺	"tread"		<i>n̄ɔbá</i> ⁺	"feet"; sg <i>n̄ɔb̄ir</i> ^ɛ is modelled on the pl (cf Toende sg <i>n̄ɔ'ɔt</i>)
cf	<i>nao</i>	"tread"	(Mooré)		

-/g:	<i>w̄iɪd</i> ^a	"draw water" dipf		<i>w̄ik</i> ^ɛ	base form (← * <i>wiggɪ</i>)
	<i>v̄ɪ</i> ⁺	"uproot"		<i>v̄ik</i> ^{ɛ/}	"uproot" (← * <i>viggɪ</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>z̄iŋ</i> ^a (← * <i>z̄iŋgā</i>)	<i>z̄im</i> ⁺	<i>z̄im-</i>	"fish"
<i>n̄áaf</i> ^p (← * <i>n̄áágf̄ū</i>)	<i>n̄iŋ</i> ⁺	<i>n̄ā</i> ⁻ (← * <i>n̄āg-</i>)	"cow"
<i>w̄áaf</i> ^p (← * <i>w̄áágf̄ū</i>)	<i>w̄iŋ</i> ⁺	<i>w̄ā</i> ⁻ (← * <i>w̄āg-</i>)	"snake"
<i>p̄iim</i> ^{m/}	<i>p̄imá</i> ⁺		"arrow"
<i>ȳùum</i> ^{mɛ}	<i>ȳùma</i> ⁺		"year"

The alternation also appears in derivation:

<i>tūuma</i> ⁺	"work" noun	<i>tùm</i> ^m	"work" verb
<i>yēóη</i>	"one"	<i>yīyη</i> ^{ɔ̄/}	"single"
<i>kāa</i> ^{ε/}	"count"	<i>kā</i> ^{ε/}	"number"
<i>māa</i> ^ε	"sacrifice" verb	<i>mālyη</i> ^{ɔ̄}	"sacrifice" noun
<i>tūulúg</i> ^{ɔ̄}	"hot"	<i>tū</i> ^l <i>a</i>	"be hot"

The alternation in *yīs*^{ε/}/*yīs*^ε "make go/come out" is of a different origin [6.1.1.1](#).

There is no obvious rule governing the alternation in flexion or in zero-derivation. Before verb-deriving suffixes, however, the short allomorph always appears:

<i>piəli</i> ^a	"white"	<i>pèli</i> ^ε	"whiten"
<i>kp̄oη</i> ^{ɔ̄}	"strong"	<i>kpè'η</i> ^ε	"strengthen"
<i>liəb</i> ^ε	"become"	<i>lèbi</i> ^ε	"turn over"
<i>tūulúg</i> ^{ɔ̄}	"hot"	<i>tūli</i> ^{ε/}	"heat"
<i>yāa</i> ^{ε/}	"scatter"	<i>yādli</i> ^{ε/}	"scatter"
<i>dēēη</i> ^a	"first"	<i>dèη</i> ^ε	"go first"
<i>piəb</i> ^ε	"blow" (flute)	<i>pèbi</i> ^ε	"blow" (wind)
<i>yūul</i> ^ε	"swing" intrans	<i>yūli</i> ^ε	"swing" transitive
cf <i>ēēñb</i> ^{ε/}	"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](#):

sáannim^m "strangerhood" (**saanlimmu*)

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

For deletion of underlying **g* after *aa iə uə aañ eñ ɔñ* see [6.3.1](#); for a historical process of deletion of **g* after *a ja ɥa añ jañ ɥañ* see [6.1.1.1](#).

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 st ↓ 2 nd →	<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>˜s</i>]	<i>nn</i>	
<i>n</i>	<i>ŋŋ</i>	<i>nn</i>	<i>mm</i>	ə	<i>nn</i>	<i>˜s</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 assimilation rules.

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

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

ms → *˜s* 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^a</i>	"land"	pl	<i>tēēñs^ε</i>	← <i>*tensi</i>
<i>kòlŋ^a</i>	"door"	pl	<i>kòlɪs^ε</i>	← <i>*kɪlɪnsɪ</i>

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

<i>bōtɪŋ^a</i>	"cup"	pl	<i>bōtɪs^ε</i>
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This probably reflects a reanalysis of the form as noun prefix *bō* + *tīŋ^a* [2.4](#).

***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^l</i>	"eye"	pl	<i>nīnɪ⁺</i>
<i>píŋf^l</i>	"genet"	pl	<i>pīnɪ⁺</i>

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

<i>kòkpàr^ε</i>	"palm fruit"	pl	<i>kòkpàra⁺</i>
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The few stems in *-r-* in the *r^ε|a⁺* 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^a/</i>	<i>pūsɪs^ε/</i>	<i>pūs-</i>	"tamarind"
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However, all other examples of *g^a|s^ε* plurals ending in *-sɪs^ε* in my materials are for **-sɪnsɪ*, from stems in ***m**. A plural **pūs^ε/* 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^a|s^ε* Class and of their fruits with the *r^ε|a⁺* and *g^ɔ|d^ε* [32.6](#); *pūsá⁺* in fact means "tamarind fruits."

Derivation precedes flexion in cluster development.

The *-mm-* and *-nn-* clusters derived from **md-* **nd* in agent nouns [13.1.1.1](#) and dynamic adjectives [13.1.1.2.1](#) never undergo assimilation with the following initial consonant of a suffix:

<i>kìm^m</i>	"tend flock"	→	<i>kòñb-kīm^{na}</i>	"shepherd"
			<i>kòñb-kīmmɪb^a</i>	
			or <i>kòñb-kīmnɪb^a</i>	

<i>bùn</i> ^ε	"reap"	→	<i>būn-búnnìr</i> ^ε	"thing for reaping"
<i>tùm</i> ^m	"work"	→	<i>būn-túmmìr</i> ^ε	"useful thing"
			<i>tūmmìr</i> ^ε DK WK	"useful"
		pl	<i>tūmna</i> ⁺ DK	
			<i>tūmma</i> ⁺ WK	
<i>gīlɪg</i> ^{ε/}	"go around"	→	<i>ɸɸ'à-gīnníg</i> ^a	"prostitute"
<i>kēŋ</i> ^{ε/}	"go"	→	<i>bùŋ-kēnnír</i> ^ε	"moving donkey"
<i>vūl</i> ^ε	"swallow"	→	<i>tì-vūnním</i> ^m	"oral medication"
<i>tùm</i> ^m	"work"	→	<i>tūmmím-tāa</i> ⁼	"co-worker"

Underived nominals which do not show assimilation probably also contain *d:

<i>sōnnur</i> ^ε	<i>sōnna</i> ⁺	<i>sòŋ-</i>	"inner <i>zàk</i> wall"
<i>sāngúnnìr</i> ^ε	<i>sāngúnnà</i> ⁺	<i>sāngún-</i>	"millipede"
<i>sūmmur</i> ^ε	<i>sūmma</i> ⁺	<i>sùm-</i>	"groundnut"
<i>yīmmír</i> ^ε	<i>yīmmá</i> ⁺	<i>yīm-</i>	"solitary" (note tones)

Stem-internal *kk pp tt ŋŋ nn* and *mn/mm* ← **md* never assimilate further.

Tàm^m "forget", *zàm*^m "cheat, betray", *dàm*^m "shake" and *lèm*^m "sip, taste" are -*mm*- stems: in KB their dipfs are always written *tammid zammid dammid lemmid*, and they form 3-mora-stem type gerunds: *tàmmug*^ɔ *zàmmug*^ɔ *dàmmug*^ɔ *lèmmug*^ɔ. The *mm* has probably arisen by assimilation of **bm* → *mm*. Mooré has *-mb-*: *zāmbé* "tricher", *rāmbé* "remuer", *lèmbé* "gôûter". These verbs do assimilate **mmm* → *mm* in the imperative [11.1](#).

Verbs with stems in *mm nn ll r* (← **rr*) drop the **d* formant in deverbal nominals [13.1.1.1](#), so the question of assimilation does not there arise. However, unlike stems in *nn* and in *mn/mm* ← **md*, stems in *ll r* and in *mm* of other origin than **md* probably completely assimilate the following initial of the Noun Class suffix *-r*^ε. This has led to reanalysis of the SF forms with the sg suffix ^a as being the result of attachment of *r*^ε, with new LFs and analogical plurals in *-a*⁺ [9.3.1.1](#). The sg tones of the deverbal adjective in *kùg-dēl*^{ε/} "chair for leaning on" (not **kùg-dé*^{lε}) are probably analogical.

Single *m n* forms may be followed by unexpected epenthesis as a strategy to avoid ambiguous SFs in dynamic imperfectives. The suffix suppletion used for this purpose in nominals [9.1](#) is not possible because there is only one regular dipf suffix.

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

<i>dìgɪn</i> ^ε	<i>dìgɪnɪd</i> ^a	<i>dìgɪnɪm</i> ^a	"lie down"
<i>dìgɪnug</i> ^ɔ			gerund
<i>gò'ɔn</i> ^ε	<i>gò'ɔnɪd</i> ^a	<i>gò'ɔnɪm</i> ^a	"extend neck"

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

<i>bùn^ε</i>	<i>bùn^{na}</i>	<i>bùnım^a</i>	"reap"
<i>būııb^ɔ</i>			gerund

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

<i>t̄ɔm^{m/}</i>	<i>t̄ɔm^{ma}</i>	<i>t̄ɔm^{ma}</i>	"depart"
	or <i>t̄ɔmíd^a</i>		
<i>t̄ɔŋ^ɔ</i>			gerund
or <i>t̄ɔmúg^ɔ</i>			
<i>kàrum^m</i>	<i>kàrum^m</i>	<i>kàrum^{ma}</i>	"read"
	or <i>kàrumíd^a</i>		
<i>kàruŋ^ɔ</i>			gerund
or <i>kàrumug^ɔ</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 *nĕ^{+/}*, and require forms with epenthesis everywhere else:

<i>M̄ p̄ kárımmā.</i>	"I'm not reading."
<i>M̄ kárım nĕ.</i>	"I'm reading."
<i>Kà bà kárımíd.</i>	"And they were reading."
<i>Kà bà kárım.</i>	only "And they read."

2-mora *m*-stems regularly assimilate in the dynamic imperfective [11.1](#):

<i>tùm^m</i>	<i>tùm^{ma}</i>	<i>tùm^{ma}</i>	"work"
<i>wùm^m</i>	<i>wùm^{ma}</i>	<i>wùm^{ma}</i>	"hear"

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

Lin wusa ka ya tumid, tumi li ...

Lìn w̄sa kà yà tùmıd, t̄mmī_ø...

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

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

ka nan kp̄en w̄umıd ye m b̄ε li p̄uvgin nannanna la.

kà nán kp̄èn w̄umıd yé m̄ b̄éε_ l̄i p̄ūvgu-n nānná-nā lā.

and still still hear:DIPF 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 (for many others see [9](#) [10](#) [11.1](#)):

<i>*gg</i> → <i>kk</i>	<i>gìgɪs</i> ^ε	"dumb people"	sg	<i>gìk</i> ^a
cf	<i>kɔ̄ɪs</i> ^ε	"river"	sg	<i>kɔ̄ɪg</i> ^a
<i>*dd</i> → <i>tt</i>	<i>bùd</i> ^ε	"plant"	dipf	<i>bùt</i> ^a
cf	<i>dūg</i> ^ε	"cook"	dipf	<i>dūgv</i> ^{a/}
<i>*bb</i> → <i>pp</i>	<i>sɔ̄b</i> ^ε	"write"	ger	<i>sɔ̄p</i> ^{ɔ/}
cf	<i>kpàr</i> ^ε	"lock"	ger	<i>kpārɪb</i> ^{ɔ/}
<i>*ld</i> → <i>nn</i>	<i>kòlv</i> ^{ɔ/}	"bag"	pl	<i>kòn</i> ^{nε}
cf	<i>zūəbúv</i> ^{ɔ/}	"hair"	pl	<i>zūəbíd</i> ^ε
<i>*mg</i> → <i>ŋŋ</i>	<i>bòmɪs</i> ^ε	"donkeys"	sg	<i>bòŋ</i> ^a
cf	<i>ñwādɪs</i> ^{ε/}	"months"	sg	<i>ñwādɪg</i> ^{a/}
<i>*ng</i> → <i>ŋŋ</i>	<i>gbàna</i> ⁺	"books"	sg	<i>gbàv</i> ^{ɔ/}
cf	<i>wābɪd</i> ^{ε/}	"elephants"	sg	<i>wābv</i> ^{ɔ/}
<i>*nr</i> → <i>nn</i>	<i>tāna</i> ⁺	"earths"	sg	<i>tān</i> ^{nε}
cf	<i>dìga</i> ⁺	"dwarfs"	sg	<i>dìgɪr</i> ^ε
<i>*mr</i> → <i>mn</i>	<i>dūma</i> ⁺	"knees"	sg	<i>dūm</i> ^{nε}
cf	<i>nɔ̄bá</i> ⁺	"legs"	sg	<i>nɔ̄bɪr</i> ^ε
<i>*lr</i> → <i>ll</i>	<i>gēlá</i> ⁺	"eggs"	sg	<i>gél</i> ^{lε}
cf	<i>kūgá</i> ⁺	"stones"	sg	<i>kūgɪr</i> ^{ε/}
<i>*nb</i> → <i>mm</i>	<i>sāan</i> ^{a/}	"stranger"	pl	<i>sám</i> ^{ma}
cf	<i>nīd</i> ^{a/}	"person"	pl	<i>nīdɪb</i> ^{a/}
<i>*mb</i> → <i>mm</i>	<i>kìm</i> ^m	"tend flock"	ger	<i>kīm</i> ^{mɔ/}
cf	<i>kàd</i> ^ε	"drive away"	ger	<i>kādɪb</i> ^{ɔ/}

Language names [9.3.4.1](#):

<i>*ll</i> → <i>ll</i>	<i>Bùl</i> ^{lε}	"Buli"	cf	<i>Bùɪs</i> ^ε	"Bulsa"
	<i>Àgò</i> ^{lε}	"Agolle Kusaal"	cf	<i>Àgò</i> ^{lε}	"Agolle area"

<i>*rl</i> → <i>tt</i>	<i>Bāt</i> ^{ε/}	"Bisa language"	cf	<i>Bāris</i> ^{ε/}	"Bisa people"
	<i>Yāt</i> ^{ε/}	"Yarsi language"	cf	<i>Yāris</i> ^{ε/}	"Yarsi people"
<i>*ml</i> → <i>nn</i>	<i>Dàgbān</i> ^{nε/}	"Dagbani"	cf	<i>Dàgbām</i> ^{ma/}	"Dagomba"
	<i>Yàan</i> ^{nε}	"Yansi language"	cf	<i>Yàamis</i> ^ε	"Yansi people"
<i>*nl</i> → <i>nn</i>	<i>Gōrín</i> ^{nε}	"Farefare language"	cf	<i>Gōrís</i> ^ε	"Farefare people"

Unexpected epenthesis is seen in

<i>Ñwāmpūri</i> ^{ε/}	"Mampruli"	cf	<i>Ñwāmpūris</i> ^{ε/}	"Mamprussi"
<i>Kàmbòni</i> ^ε	"Twi"	cf	<i>Kàmbòmisi</i> ^ε	"Ashanti"

6.2.1.1 Consonant changes in derivation

Single alveolar consonants sometimes reflect original clusters in derivation. Single *-l-* apparently results from **dl* in *pìl*^ε "put (hat etc) on someone":

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

Single *-s-* may also represent an earlier cluster in some words. The agent nouns *sòs*^a "beggar" and *tis*^a "giver" drop the formant *-d-* in the sg and have Tone Pattern L like 3-mora stems 9.3.1; in *tis*^ε "give" the *-s-* may have resulted from a root-final **y* assimilated to a following derivational *-s-* 6.1.1.1. The similarly formed Pattern H verb *gōs*^ε "look" makes a Pattern HL gerund 12.1.1.1.1 like *kīr*^ε "hurry" above; so too does *sōñs*^ε "converse" 12.1.1.1.1.

Single *-n-* may represent an original cluster after an epenthetic vowel within a stem. The word *pībin*^{nε} pl *pībina*⁺ "covering" 12.1.2 has single *-n-* for my informants, but the corresponding Mooré word has *-nd-*: *pìbìndgà* "couvercle." 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." An original geminate origin for Kusaal *-n-* may explain the fact that the suffix never assimilates to a following consonant.

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](#) and CVV roots adopt the allomorph CYy before *-a* [6.1.1.1](#):

<i>sō'e^{ya}/</i>	"own"	cf <i>sō'vlím^m</i>	"possession"
<i>tōē^a/</i>	"be bitter"	cf <i>tōɔg^ɔ</i>	"bitter"

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

<i>dīg^{ya}/</i>	"be lying down"
<i>vābi^{ya}/</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^{la}/</i>	"be with someone in a subordinate rôle"
<i>nēn^{na}/</i>	"envy"
<i>mōr^a/</i>	"have" cf gerund <i>mōrím^m</i> showing *rr

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^{ya}/</i>	"own"	→	<i>sō'vlím^m</i>
<i>bòɔd^a</i>	"like, want"	→	<i>bòɔdím^m</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>yàmmig^a</i>
<i>yaalim</i>	"salt"	<i>yàarim^m</i>
<i>nlwob</i>	"six"	<i>ñyúèb</i>
<i>nle</i>	"two"	<i>ñyí</i>
<i>lwot</i>	"open"	<i>yò'ɔg^ɛ</i>
<i>lwo</i>	"close"	<i>yò⁺</i>

Cf also the ancient loanword *yūgúm*^{NE} "camel" (Farefare *yúgné*, pl *yugma*, Mooré *yúgémde*) 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^{a/}*, because **sabiɿa* would result instead in **sābi^{ya/}*; Manessy's Dagbani *sabla* "be black" seems to be a ghost form.

No cases of stem-final *d* occur in Dynamic Invariable verbs; **Vdɿ* has perhaps become *V'Vy*.

It was suggested above that original single **ɿ* was deleted after short root vowels, with glottalisation and lengthening of the vowel, unless it was followed by an affix vowel or by **ɿ*, where **ɿɿ* subsequently gave rise to a new geminate **rr* [6.1.1.1](#); this would account for the relationships in

<i>gūr^{a/}</i>	"guard"
<i>gū'u^{lɛ/}</i>	"put on guard"
<i>gū'u^{sɛ/}</i>	"take care, watch out"
<i>gū'u^{d^{a/}}</i>	agent noun

Derivational **g* may also have caused a preceding original single **ɿ* to appear as surface *d*:

<i>gōr^{a/}</i>	DK	"have neck extended"
<i>gōdɿg^{ɛ/}</i>	DK	"look up, extend neck"
<i>yāar^{ɛ/}</i>		"scatter"
<i>yādɿg^{ɛ/}</i>		"scatter" (for the shortening see 6.1.1.2)
(but <i>èñrɿg^ɛ</i>		"shift along")

The sequence *-rɿd-* does occur with agent nouns involving the suffix *-d-* but variant forms occur, suggesting that the *-rɿd-* 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>kpārɿd^a</i>	"lock-er"
<i>gūrɿd^{a/}</i>	"guard"
<i>gū'u^{d^{a/}}</i>	"guard"

The gerund *kīrɿb^{ɔ/}* "hurrying" 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 *pōñrɿb^ɔ* from the Adjectival verb *pōñr^a* "be near."

The tonemes do not support a geminate origin of *r* in the ethnonyms *Yāris^{ɛ/}* *Bāris^{ɛ/}* [32.5](#).

6.3 Vowel changes

The vowel changes described in this section apply before Apocope, being often conditioned by elements which are deleted by Apocope.

6.3.1 Consonant deletion and vowel fusion

Kusaal makes no distinction between word-internal sequences of adjacent vowels and diphthongs, though three-mora diphthongs are realised as disyllabic [2.4](#).

Some diphthongs probably arose historically by fusion of adjacent vowels following the loss of intervocalic *w *y, but this leads to no significant synchronic alternations. For historical deletion of *g after *a ja ɥa aŋ jaŋ ɥaŋ* see [6.1.1.1](#). With deletion of *g after *long* vowels, there are numerous parallels with forms which preserve *g*, and in these cases it is therefore reasonable to treat the deletion and vowel fusion as synchronic processes.

Underlying *g is deleted after *aa iə uə aaŋ eŋ ɔŋ*, 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:

*aaga	→ aa 8.1	*aagi	→ aee
*iəga	→ iaa	*iəgi	→ iee
*uəga	→ uaa	*uəgi	→ uee

and likewise with the glottalised vowels. (See below for the nasalised equivalents.)

The diphthongs *iaa uaa* arise from deletion of the *g in *g^a|s^ɛ* Class singulars:

	<i>bōvg^a</i>		"goat"	pl <i>bōvs^ɛ</i>
but	<i>bāa⁼</i>	← *baaga	"dog" 8.1	pl <i>bāas^ɛ</i>
	<i>sīa⁺</i>	← *siəga	"waist"	pl <i>sīas^ɛ</i>
	<i>sàbùa⁺</i>	← *sabuega	"lover"	pl <i>sàbùəs^ɛ</i>

The diphthongs *ae e ie 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⁺</i>	← *kpi'əgi	"approach"
	<i>kpi'əs^ɛ</i>	← *kpi'əsi	"neighbours"
cf	<i>tēbiɡ^{ɛ/}</i>		"get/make heavy"
	<i>tēbɪsír^ɛ</i>		"heavy"

There are many such "Fusion verbs", showing base forms ending in the diphthongs *-ae -ie -ue* [11.1](#), e.g.

<i>pāe</i> ^{+/}	← * <i>paagi</i>	"reach"
<i>dūe</i> ^{+/}	← * <i>duøgi</i>	"raise, rise"

The LF *aee iee ue* reduce to the two-mora diphthongs *ae ie ue* after Apocope.

There are no underlying nasalised *ieñ ueñ*; instead *εεñ ɔɔñ* appear [6.1](#).

However, **g* is deleted after nasal *εεñ ɔɔñ* (unlike their oral equivalents *εε ɔɔ*) in the same contexts as after *ia ue* (i.e. before an affix vowel *a* or *ɪ*), and the resulting diphthongs coincide in vowel quality with those produced with *ia ue*:

* <i>ããga</i>	→ <i>aañ</i> 8.1	* <i>ããgi</i>	→ <i>aeñ</i>
* <i>ĕĕga</i>	→ <i>iaañ</i>	* <i>ĕĕgi</i>	→ <i>ieñ</i>
* <i>ũũga</i>	→ <i>uaañ</i>	* <i>ũũgi</i>	→ <i>ueñ</i>

and likewise with the corresponding glottalised vowels.

The rule gives rise to alternations in nouns and adjectives in the *g^a|s^ε* Class between SF-final *iañ uañ* and word-internal *εεñ ɔɔñ* before a consonant:

<i>zìñ'a</i> ⁺	← * <i>zĕ'ĕga</i>	"red" <i>g^a s^ε</i> Class sg
<i>zèñ'εs</i> ^ε	← * <i>zĕ'ĕsɪ</i>	"red" <i>g^a s^ε</i> Class pl
<i>zèñ'εd</i> ^ε	← * <i>zĕ'ĕdɪ</i>	"red" <i>g^ɔ d^ε</i> Class pl
<i>dùañ</i> ⁺	← * <i>dũũga</i>	"dawadawa" sg
<i>dòɔñs</i> ^ε	← * <i>dũũsɪ</i>	"dawadawa" pl
<i>nūa</i> ^{+/}	← * <i>nũũga</i>	"hen"
<i>nɔɔs</i> ^{ε/}	← * <i>nũũsɪ</i>	"hens"
<i>Mùa</i> ⁺	← * <i>Mũũga</i>	"Mossi person"
<i>Mòɔs</i> ^ε	← * <i>Mũũsɪ</i>	"Mossi people"
<i>Mòɔg</i> ^ɔ	← * <i>Mũũgɔ</i>	"Mossi country"
<i>Mòɔl</i> ^ε	← * <i>Mũũlɪ</i>	"Mooré language"

In derivation the rule causes alternation between Fusion verb forms from historical *-*gi*, ending in SF *ieñ ueñ*, and cognate forms with *εεñ ɔɔñ*:

<i>nìe</i> ⁺	← * <i>nĕĕgi</i>	"appear"
<i>nèe</i> ^ε	← * <i>nĕĕlɪ</i>	"reveal"
<i>pūñ'e</i> ^{+/}	← * <i>pũ'ũgi</i>	"rot"
<i>pɔñ'ɔl</i> ^{ε/}	← * <i>pũ'ũlɪ</i>	"cause to rot"
<i>ñyū'e</i> ^{+/}	← * <i>yũ'ũgi</i>	"set alight"
<i>ñyɔ'ɔs</i> ^{ε/}	← * <i>yũ'ũsɪ</i>	"smoke" (noun)
<i>sūeñ</i> ^{+/}	← * <i>sũũgi</i>	"anoint"
<i>sɔñ</i> ⁺	← * <i>sũũ</i>	"rub"

<i>zìñ'a⁺</i>	← *zĕ'ĕga	"red" <i>g^a s^ε</i> Class sg
<i>zèñ'og^ɔ</i>	← *zĕ'ĕgυ 6.3.2	"red" <i>g^ɔ d^ε</i> Class sg

The fronting effect of *-*gi* differs from the fronting caused by *-*y*- [6.3.2](#):

<i>sūñ'e^{+/}</i>	← *sǔ'ǔgi	"become better than" WK
<i>sǔñ'e^{ya/}</i>	← *sǔ'ǔya	"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^ɔ</i>	← *nāágfū	"cow"	pl <i>nīgí⁺</i>	cb <i>nā'</i>
<i>dí'ər^ε</i>	← *dī'əgrī	"receiving"	cf <i>dī'e^{+/}</i>	"get" ← *dī'əgí
<i>vúər^ε</i>	← *vū'égrī	fruit of <i>vúəŋ^a</i> tree	pl <i>vūáa⁼</i>	

Surface *iəñ uəñ* appear in just one context: Fusion verbs with nasal vowels introduce *iəñ uəñ* into the dynamic imperfective, imperative and gerund forms:

	<i>nèər^ε</i>		"empty" (← "clear")
but	<i>nìər^ε</i>		gerund of <i>nìe⁺</i> "appear"
	<i>pǔñ'ɔ^{ε/}</i>	← *pǔ'ǔli	"cause to rot"
but	<i>púñ'ər^ε</i>		gerund of <i>pūñ'e^{+/}</i> "rot"
	<i>pūñ'əd^{a/}</i>		dipf

This is readily attributable to the analogy of verbs with oral vowels:

	<i>pūñ'e^{+/}</i>	base <i>pūñ'əd^{a/}</i>	dipf <i>púñ'ər^ε</i>	ger "rot"
cf	<i>dūe^{+/}</i>	base <i>dūəd^{a/}</i>	dipf <i>dúər^ε</i>	ger "raise"

Levelling in Variable verb flexion and gerund formation is common, but the *gerund* vowels were probably not analogical historically. Gerunds like **pon'or* or **neer* are never found for *púñ'ər^ε* "rotting" or *nìər^ε* "appearing", but dipfs like *pon'od* *pǔñ'ɔd* do occur in texts. It would be surprising for gerunds to be subject to levelling before finite forms (cf [7.3](#)) and the tonal evidence suggests a different analysis.

Fusion verbs lack any tonal evidence of a lost mora in the dipf [7.3.1](#): *pūñ'əd^{a/}* not **púñ'əd^a* "rot." This too might be the result of levelling; however, comparative evidence and irregularities in Variable verbs [11.1.1](#) suggest that the dropping of a derivational suffix before the imperfective flexion may once have been common. Fusion verbs may preserve this pattern, with **g* absent in the dipf by *morphological*

rule; forms like *pon'od pōñ'ɔd^{a/}* also reflect this. The *iəñ uəñ* of gerunds correlate with *tones* showing underlying *g: *púñ'er^ε* "rotting." Historically, *g deletion probably followed insertion of an epenthetic vowel between the *g and any following consonant; absorption of this vowel by the preceding *iəñ uəñ* resulted in sequences which, unlike other *iəñ uəñ*, did not merge with *εñ ɔñ*, either as extra-long, or as already diphthongised *phonologically*.

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* 2.2:

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^{ya/}</i>
cf	<i>sō'ulím^m</i>			"property"
SF	<i>sōñ'e</i>	LF	<i>sōñ'eyá</i>	"be better than" <i>sōñ'e^{ya/}</i>

Rounding: Short unrounded root vowels become diphthongs in *ɥ* before LF *kku *ηηυ:

<i>gbàɥ^ɔ</i>	← *gbəηηυ	"book"	pl <i>gbàna⁺</i>
<i>lāɥk^ɔ</i>	← *lakku	"goods item"	pl <i>lā'ad^ε</i>
<i>yīɥ^{ɔ/}</i>	← *yιηηυ	"single"	pl <i>yīná⁺</i>
<i>sàbùà⁺</i>	← *sabuəga	"lover"	pl <i>sàbùəs^ε</i>

Tense *i* does not become a diphthong in the only case in my materials:

<i>nìn-gbīη^{ɔ/}</i>	"body"	pl <i>nìn-gbīná⁺</i>
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The vowel may simply be taken from the alternative singular *nìn-gbīn^{ε/}*. Short *ja* becomes the short diphthong *jaɥ*:

bjāuñk^ɔ ← **bjākkv* "shoulder" pl *bjāñ'ad*^ε

Short *ya* becomes *ɔ*: **uakku* → *ɔkku*

bòk^ɔ ← **bɯakku* "pit" pl *bò'ad*^ε

Long vowels undergo rounding of a back second mora before LF **gv* **ηv*. The second mora is always high.

dàad^ε "logs"
 but *dàvɔ*^ɔ ← **daagv* "log"
fēñ'εd^{ε/} "ulcers"
 but *fēñ'og*^{ɔ/} ← **fē'εgv* "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]:

vīug^{ɔ/} ← **viigv* "owl" pl *vīid*^{ε/}
 but *dàbīog*^ɔ ← **dabiəgv* "coward" pl *dàbīəd*^ε
kpī'ov^ɔ ← **kpi'əηv* "strong" pl *kpī'əma*⁺

A parallel case with *uu/uv* does not occur, because of a rule **uəgv* → *ɔɔgv*:

Sà'dàbòɔg^ɔ ← **Sa'dabuəgv* "place of the Sarabose clan"
 cf *Sà'dàbùə*^ε "Sarabose clan members"
lām-fòɔg^ɔ ← **lam-fuəgv* "toothless"
 (*lām*^{mε/} "gum" *fùe*+ "draw out")

The **epenthetic vowel** *i* is rounded to *u* before LF **gv* **ηv*:

āañdɪg^a ← **āāɪdɪga* "black plum tree"
 but *gàaduv*^ɔ ← **gaadɪgv* "(sur)passing" (gerund)
 pl *mālɪma*⁺ ← **malɪmaa* "sacrifices"
 but *mālɪv*^ɔ ← **malɪηv* "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 *dāy* "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 [2.5](#). (A similar issue arises with so-called "Canadian Raising" in American English dialects which also show neutralisation by flapping 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](#).

Word-internally, long vowels are shortened before *k t p*:

<i>gàad</i> ^ε	"pass"	<i>gàt</i> ^a	"pass" dipf
<i>tēeg</i> ^{ε/}	"drag" ILK	<i>tēk</i> ^{ε/}	"pull" (* <i>tεεkkι</i>)

Hausa loanwords show this to be phonological, not morphophonemic:

<i>àtìyuk</i> ^ɔ	"sea"	←	<i>tèeku</i>	"sea"
<i>kótù</i> ⁺	"court"	←	<i>kootù</i>	"court" (← English)

3-mora vowel sequences [4.2.3](#) [2.4](#) arise by Vowel Fusion [6.3.1](#) or by Liaison before the pronoun ^o [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> ⁼	←	* <i>vuegaa</i>	"fruits of the <i>vúeŋ</i> ^a 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](#); for the tones see [8.2.3](#).

6.4 Apocope Blocking

Certain full words have citation forms without Apocope. The form is like a LF, without the lowering of postconsonantal final ι υ to ε 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>bèdvǭ</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^{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*^{+/} "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 $-mv$ 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 dǫ̀g.</i>	"It's a hut."
	<i>Lì kā' dǫ̀gǭ.</i>	"It's not a hut."
with	<i>Lì à nē bédvǭ.</i>	"It's a lot."
	<i>Lì kā' bédvǫ̀v.</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 ε 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> ^{nε}	"only"	<i>kòtāa</i> ^{nε}	"at all"

The LF of *ñyāe*^{nε}/ "brightly, clearly" [17.4](#) is *ñyāené* [jãĩnɛ̃].

Cf also *mè* DK KT SB NT *mèn* WK; clause finally (all sources) *mèn*^ε "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 [7.5](#).

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> ^{P/} sg	<i>sīĩŋs</i> ^{ε/} pl	<i>sīĩŋ-</i> cb	"bee"
<i>píĩŋʰ</i>	<i>pīĩní</i> ⁺	<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> ^a	<i>pō'usidɪb</i> ^a	<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 *náa^p* "cow" versus *nú'ùg^o* "hand", but this can be accounted for by a late tone realisation rule 5.3. 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>
SF <i>bèdvgū</i>	LF <i>bèdvgúu</i>	"a lot"	<i>bèdvgū^{+/}</i>

Superscript Notation writes *yā^{+/}* *bèdvgū^{+/}* by the usual convention 2.2.1. The only exception among free words is *kòbıgā⁼* "one hundred."

Surface Tone Patterns can be analysed as the outcome of **internal tone sandhi** acting on an underlying allocation of M or L to every underlying mora, vocalic or not. (Historically, all morae may in fact have once been vocalic, with *deletion* of non-root vowels between homorganic consonants and after nasals, but all that is necessary for this purpose is for all morae be underlying tone-bearing units.) This allocation precedes Apocope, and in particular precedes the deletion of *g 6.3.1 and development of consonant clusters 6.2.1. Forms which lose a mora by these processes show aberrant tonal patterns 7.2.1.1.

Roots may carry MM, ML, LM or LL tonemes. A derivational suffix may carry M or L, but may carry M only if there are no preceding M tonemes already. Before a derivational suffix ML roots become MM and LM roots become LL 7.5.

Flexional suffixes bear M toneme unless preceded by stem-final M, when they dissimilate to L. The plural suffixes *-a⁺* and *-ı⁺* bear the last *stem* toneme on the first mora, with the second mora showing the suffix toneme. The singular suffix *ª* displays the last stem toneme.

Three internal tone sandhi rules then produce the surface tonemes.

Rightward **M Spreading** causes ML to become MH, unless the consonants before and after the L mora have assimilated to form a consonant cluster, or the L mora is the second in a syllable, in which cases ML instead becomes HL. A stem mora beginning with **m* after a *non-root* M toneme is also not affected by M spreading: again, the M toneme becomes H instead.

Pattern **O Raising** is triggered by the attachment of any flexional suffix (including ^a) to a stem with no intrinsic M tonemes; all tonemes in the entire word become M. It precedes L Spreading, but need not be ordered with respect to M spreading.

Rightward **L Spreading** applies after M spreading and Pattern O Raising. It causes all remaining LM to become LL, after which word-final LH becomes LM.

Following the application of internal tone sandhi, tone Levelling occurs within syllables 5.2 and all tonemes on non-vocalic morae are deleted.

Three basic Tone Patterns are distinguished, according to whether the stem has underlying initial M, underlying non-initial M, or no underlying M toneme at all:

<u>Pattern Name</u>	<u>Intrinsic Stem Tonemes</u>	<u>Surface Tonemes in Nominals</u>
Pattern H	MM... or ML...	initial M or H
Pattern L	L...M	initial L
Pattern O	L...	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>náaP</i>	<i>id</i>
<i>tììb</i>	"tree"	cf Kusaal <i>tìig^a</i>	<i>id</i>
<i>būūk</i>	"goat"	cf Kusaal <i>būvg^a</i>	<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; they copy the H tone (= Kusaal M) of a flexional suffix but otherwise default to all-L. Olawsky 1999 similarly takes Dagbani Pattern O stems as intrinsically toneless, but he follows Anttila and Bodomo (on Dagaare) in attributing O Raising to *stress*. This is not workable with surface stress 2.4 in Kusaal. Even in Dagbani, stressed verb forms may have all-L tonemes. O Raising is in fact

triggered by the addition of any flexional suffix; as all flexional suffixes have intrinsic M tone after all-L stems this is essentially equivalent to the tone-copying proposal. Note, however, that M *derivational* suffixes do not trigger the change.

These previous analyses require an underlying three-way contrast between M, L and unmarked tone-bearing units. (This distinction differs from that suggested in [5.3](#); all tone-bearing units in these unmarked stems would surface with either L or M tonemes.) The nominal Subpattern HL [7.2.1.2](#) demonstrates that roots can carry two tonemes, prompting the alternative analysis adopted here: Pattern O and L roots are LL and LM respectively, and O Raising is blocked by non-initial M tonemes⁵.

7.2 Nominals

Prefixed nominals differ tonally only in that cbs with M prefixes always have H toneme on the root; sg and pl are unchanged. L prefixes do not affect stem tone patterns at all [7.2.4](#). Prefixes will be ignored in counting stem morae below.

The tones of compounds are determined by external tone sandhi [8.4](#) [8.3](#).

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 [7.1](#) [6.4](#).

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, it falls on the second mora, unless this is the second mora of a long vowel [5.2](#), in which case the H appears written on the *first* mora, and the toneme covers both morae of the long vowel. Cbs have M tonemes up until any third toneme, which is H.

<i>vōr</i> ^{ε/}	<i>vōyá</i> ⁺	<i>vōr-</i>	"alive"
<i>yīr</i> ^{ε/}	<i>yā</i> ^{+/}	<i>yī-</i>	"house"
<i>fūug</i> ^{ɔ/}	<i>fūud</i> ^{ε/}	<i>fū-</i>	"shirt, clothes"
<i>dōk</i> ^{ɔ/}	<i>dōgvd</i> ^{ε/}	<i>dōg-</i>	"cooking pot"
<i>nīd</i> ^{a/}	<i>nīdɪb</i> ^{a/}	<i>nīn-</i>	"person"
<i>nīf</i> ^{ɔ/}	<i>nīní</i> ⁺	<i>nīn-</i> or <i>nīf-</i>	"eye"
<i>kūgur</i> ^{ε/}	<i>kūgá</i> ⁺	<i>kūg-</i>	"stone"

5) 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*.

<i>gōt^a/</i>	<i>gōtíb^a /tt/</i>	<i>gōt-</i>	"seer, prophet"
<i>sābílíg^a</i>	<i>sābílís^ε</i>	<i>sābíl-</i>	"black"
<i>yōgúm^{mε}</i>	<i>yōgumá⁺</i>	<i>yōgum-</i>	"camel"
<i>sābíl^{lε}</i>	<i>sābílá⁺</i>	<i>sābíl-</i>	"black"
<i>sú'əŋ^a /ŋŋ/</i>	<i>sū'əmís^ε</i>	<i>sū'əŋ-</i>	"rabbit"
<i>sāan^a/</i>	<i>sāam^{ma}</i>	<i>sāan-</i>	"stranger, guest"
<i>dīəs^a/</i>	<i>dīəsídìb^a</i>	<i>dīəs-</i>	"receiver"
<i>sūgvríd^a</i>	<i>sūgvrídìb^a</i>	<i>sūgvríd-</i>	"forgiver, forbearer"
<i>kō'alíg^a</i>	<i>kō'alís^ε</i>	<i>kō'alíg-</i>	traditional smock
<i>sáannìm^m</i>			"strangerhood"

LFs ending in long vowels or diphthongs, or in *-mm* (where the second *m* was historically syllabic but is now consonantal) cannot carry a toneme on the final mora. The SF forms are regular, but if the LF final mora would have carried H toneme by the usual rules, the H is transferred to the next preceding vocalic mora which is *not* the last of a long vowel/diphthong [5.2](#), replacing the previous toneme, which is always M. Superscript Notation still writes the acute tone mark at the end [2.2.1](#); such marks are interpreted as falling on the nearest preceding vocalic mora which is not the last in a long vowel or diphthong:

<i>nūa^{+/}</i>	SF <i>nūa</i>	LF <i>nūáa</i>	"hen"
<i>dāam^{m/}</i>	SF <i>dāam</i>	LF <i>dáamm</i>	"millet beer"
<i>vōm^{m/}</i>	SF <i>vōm</i>	LF <i>vúmm</i>	"life"
<i>tāuñ^{+/}</i>	SF <i>tāuñ</i>	LF <i>táuñ</i>	"opposite-sex sibling"

7.2.1.1 Tonal effects of deleted morae

Pattern H forms which have lost an underlying mora display the H toneme one mora to the left of its expected position, prior to Levelling [5.2](#) within syllables.

So when clusters are reduced to single consonants by assimilation [6.2.1](#)

<i>nīŋ^a /ŋŋ/</i>	<i>nís^ε *ns</i>	<i>nīŋ-</i>	"bird"
<i>pīlñ^p *nf</i>	<i>pīlíní⁺</i>	<i>pīlɛn-</i>	"genet"
<i>ñyīríf^p *rr</i>	<i>ñyīrí⁺</i>		"egusi seed"

With a noun prefix [7.2.4](#) *tīn-*:

<i>tīntōñríg^a *rr</i>	<i>tīntōñrís^ε</i>	<i>tīntōñr-</i>	"mole" (animal)
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So too with deletion of *g when no affix vowel follows [6.3.1](#):

<i>náaf</i> ^p 5.2	← * <i>nāágfū</i>	(cf pl <i>nīigí</i> ⁺)	"cow"
<i>wáaf</i> ^p	← * <i>wāágfū</i>	(cf pl <i>wīigí</i> ⁺)	"snake"
<i>yáab</i> ^a	← * <i>yāágbā</i>		"grandparent"
<i>vúər</i> ^ε	← * <i>vūégrī</i>		fruit of the <i>vúəŋ</i> ^a tree

Here belong all regular gerunds in *-r*^ε formed from Pattern H Fusion verbs [11.1](#) which have phonologically-deleted **g* in the base form:

	<i>náar</i> ^ε 5.2	← * <i>nāágrī</i>	"end"
from	<i>nāe</i> ^{+/}	← * <i>nāagí</i>	"finish"
	<i>dí'ər</i> ^ε	← * <i>dī'égrī</i>	"receiving"
from	<i>dī'e</i> ^{+/}	← * <i>dī'əgí</i>	"get"
	<i>púñ'ər</i> ^ε	← * <i>pṣ'ǐgrī</i> 6.3.1	"rotting"
from	<i>pūñ'e</i> ^{+/}	← * <i>pṣ'ǐgí</i>	"rot"

Fusion verbs show evidence of **g* only in base forms and in gerunds; in dynamic imperfectives and in derived agent nouns **g* is absent:

<i>nāad</i> ^{a/}	"finish" dipf
<i>nāad</i> ^{a/}	"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> ^ᵝ	<i>nú'ùs</i> ^ε	<i>nū'</i> -	"hand, arm"
<i>à-gáùñg</i> ^ᵝ	<i>à-gáàñd</i> ^ε	<i>à-gāñ</i> -	"pied crow"
<i>nóbìr</i> ^ε	<i>nōbá</i> ⁺	<i>nōb</i> -	"foot, leg"
<i>gél</i> ^{lε}	<i>gēlá</i> ⁺	<i>gēl</i> -	"egg"
<i>gbéèñm</i> ^m	no pl	<i>gbēñ</i> -	"sleep"
<i>kísùg</i> ^ᵝ	<i>kīsá</i> ⁺	<i>kīs</i> -	"hateful, taboo" (adj)
<i>áñsìb</i> ^a	<i>āñs-nám</i> ^a	<i>āñs</i> -	"mother's brother"

Here belong the irregularly formed gerunds [12.1.1.1.1](#):

<i>sóñsìg</i> ^a	"conversing"
<i>gósìg</i> ^a	"looking"
<i>kìkírùg</i> ^ᵝ	"hurrying" (L prefix)

Olawsky treats words like Dagbani *gállì* "egg" (Kusaal *gél^lÉ*) as regular Pattern H, and cognates of regular Kusaal 2-mora Pattern H stems as a separate tone class.

Several HL words may have lost a stem mora historically; *-s-* *-r-* may represent older *-ss-* *-rr-* 6.2.1.1; cf also Mooré *náooré* "leg" *gǎoobgó* "pied crow", *góóém* "sleep." *Nú'ùg^ɔ* "hand" has cognates in the ɔ^lÉ Class in Nawdm *núʔú* pl *níʔí* 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 stem tonemes are L, except for non-root (third or fourth) morae preceding stem **-m-* (including cases where the *m* has undergone assimilation to *ŋ*), which are H.

<i>sù'vɔg^a</i>	<i>sù'vs^É</i>	<i>sù'-</i>	"knife"
<i>zàk^a</i>	<i>zà'as^É</i>	<i>zà'-</i>	"dwelling-compound"
<i>dìgɪr^É</i>	<i>dìga⁺</i>	<i>dìg-</i>	"dwarf"
<i>mòlɪ^ɸ</i>	<i>mòli⁺</i>	<i>mòl-</i>	"gazelle"
<i>kù'əm^m</i>	no pl	<i>kɥ'à-</i>	"water"
<i>mà⁺</i>	<i>mà nám^a</i>	<i>mà-</i>	"mother"
<i>mèɛŋ^a</i>	<i>mèɛmɪs^É</i>	<i>mèɛŋ-</i>	"turtle"
<i>pùgvdɪb^a</i>	<i>pùgvd-nàm^a</i>	<i>pùgvd-</i>	"father's sister"
<i>sàam^{ma}</i>	<i>sàam-nàm^a</i>	<i>sàam-</i>	"father"
<i>dìəm^{ma}</i>	<i>dìəm-nàm^a</i>	<i>dìəm-</i>	"man's parent-in-law"
<i>àñrvɔ^ɔ</i>	<i>àñrɪma⁺</i>	<i>àñrvɔ-</i>	"boat"
<i>kàrvɔ^ɔ</i> or <i>kàrvɔg^ɔ</i>			"reading" (gerund)
<i>zùlvɔ^ɔ</i>	<i>zùlvɔma⁺</i>	<i>zùlvɔ-</i>	"deep"
<i>yàlvɔ^ɔ</i>	<i>yàlvɔma⁺</i>	<i>yàlvɔ-</i>	"wide"
<i>zìlvɔ^{mÉ}</i>	<i>zìlvɔma⁺</i>	<i>zìlvɔ-</i>	"tongue"
<i>nòŋɪd^a</i>			"lover"
<i>sìilɪŋ^a</i>	<i>sìilímɪs^É</i>		
	<i>sìilís^É</i>		
	<i>sìilímà⁺</i>	<i>sìilɪŋ-</i>	"proverb"
<i>zàaňsúvɔ^ɔ</i>	<i>zàaňsímà⁺</i>	<i>zàaňsúvɔ-</i>	"dream"
<i>nòŋɪlvɔ^m</i>		<i>nòŋɪlvɔ-</i>	"love"
<i>nòŋɪdím-tāa⁼</i>	13.1.1.4		"fellow lover" WK
<i>sòŋɪdím-tāa⁼</i>			"fellow-helper"
<i>dàalívɔ^m</i>	<i>dàalímɪs^É</i>	<i>dàalívɔ-</i>	"male sex organs"
<i>pù'alívɔ^m</i>	<i>pù'alímɪs^É</i>	<i>pù'alívɔ-</i>	"female sex organs"
<i>bì'ísívɔ^m</i>			"milk"

Nouns which are not *m*-stems do not show H before the class suffix *m*^m:

<i>bòɔdɪm</i> ^m	no pl	<i>bòɔdɪm-</i> 9.2.2	"will"
<i>zòtɪm</i> ^m	no pl		"fear"
<i>dàalɪm</i> ^m	no pl		"maleness"
<i>pò'alɪm</i> ^m	no pl		"femininity"

Note that the sg Noun Class suffix ^a does not prevent a stem-final underlying M toneme from preventing O Raising (cf verbal dipf suffixes [7.3](#)):

<i>sàal</i> ^a	<i>sàalɪb</i> ^a	<i>sàal-</i>	"human"
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Tonally exceptional in showing H before stem *m* on the *second* mora is

<i>bùgúm</i> ^m	no pl	<i>bùgúm-</i> or <i>bùgūm-</i>	"fire"
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These forms in *-mís*^ε perhaps derive from **-mɪmsɪ*:

no sg	<i>tàdɪmís</i> ^ε	"weakness"
no sg	<i>bùdɪmís</i> ^ε	"confusion"

7.2.3 Pattern O

Pattern O shows M throughout in sg/pl forms and L throughout in the cb.

<i>bōvs</i> ^a	<i>bōvs</i> ^ε	<i>bù-</i>	"goat"
<i>tān</i> ^{nε}	<i>tāna</i> ⁺	<i>tàn-</i>	"earth"
<i>sīd</i> ^a	<i>sīdɪb</i> ^a	<i>sìd-</i>	"husband"
<i>pɸ'ā</i> ^a	<i>pō'ab</i> ^a	<i>pɸ'à-</i>	"woman, wife"
<i>sā'ab</i> ^ɔ	no pl	<i>sà'-</i>	"millet porridge"
<i>gbīgɪm</i> ^{nε}	<i>gbīgɪma</i> ⁺	<i>gbìgɪm-</i>	"lion"
<i>ñwāaŋ</i> ^a	<i>ñwāamɪs</i> ^ε	<i>ñwàaŋ-</i>	"monkey"
<i>mēɛd</i> ^a	<i>mēɛdɪb</i> ^a	<i>mèɛd-</i>	"builder"
<i>sjàkɪd</i> ^a	<i>sjàkɪdɪb</i> ^a	<i>sjàkɪd-</i>	"believer"
<i>būtɪŋ</i> ^a	<i>būtɪs</i> ^ε	<i>bùtɪŋ-</i>	"cup"
<i>mēɛdɪŋ</i> ^a	<i>mēɛdɪs</i> ^ε	<i>mèɛdɪŋ-</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) [7.5.1](#):

<i>pò'us^a</i>	<i>pō'usidib^a</i>	<i>pò'us-</i>	"worshipper"
<i>kùəs^a</i>	<i>kūəsıdib^a</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 *gīŋilim^m* "shortness" is derived from the Pattern O adjective *gīŋ^a* "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 *gīīŋilim^m id.*

Pattern O all-M LFs become all-L at the end of questions [8.1](#):

<i>Lì kā' gbìgimméε?</i>	"Isn't it a lion?"
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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>yūgvdir^{ε/}</i>	<i>yūgvda⁺</i>	<i>yùgvd-</i>	"hedgehog"
<i>ñwāaŋ^a</i>	<i>ñwāamıs^{ε/}</i>	<i>ñwàaŋ-</i>	"monkey"
<i>bāŋıd^a</i>	<i>bāŋıdib^{a/}</i>	<i>bàŋıd-</i>	"wise man"
<i>kpārıdıŋ^a</i>	<i>kpārıdıs^{ε/}</i>	<i>kpàrıdıŋ-</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 **-mmv*):

<i>gbīgım^{mε/}</i>	<i>gbīgıma⁺</i>	<i>gbìgım-</i>	"lion"
<i>zōōm^{mε/}</i>	<i>zōōma⁺</i>	<i>zōōm-</i>	"fugitive"
<i>tādım^{m/}</i>	<i>tādımıs^{ε/}</i>	<i>tādım-</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 gbīgımméε?</i>	"Is it a lion?" WK only; rejected by DK
<i>Lì à nē gbìgimméε?</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> ^{ɔ/}	<i>dàyūud</i> ^{ε/}	<i>dàyū-</i>	"rat"
H	<i>Bùsán</i> ^a	<i>Bùsààñs</i> ^ε	<i>Bùsān-</i>	"Bisa person" 7.2.1.2
L	<i>kùkpàrig</i> ^a	<i>kùkpàrs</i> ^ε	<i>kùkpàr-</i>	"palm tree"
O	<i>dàkīig</i> ^a	<i>dàkīs</i> ^ε	<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>zīnzāuŋ</i> ^{ɔ/}	<i>zīnzāná</i> ⁺	<i>zīnzáuŋ-</i>	"bat"
H	<i>Ñwāmpūrig</i> ^{a/}	<i>Ñwāmpūrs</i> ^{ε/}	<i>Ñwāmpúr-</i>	"Mamprussi person"
H	<i>gūmpūzēr</i> ^{ε/}	<i>gūmpūzēyá</i> ⁺	<i>gūmpūzér-</i>	"duck"
H	<i>tīntōñrig</i> ^a	<i>tīntōñrs</i> ^ε	<i>tīntōñr-</i>	"mole" 6.2.1
H	<i>pīpīrig</i> ^{a/}	<i>pīpīrs</i> ^{ε/}	<i>pīpír-</i>	"desert"
H	<i>bālērvug</i> ^{ɔ/}	<i>bālērɪd</i> ^{ε/}	<i>bālér-</i>	"ugly person"
H	<i>pūkpāad</i> ^{a/}	<i>pūkpāadíb</i> ^a	<i>pūkpá-</i>	"farmer" 14.1.4
O	<i>fūfūm</i> ^{mε}	<i>fūfūma</i> ⁺	<i>fūfūm-</i>	"envy; sty in the eye"
L	<i>sāmán</i> ^{nε}	<i>sāmánà</i> ⁺	<i>sāmán-</i>	"courtyard"

The examples labelled "H" might be Pattern O: the cb tonemes are as expected for Pattern O, and the LF-final sg/pl H tonemes might reflect a similar process to that resulting in LF-final H in other Pattern O words [7.2.3](#). There may be a limit on how many successive M morae can be tolerated within a word; cf [8.4](#) fn. With *zīnzāná*⁺ *gūmpūzēyá*⁺ compare WK's forms sg *wālig*^a, pl *wāls*^ε beside *wālí*⁺ "a kind of gazelle."

M Raising only follows forms which have undergone Apocope. One or two compounds behave tonally as if the first element were a prefix, with no neutralisation of stem tones in the sg/pl, but only in the cb. All cases involve cbs as pre-modifiers rather than heads, and the cb stems are all probably originally of one mora:

<i>zūg-kūgur</i> ^{ε/}	<i>zūg-kūga</i> ⁺	<i>zūg-kúg-</i>	"pillow" 9.2.2
<i>kā-wēnnir</i> ^{ε/}	<i>kā-wēnna</i> ⁺	<i>kā-wén-</i>	"corn"

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^a* imperative is found only (and always) with tone overlay [19.6.1.1](#) so it is unnecessary to treat it further here; Base and dynamic imperfective forms will be cited in that order. Dynamic Invariable verbs have a single finite form which behaves tonally like the dipf of a Variable verb.

The Tone Patterns of all regular deverbal nominals are predictable [7.5.1](#).

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 Base Forms. Cbs show a collapse of Subpattern HL with regular Pattern H, and of Pattern O with L everywhere except with four-mora Pattern L stems. A similar process with Base Forms 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 are seen proceeding in tandem in the two gerunds of *kīr^ε* "hurry, tremble": *kīkírùg^ɔ* and *kīrīb^ɔ*.

Pattern LO dynamic imperfectives have all-L stem tonemes, but the mora before Liaison is M, and the SFs are followed by the L Raising tone sandhi [8.3](#). Such stems have not become all-M, unlike Pattern O nominals with a M noun class suffix [7.2.3](#), because **the flexions *-d^a* and *-y^a* are composite**, the result of adding ^a to stems with suffixed *-d-* or *-y-*, which have an intrinsic M toneme unless M already precedes, creating *Pattern L* type stems; this is parallel to the behaviour of Pattern L nouns with the Noun Class suffix ^a, e.g. *sàal^a* "human being" [7.2.2](#). This M toneme causes falling together of Patterns O and L in dynamic imperfectives; significantly, the Patterns remain distinct in Descriptive verbs [7.3.3](#).

The different tonemes of 4-mora stem Pattern LO base forms like *zàańsım^m* and dipfs like *zàańsım^{ma}* "dream" from Pattern L nouns like *zàańsúŋ^ɔ* "dream" cb *zàańsúŋ-* 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, presumably by treating the stem-final vowel of a Pattern LO Base Form as an affix, instead of part of the stem as in the indicative. By analogy, the much less common irrealis forms of Pattern LO dynamic imperfectives and Pattern L Descriptive 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, unless this is the second within a long vowel, when the H falls on the first mora.

Unlike nouns, verbs show no anomalous patterns due to mora deletion (see on Fusion verbs below), and no Subpattern HL.

However, the final vowel of the base form of 2-mora-stem verbs only shows the expected H toneme before Liaison Words; before Prosodic Clitics it carries M:

<i>dōgí lī</i>	"cooked it"
<i>Ò pō dōgε.</i>	"He didn't cook."

The form before the Interrogative Clitic confirms that the pattern there is intrinsically MM, because it becomes LL like all other all-M sequences in this context:

<i>Ò pō gōsε.</i>	"She didn't look"
<i>Ò pō gósεε?</i>	"Didn't she look?"
<i>Ò pō dōgε.</i>	"She didn't cook."
<i>Ò pō dúgεε?</i>	"Didn't she cook?"

In Superscript Notation these LFs will be written as MM rather than MH. Examples for Pattern H:

<i>ňyē⁺</i>	<i>ňyēt^{a/}</i>	"see"
<i>kō⁺</i>	<i>kōvd^{a/}</i>	"kill"
<i>dōg^ε</i>	<i>dōgvd^{a/}</i>	"cook"
<i>pĭāñ^{'a}</i>	<i>pĭāñ'ad^{a/}</i>	"speak", "praise"
<i>kūl^ε</i>	<i>kūn^{na/}</i>	"go home"
<i>yādıg^{ε/}</i>	<i>yādıgíd^a</i>	"scatter"
<i>mōɔl^{ε/}</i>	<i>móɔn^{na}</i>	"proclaim"
<i>dīgı^{ε/}</i>	<i>dīgín^{na}</i>	"lay down"
<i>nōk^{ε/} /kk/</i>	<i>nōkíd^a /kk/</i>	"take"
<i>lāñım^m /ŋŋ/</i>	<i>lāñım^{ma} /ŋŋ/</i>	"wander searching"
	<i>dīgı^{ya/}</i>	"be lying down"
	<i>tīj^{ya/}</i>	"be leaning" (objects)
	<i>zāñ a/</i>	"be holding"
	<i>gō a/</i>	"have neck extended"

As with nominals [7.2.1](#), complications arise with LFs ending in long vowels or diphthongs or in *-mm*, where the final mora cannot bear a toneme. Again, the SFs are regular, but H allocated to a LF final mora is transferred to the next preceding mora which is not the last in a long vowel or diphthong, replacing its previous M toneme.

tōwm^{m/} *tōwm^{ma}* or *tōwmíd^a* "disappear"
SF *tōwm* LF *tōwmm*

pāe^{+/} "reach"
SF *pāe* LF *pāée*

As always, Superscript Notation writes the acute mark at the end [2.2.1](#). Fusion verbs show no sign of *g in the dynamic imperfective tonally:

pāe^{+/} *pāad^{a/}* not **páad^a* "reach"
dīe^{+/} *dīəd^{a/}* not **díəd^a* "get"
pūñ'e^{+/} *pūñ'əd^{a/}* not **púñ'əd^a* "rot" WK

Contrast the corresponding gerunds in *-r^ε*: *páar^ε* *díər^ε* *púñ'ər^ε*.

7.3.2 Pattern LO

All stem tonemes are L in the indicative and imperative, and M in the irrealis.

<i>bùd^ε</i>	<i>bùt^a</i>	"plant"
<i>dì⁺</i>	<i>dít^a</i>	"eat"
<i>mè⁺</i>	<i>mèəd^a</i>	"build"
<i>zàb^ε</i>	<i>zàbíd^a</i>	"fight, hurt"
<i>bùø^ε</i>	<i>bùøn^{na}</i>	"call"
<i>bòdíg^ε</i>	<i>bòdígíd^a</i>	"get lost, lose"
<i>nìj^ε</i>	<i>nìjíd^a</i>	"do"
<i>màa^ε</i>	<i>màan^{na}</i>	"sacrifice"
<i>dìgìn^ε</i>	<i>dìgìníd^a</i>	"lie down"
<i>wàŋım^m</i>	<i>wàŋım^{ma}</i>	"waste away"
<i>siilım^m</i>	<i>siilım^{ma}</i>	"cite proverbs"
<i>zàaňsım^m</i>	<i>zàaňsım^{ma}</i>	"dream"
	<i>zìň'ıya</i>	"be sitting down"
	<i>tàbıya</i>	"be stuck to"
	<i>tèň^a</i>	"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 zābɪdɪnɛ́.</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^m</i>)."

Such forms always cause L Raising:

	<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 ^o 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>Ṁ ná b̄dɪgɛɛ?</i>	"Will I get lost?"
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7.3.3 Descriptive verbs

Because their stems do not contain an intrinsically M suffix before the ^a flexion, Descriptive verbs maintain distinct Patterns O and L. Where consonant gemination occurs before ^a, it is either part of an adjectival stem or due to analogy (so with all *m*-stems for WK [11.2](#).) Adjectives correspond to Descriptive verbs with the same surface SF tones as the sg/pl of the adjective, HL being conflated with H:

H	<i>wōk</i> ^{ɔ/}	"long, tall"	<i>wā'am</i> ^{ma/}	"be long, tall"
	<i>bōgvsír</i> ^ε	"soft"	<i>bōgvs</i> ^{a/}	"be soft"
	<i>vōr</i> ^{ε/}	"alive"	<i>vōe</i> ^{a/}	"be alive"
	<i>zēm</i> ^{ma/}	"equal"	<i>zēm</i> ^{ma/}	"be equal"
	<i>kísùg</i> ^ɔ	"hateful, taboo"	<i>kīs</i> ^{a/}	"hate"
L	<i>vènnig</i> ^a	"beautiful"	<i>vèn</i> ^{na}	"be beautiful"
	<i>zùluŋ</i> ^ɔ	"deep"	<i>zùlum</i> ^{ma}	"be deep"
	<i>pòɔdig</i> ^a	"small"	<i>pòɔd</i> ^a	"be few, small"
O	<i>tōg</i> ^ɔ	"bitter"	<i>tōe</i> ^{a/}	"be bitter"
	<i>gīŋ</i> ^a	"short"	<i>gīm</i> ^{ma/}	"be short"
	<i>kpī'ŋ</i> ^ɔ	"strong"	<i>kpī'əm</i> ^{ma/}	"be strong"
	<i>kpēēñm</i> ^m	"elder"	<i>kpēēñm</i> ^{ma/}	"be older than"
	<i>wēnnir</i> ^ε	"resembling"	<i>wēn</i> ^{na/}	"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 Clitic (specifically checked with WK and DK.)

All-L SFs become all-M in the irrealis mood, by analogy with dipsfs [7.3](#):

Ò nà vēn. "She'll be beautiful."

7.4 Particles

Some particles have the segmental and tonal structure of nouns [6](#).

Proclitic Liaison Words all have a single mora with a Fixed L toneme [8.3.1](#). Catenator-*n* is toneless and "transparent" to L Raising. Liaison Enclitics bear H after a host-final M toneme vowel 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. Pattern L are *ñwà*⁺ "this" [16.5](#) and *sà*⁺ "hence, ago" [20.7](#); Pattern O is the Independent/perfective marker *yā*⁺ [19.6.2.1](#).

Patterns H and O fall together in the SF, where both appear with a M toneme.

Pattern H enclitics change the M tone to H in the Long Form (compare the tonal behaviour of 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; so with the article *lā*^{+/} versus the Independent/perfective particle *yā*⁺:

Lì à nē dǒ̀g lā. "It's the hut."
Lì kā' dǒ̀g láa. "It's not the hut."

but *Ka o ba' ne o ma pu ban ye o kpelim yaa.*
Kà ò bā' né ò mà pū bán 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)

As usual before the Interrogative Prosodic Clitic 8.1, Pattern O becomes all-L; thus focus-*nē*^{+/} contrasts with *yā*⁺ in

Lì bǒ̀dìg nē. "It's lost."
Lì bǒ̀dìg néé? "Is it lost?"
 but *Lì bǒ̀dìg yā.* "It's got lost."
Lì bǒ̀dìg yàa? "Has it got lost?"

7.5 Tone in derivation

Root tone patterns can be deduced from the tone patterns of words with stems lacking any derivational suffix, and from common patterns in stems with different derivational suffixes but the same root.

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>áńsìb^a</i>	"maternal uncle"	<i>āńsín^a</i>	"sister's child"
<i>kísùg^ɔ</i>	"hateful"	<i>kīs^{a/}</i>	"hate"
<i>gósìg^a</i>	"looking"	<i>gōs^ε</i>	"look"

Pattern L roots also fall together with Pattern O. Pattern L roots can give rise to derived Pattern O stems (*nā'am*^m "chiefship" ← *nà'ab*^a "chief"), suggesting that these mergers are not due to tone spreading rules, but to roots simply losing second-mora tonal contrasts before derivational suffixes.

After O/L roots, but not H roots, derivational suffixes themselves differ in tonal behaviour, implying that derivational suffixes can be M or L, but that M is only permitted when the root has no M toneme.

Most derivational suffixes added to O/L roots produce Pattern L/LO stems. No stem with **g* **/* or **s* as the final derivational suffix [13.1](#) is Pattern O: these suffixes therefore carry an underlying M toneme unless the preceding root does. This explains the regular assignment of 3- and 4-mora stem Pattern LO verb gerunds to Pattern L; most such stems would have always have been Pattern L.

Quite different is the **d* of agent nouns, deverbal adjectives and instrument nouns [7.5.1](#): forms from Pattern LO verbs are Pattern O, but stems where the *-d-* is absent (not just assimilated) are Pattern L, with a change of Tone Pattern possible even within a single noun paradigm: *pò'us*^a "worshipper", plural *pō'usidib*^a. This implies that the L toneme of **d* has *replaced* the M of any preceding suffix, which seems tonologically implausible. However, formations with **d* [13.1.1.2.1](#) either omit any preceding derivational suffix or omit the **d* itself in the most "derivational" forms, with retention of both suffixes becoming commoner as the formations become more productive and "flexional" [13.1.1.1](#): forms with a suffix restored before *-d-* probably preserve their original tone patterns despite segmental remodelling.

Imperfective gerunds [13.1.1.4](#) with **d* from Pattern LO verbs are Pattern L, as in *bòɔdɪm*^m "will" and *mèɛdíɪm-tāa*⁼ "fellow-builder" versus Pattern O *bōɔdɪr*^ɛ "desirable" and *mēɛdɪŋ*^a "building implement." Here **d* must have M toneme, as it does in the finite forms [7.3](#).

Considerations like these, along with the levelling of Tone Patterns that has taken place in Variable verbs [7.3](#), and the segmental, but not tonal, remodelling of cbs [9.2.2](#), show that it is not possible to describe synchronic Tone Patterns purely as the outcome of tonemes associated with particular segments.

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](#).

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

gbāŋ^{ɔ/} "skin", "book" DK *gbàŋ*^ɔ "book" WK

7.5.1 Tones of deverbal nouns and adjectives

All segmentally regular gerunds have predictable Tone Patterns:

	from Pattern H verbs			Pattern H
	from Pattern LO verbs			
	2-mora stem perfective			Pattern O
	otherwise			Pattern L
<i>dōg^ε</i>	"cook"	→	<i>dōgub^ɔ</i>	
<i>nōk^{ε/}</i>	"take"	→	<i>nōkír^ε</i>	
<i>dīgul^{ε/}</i>	"lay down"	→	<i>dīgulóg^ɔ</i>	
<i>mè⁺</i>	"build"	→	<i>mēeb^ɔ</i>	
		→	<i>mèédím-tāa⁼</i>	"fellow-builder"
<i>sòη^ε</i>	"help"	→	<i>sòηír^ε</i>	
<i>dìgin^ε</i>	"lie down"	→	<i>dìginug^ɔ</i>	
<i>zàañsim^m</i>	"dream"	→	<i>zàañsúη^ɔ</i>	

Most segmentally irregular gerunds formed from root verbs are tonally regular. Agent nouns and deverbal adjectives 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

-d- is not always present, being omitted regularly after certain longer verb stems. With nouns and adjectives derived from Pattern LO verbs, forms with retained *d* (even when it is assimilated into a cluster as *-mn-* or *-nn-*) are Pattern O whereas those without it are Pattern L. The *-d-* is dropped in the sg and the cb, but not the pl, of agent nouns derived from 3-mora *s*-stem verbs, resulting in a regular change of tone Pattern within a single flexional paradigm:

pò'us^a *pō'usidib^a* *pò'us-* "worshipper"

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 [2.2](#), with its complete suppression before certain particles ("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.)

There is some evidence of a closer juncture between proclitic words and following hosts than between word-forms capable of ending a phrase and following dependents, including enclitics *other* than Liaison Words; however, finite verb forms often behave in this regard as if they were proclitic.

Thus, in segmental sandhi, proclitics and finite verb forms ending in a fronting diphthong show monophthongisation phrase internally, whereas this change does not take place with noun singular forms before uncompounded modifiers, or even before the article *lā*^{+/}:

<i>sāḡñ lā</i>	"the blacksmith"	
<i>sàñ-kàḡñ</i>	"this blacksmith"	
<i>Ò sù'v lór.</i>	"She owns a lorry."	<i>sū'e</i> ^{ya/} "own"
<i>Lì nàa nē.</i>	"It is finished."	<i>nāe</i> ^{+/} "finish"

Tone sandhi in a number of respects suggests a similar distinction [8.3](#) [8.4](#), but the tonal phenomena cannot be accounted for in purely phonological terms and probably reflect historical developments connected with Apocope rather than any synchronic differences in juncture.

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 ^o and the post-imperative 2pl *subject* pronoun ^{ya} 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 [8.2.2.1](#). In interlinear glosses Prosodic Clitics are written as ⁺∅, while these Liaison Enclitics are written ₋∅.

8.1 Prosodic Clitics

All three Prosodic Clitics⁶ cause lowering of short LF-final *ɪ ʊ* 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 *-mɪ* and *-mʊ* 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^m</i>	"medicine"	SF <i>tìum</i>	LF <i>tīumm</i>	← * <i>tìumō</i>
<i>dāam^{m/}</i>	"millet beer"	SF <i>dāam</i>	LF <i>dāamm</i>	← * <i>dāamú</i>
<i>vōm^{m/}</i>	"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 [8.2.1](#) [8.2.2](#).

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>	"waist"	SF <i>sīa</i>	LF <i>sīaa</i>	← * <i>sīəga</i>
but	<i>dà'a⁼</i>	"market"	SF <i>dà'a</i>	LF <i>dā'a</i>	← * <i>dà'agā</i>
	<i>bāa⁼</i>	"dog"	SF <i>bāa</i>	LF <i>bāa</i>	← * <i>bāaga</i>
	<i>kū·ó⁼</i>	"kill him"	←	<i>kū⁺</i> "kill" + ^o "him/her"	SF/LF [k ^h ʊ:]

6) The concept of Prosodic Clitics is also useful in describing the syntax of negation [29.3](#) and in determining the structure of complex clauses [24.2](#). The Negative Clitic corresponds to an actual segmental clitic in Mooré, which uses *ka* as negative particle before the verb along with clause-final *ye*. Similarly, segmental vocative and interrogative clitics are common in West Africa.

The term "Prosodic Clitic" admittedly begs the question as to the origin of this behaviour. However, for clitic-like elements cross-linguistically which lack segmental form of their own see Spencer and Luís 2012: 5.5.1 on Tongan "definitive accent." Rotuman ([Temathesis in Rotuman](#), Hans Schmidt 2003) has a much discussed system with some analogies to Apocope. The unusual Cameroonian Bantu language Nen (Nurse and Phillipson pp283ff) deletes word-final vowels unless the word has the underlying final tones LH, not only before vowel-initial words, but also before pause.

The **Negative Prosodic Clitic** appears at the end of a clause containing a negated or negative verb [19.5](#). Superscript Notation [2.2.1](#) 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 kǎ' nóbìrē +∅. "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.

Lì kǎ' dūkó +∅. "It's not a pot."
3INAN NEG.BE pot:SG NEG.

Unlike short *ɪ ʊ*, long final *ɪɪ ʊʊ* are not lowered:

Bà à nē mólì. "They are gazelles."
3PL COP FOC gazelle:PL.

Bà kǎ' mólì +∅. "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, Jagger p18.)

Ṃ bīiga +∅! "My child!"
1SG child:SG VOC!

Ṃ bīise +∅! "My children!"
1SG child:PL VOC!

Pu'aa, bɔ ka fu kaasida?

Pɔ'āa +∅, bó kà fù kāsídà +∅?

Woman:SG VOC, what and 2SG cry:DIPF 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 niŋida

dāy ɔ̀nì àñ yàddā-níŋìdā +∅

man:SG REL.SG COP faith-doer:SG VOC

"You man, who are a believer!" (1 Cor 7:16)

The **Interrogative Prosodic Clitic** ends 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^ɛ*)."
 3INAN COP FOC leg:SG.

Ànó'ɔ̀nì ∅ ñyē nóbìrè +∅? "Who saw a leg?"
 Who CAT see leg:SG CQ?

Lì à nē nóbìrèè +∅? "Is it a leg?"
 3INAN COP FOC leg:SG PQ?

Lì à nē dōk. "It's a cooking pot (*dōk^ɔ*)."
Ànó'ɔ̀nì ñyē dōkà? "Who saw a pot?"
Lì à nē dōkò? "Is it a pot?"

Lì à nē kōk. "It's a chair (*kōk^a*)."
Ànó'ɔ̀nì ñyē kúkà? "Who saw a chair?"
Lì à nē kúkàa? "Is it a chair?"

Lì à nē gbīgim. "It's a lion (*gbīgim^{nɛ}*)."
Ànó'ɔ̀nì ñyē gbígìmnɛ? "Who saw a lion?"
Lì à nē gbígìmnɛɛ? "Is it a lion?"

The 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(*kōk^a*)?"
Ànó'ɔ̀nì ñyē yīrɛ? "Who saw a house(*yīr^{ɛ/}*)?"
Ànó'ɔ̀nì ñyē dɔ̀ɔ̀gò? "Who saw a hut (*dɔ̀ɔ̀g^ɔ*)?"
Ànó'ɔ̀nì ñyē mólì? "Who saw gazelles(*mólì⁺*)?"
Ànó'ɔ̀nì ñyē bédugú? "Who saw a lot (*bédugū^{+/}*)?"

The Interrogative Prosodic Clitic induces a tonal change in the preceding LF. Kusaal is cross-linguistically unusual⁷ 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 L Raising 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 5.4.**

Ànɔ́'ɔ̀nì_ø ñyḗ bà bìiga †ø?
 Who CAT see 3PL child:SG CQ?
 "Who saw their child (bīig^a)?"

Ànɔ́'ɔ̀nì ñyḗ bíigà?	"Who saw a child?" tonally identical to
Ànɔ́'ɔ̀nì ñyḗ sù'ugà?	"Who saw a knife (sù'ug ^a)?"
Fù bɔ́ɔ̀d bɔ́?	"What (bɔ́ ⁺) do you want?"
Ànɔ́'ɔ̀nì ñyḗ zṹéyà?	"Who saw hills (zṹéya ⁺)?"

Similarly with Pattern LO verbs in the irrealis mood:

M̃ ná bɔ́dɪg.	"I will get lost."
M̃ ná bɔ̀dɪgɛɛ?	"Will I get lost?"

With 2-mora stem Pattern H verb base forms:

Ò p̄ gɔ́sɛ.	"She didn't look"
Ò p̄ gɔ́sɛ̀ɛ?	"Didn't she look?"
Ò p̄ dɔ́gɛ.	"She didn't cook."
Ò p̄ dɔ́gɛ̀ɛ?	"Didn't she cook?"

7) This is not uncommon in West Africa, however: see, for example, Jagger pp513, 525 on Hausa. Hausa also shows raising of the pitch of the last H tone preceding the fall in polar questions.

8.1.1 Presubject Long Forms

There is often a pause after any element which precedes a clitic subject pronoun. Nevertheless, examples occur which are probably to be explained as Liaison before subject pronouns:

Fù ná kũl bēog. "You'll go home tomorrow."
2SG IRR go.home tomorrow.

but *Bēogú fù ná kũl.* "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:

Buŋ ya'a kpi be'ede, ba siido ne be'ed.
Bùŋ yá' kpi bē'ede [ʔbē'edi], bà sìid·ō̄ ∅ nē bē'ed.
 Donkey:SG if die bad:PL, **3PL** flay:DIPF **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 *bēdegv* for *bēdv̄ḡ⁺* "a lot", and equally consistently has final *-ɔ* in *bɔzugɔ* for *b̄ɔ z̄uḡɔ* "because", *dinzugɔ* for *d̄in z̄uḡɔ* "therefore" and *alazugɔ* for *àlá z̄uḡɔ* "therefore." This phenomenon is thus best regarded as an idiosyncratic derivational formation for conjunctions.

Ka o kaas bēdegv. "And he wept greatly." (Genesis 27:38)
Kà ò k̄aas bēdv̄ḡ.
 And **3AN** weep great:ADV.

bɔzugɔ ba zi' onɛ tumi m la naa.
b̄ɔ z̄uḡɔ, bà z̄i' ɔ̀nì t̄òm̄ m l̄ā n̄á +∅.
 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 enclitic	n^{ε}	17.3
Remoteness marker	n^{ε}	27.1.1
Postposed 2pl subject pronoun	ya	25.2.3

The Locative enclitic attaches directly to noun words; the Remoteness 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.

Position 2:

all bound personal pronoun objects [16.3.1.1](#)

	<u>Singular</u>	<u>Plural</u>
1st	m^a	tl^+
2nd	p	ya^+
3rd an	$^o [v]$	ba^+
3rd inan	l^+	

The pronouns either attach directly to a verb word or after either of the Position 1 clitics, Remoteness marker n^{ε} or enclitic 2pl subject ya . They are written as separate words, except with the 3sg animate pronoun, which is altogether deleted by Apocope; the preceding host-final rounded vowel mora is written $\cdot o$ [1.3](#).

These words prevent Apocope applying to the preceding word, which retains its final affix vowel in **downranked** form with loss of quality contrasts. (See further [2.2.2](#).)

The downranked vowel is not epenthetic and occurs where epenthesis does not:

	<i>dùm^m</i>	"bite"			
		+ <i>ba⁺</i> "them"	→	<i>dùmɪ bā</i>	"bite them"
but		+ suffix <i>-b^{ɔ̄}</i>	→	<i>dūm^{mɔ̄}</i>	gerund "biting"

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 ^o "him/her" with which it fuses to create a long vowel *·o-o* [ʊ:] in the LF [8.2.1.1](#). There is no ATR harmony; the added vowel is always lax.

LFs ending in *-mm* behave as *-mV* before Liaison:

	<i>tùm^m</i>	"send"	+ <i>ti⁺</i> "us"	→	<i>tùmɪ tī⁺/</i>
			+ ^o "him/her"	→	<i>tùm·o^{-o}</i>
	<i>dāam^{m/}</i>	"beer"	+ <i>n^ɛ</i> "at, in"	→	<i>dāamín^ɛ</i>

LF-final *-iə -uə* remain as such before Liaison, not becoming *-ia -ua* [4.1.1](#).

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](#).

A back second mora of a long vowel is fronted to *e* [ɪ] before Liaison Words beginning with *y*, and *any* second mora is rounded to *·o* [ʊ] before the object pronoun ^o "him/her." In the LF, the 3sg animate object pronoun *o* combines with this preceding *o* to create long *·o-o* [ʊ:] after a consonant and three-mora diphthongs *V·o-o* [Vʊ:] after vowels [8.2.1.1](#).

Examples with host LFs ending in short vowels:

<i>kūk^a</i>	"chair"	+ <i>n^ɛ</i> "at, in"	→	<i>kūkɪ-n^{ɛ/}</i>
<i>dūk^{ɔ̄/}</i>	"pot"	+ <i>n^ɛ</i> "at, in"	→	<i>dūkɪ-n^ɛ</i>
<i>b̀̀̀̀d^a</i>	"want"	+ <i>ti⁺</i> "us"	→	<i>b̀̀̀̀dɪ tɪ⁺</i>
		+ <i>f^{ɔ̄}</i> "you"	→	<i>b̀̀̀̀dɪ f[/]</i>
		+ ^o "him/her"	→	<i>b̀̀̀̀d·ō^{-o/}</i>
<i>g̀̀̀̀sɪm^a</i>	"look!"	+ <i>y^a</i> "ye"	→	<i>g̀̀̀̀sɪmɪ-y^{a/}</i>
<i>p̄̄̄vɔg^a</i>	"inside"	+ <i>n^ɛ</i> "at"	→	<i>p̄̄̄vɔv-n^{ɛ/}</i>
<i>p̄̄̄vɔg^{ɔ̄/}</i>	"field"	+ <i>n^ɛ</i> "at"	→	<i>p̄̄̄vɔv-n^ɛ</i>
<i>ỳ̀̀̀vɔg^{ɔ̄}</i>	"grave"	+ <i>n^ɛ</i> "at"	→	<i>ỳ̀̀̀vɔv-n^{ɛ/}</i>
<i>k̀̀̀̀'əm^m</i>	"water"	+ <i>n^ɛ</i> "in"	→	<i>k̀̀̀̀'əmɪ-n^{ɛ/}</i>
<i>tùm^m</i>	"send"	+ <i>li⁺</i> "it"	→	<i>tùmɪ lɪ⁺/</i>
<i>tùm^m</i>	"send"	+ ^o "him/her"	→	<i>tùm·o^{-o}</i>

<i>Kà bà kía lī.</i>		"And they cut it."
<i>Kà bà pū kía lí.</i>		"And they didn't cut it."
<i>Kà bà kí·o.</i>	[kʰiʊ]	"And they cut him."
<i>Kà bà pū kí·ō-o.</i>	[kʰiʊ:]	"And they didn't cut him."
<i>Kà bà kía tī.</i>		"And they cut us."
<i>Kà bà pū kía tí.</i>		"And they didn't cut us."

ñyē⁺ "see"

<i>Kà bà ñyéε m.</i>		"And they saw me."
<i>Kà bà pū ñyéε mā.</i>		"And they didn't see me."
<i>Kà bà ñyéε f.</i>		"And they saw you."
<i>Kà bà pū ñyéε fō.</i>		"And they didn't see you."
<i>Kà bà ñyé·o.</i>		"And they saw her."
<i>Kà bà pū ñyē·ó-o.</i>		"And they didn't see her."
<i>Kà bà ñyéε bā.</i>		"And they saw them."
<i>Kà bà pū ñyéε báa.</i>		"And they didn't see them."

There is no ATR harmony when ^o "him/her" causes complete assimilation of the final mora of the preceding LF:

<i>zú·o</i>	"steal him" SF	[zuʊ]
<i>zū·ó-o</i>	"steal him" LF	[zuʊ:]

Three-mora vowel sequences reduce to two before Liaison:

dà'a⁼ "market" + *n^ε* "at, in" → *dā'an^{ε/}* [2.2.1](#)

Fusion verbs also monophthongise the LF final to a long vowel (showing the same loss of fronting as in phrase-level sandhi [8.5.3](#)):

<i>pāe^{+/}</i>	"reach"	+ <i>tl⁺</i> "us"	→	<i>páa tī^{+/}</i>
		+ <i>f^ɔ</i> "you"	→	<i>páa f^ɔ</i>
		+ ^o "him/her"	→	<i>pā·ó^o</i>
		+ <i>ya</i> "ye"	→	<i>pāe^{-ya/}</i>
<i>pīe^{+/}</i>	"wash"	+ <i>tl⁺</i> "us"	→	<i>pía tī^{+/}</i>
		+ <i>f^ɔ</i> "you"	→	<i>pía f^ɔ</i>
		+ ^o "him/her"	→	<i>pī·ó^o</i>
		+ <i>ya</i> "ye"	→	<i>pīe^{-ya/}</i>

<i>dūe</i> ^{+/}	"raise"	+ <i>t</i> ⁺ "us"	→	<i>dúe tī</i> ^{+/}
		+ <i>f</i> ^ɸ "you"	→	<i>dúe f</i> ^ɸ
		+ <i>o</i> ^o "him/her"	→	<i>dū·ó</i> ^{-o}
		+ <i>ya</i> ^{ya} "ye"	→	<i>dūe</i> ^{-ya/}

Invariable verbs with LFs ending in *-ya* make forms analogous to those of Fusion verb base forms. They drop the *ya*, monophthongise diphthongs and prolong preceding short vowels (see further [2.2.2](#)):

<i>sū'e</i> ^{ya/}	"own"	+ <i>l</i> ⁺ "it"	→	<i>sú'v lī</i> ^{+/}
<i>vūe</i> ^{a/}	"live"	+ <i>n</i> ^ε rem	→	<i>vūv-n</i> ^{ε/}

Similarly, the form

<i>àeñ</i> ^a	"be"	+ <i>o</i> ^o "him/her"	→	<i>àñ·o</i> ^{-o}
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occurs in

<i>Mane a o.</i>	"I am he." (Jn 18:5, 1976)
<i>Māni</i> _⏟ <i>∅</i> <i>áñ·o</i> _⏟ <i>∅</i> .	
1SG.CNTR CAT COP 3AN.OB.	

8.2.1.1 Fronting and rounding before Liaison Enclitics

LF-final vowels before Liaison Enclitics are subject to fronting and rounding changes analogous to those which arise word-internally in Long Forms and are often left contrastive by Apocope [6.3.2](#).

Despite the similarities, these changes arise from a different set of rules. The input is the synchronic LF resulting from the application of all the vowel changes which precede Apocope [6.3](#). The outcome is also different; for example, ATR harmony never applies within the diphthongs which result from Liaison.

The default is for LFs ending in root vowels before Liaison to show the same segmental form as before the Negative Prosodic Clitic, and for all short affix vowels to become *ɪ*.

Fronting of the second mora of a LF-final long vowel occurs before the 2pl object pronoun *ya*⁺ and before the enclitic 2pl subject pronoun *ya*.

The object pronoun induces 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>kū</i> ⁺		"kill"
<i>Kà bà kúe yā.</i>	[k ^h ʊɪja]	"And they killed you (pl)."
<i>Kà bà pū kúe yáa.</i>		"And they didn't kill you (pl)."
<i>kɪ̀à</i> ⁺		"cut"
<i>Kà bà kíe yā.</i>	[k ^h iɪja]	"And they cut you (pl)."
<i>Kà bà pū kíe yáa.</i>		"And they didn't cut you (pl)."
<i>ñyē</i> ⁺		"see"
<i>Kà bà ñyée yā.</i>		"And they saw you (pl)."
<i>Kà bà pū ñyée yáa.</i>		"And they didn't see you (pl)."
<i>pāe</i> ^{+/}		"reach"
<i>Kà bà páe yā.</i>		"And they reached you (pl)."
<i>Kà bà pū páe yáa.</i>		"And they didn't reach you (pl)."

Fronting before the enclitic 2pl subject pronoun ^{ya} is subject to a different rule: the preceding mora is invariably replaced by [ɪ], usually written *e* as normal. In most cases this has the same outcome as other fronting rules:

<i>kū</i> ⁺	"kill"	+ ya	"ye"	→	<i>kūe</i> ^{-ya/}	[k ^h ʊɪ]
<i>kɪ̀à</i> ⁺	"cut"	+ ya	"ye"	→	<i>kīe</i> ^{-ya/}	[k ^h iɪ]
<i>pāe</i> ^{+/}	"reach"	+ ya	"ye"	→	<i>pāe</i> ^{-ya/}	

However, the replacement also affects front vowels:

<i>bè</i> ⁺	"be"	+ ya	"ye"	→	<i>bēe</i> ^{-ya/}	[bɛɪ] written <i>bei</i>
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Rounding of the second mora of the second mora of a LF-final long vowel occurs before the 3sg animate object pronoun ^o[ʊ] "him/her", before which the default LF-final short *ɪ* also becomes [ʊ], written *o* [2.3](#).

The rule for second morae differs from the word-internal rounding rule operative in the LF before **kkv* **ηηv* [6.3.2](#): the second mora is invariably replaced by [ʊ], even if it was rounded and/or tense: there is no ATR harmony.

<i>zū</i> ⁺	"steal"	+ °	"him/her"	→	<i>zū·ó</i> ⁻⁰	SF [zuσ]	LF [zuσ:]
<i>ñyē</i> ⁺	"see"	+ °	"him/her"	→	<i>ñyē·ó</i> ⁻⁰	SF [j̃ɛσ]	LF [j̃ɛσ:]
<i>dì</i> ⁺	"eat"	+ °	"him/her"	→	<i>dì·ó</i> ⁻⁰	SF [dɪσ]	LF [dɪσ:]
<i>kìà</i> ⁺	"cut"	+ °	"him/her"	→	<i>kì·ó</i> ⁻⁰	SF [kʰiσ]	LF [kʰiσ:]
<i>pāe</i> ^{+/}	"reach"	+ °	"him/her"	→	<i>pā·ó</i> ⁻⁰		
<i>pīe</i> ^{+/}	"wash"	+ °	"him/her"	→	<i>pī·ó</i> ⁻⁰		
<i>dūe</i> ^{+/}	"raise"	+ °	"him/her"	→	<i>dū·ó</i> ⁻⁰		

After a consonant a LF-final short *i* becomes [σ], also written *·o*, before °; when the pronoun itself appears in its LF the two [σ] vowels combine as long [σ:]

bòɔd^a "want"

The LF long vowel behaves as one syllable tonally with regard to Levelling [5.2](#):

M̀ bɔɔd·ō. "I love him/her." [ɱbɔ:dσ]
M̀ pō bɔɔd·ó-o. "I don't love him/her." [ɱpʰσbɔ:dσ:]

Thus the SFs of both ^ya and °, like Prosodic Clitics, have segmental effects on the form of the preceding word despite having zero as their own Short Forms [8](#).

For some speakers, rounding of unrounded long vowel second morae and of the default LF-final short vowel *i* takes place also before the 2 sg object pronoun *f* "you":

Kà bà kíə f. "And they cut you (sg)."
 or *Kà bà kíó f.*

Kà bà ñyéé f. "And they saw you (sg)."
 or *Kà bà ñyéó f.*

Kà bà páa f. "And they reached you (sg)."
 or *Kà bà páv f.*

M̀ gbáñ'a f. "I've grabbed you (sg)."
 or *M̀ gbáñ'v f.*

Rounded forms are invariable in the 1996 NT version, though 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.

8.2.1.2 Allomorphy of the subject pronoun ^{ya}

The enclitic 2nd Person Plural Subject pronoun ^{ya} adopts the allomorph *-ní-* before Liaison, both before pronoun objects and before *àlá*⁺ "thus" 19.4. The pronoun was historically **ɲa*, which regularly became **yã* 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 2.2. When followed by a Liaison word, the vowel *a* was not deleted but became *ɪ*, before which *ɲ* became *n-*. (A similar development has occurred with the initial consonants of *nìŋ*^ɛ "do" = Toende Kusaal *ěŋ*, the locative enclitic *n*^ɛ ~ *nĩ*^{+/} = Toende *-ɪ*, and *nìe*⁺ "appear" = Toende *yěe*.)

Dā dõllɪ_ yá ^{+ø!} "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.

Sīdɪbā ^{+ø,} *nòŋɪmī-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 ^{+ø,} *sjàkɪmī-ní_ yà dū'adɪb 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 àlá! "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 l̀ t̀ yà bà</i>	16.3.1.1
personifier clitics	<i>à ñ m̀</i>	16.6
<i>ànó'òñ^ε</i> "who?"		16.3.1.4

along with all words beginning with

number prefixes	<i>à bà bù</i>	14.3
manner-adverb prefix	<i>à</i>	14.2

All these words have an initial Fixed L Toneme [8.3.1](#).

Two other particles of the underlying form *n* are also Liaison Words:

Nominaliser	<i>ñ</i>	28
Catenator	<i>n</i>	23.1

Clause Nominaliser *ñ* is Fixed-L, but VP Catenator *n* has no toneme. Nominaliser-*ñ* is bound to the left as well as right. Catenator-*n* is bound to the right but may follow a pause; even so it cannot be utterance-initial.

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 ^{ya} equally before all Liaison Words [8.2.1.2](#), and in the *lack* of vowel lengthening before non-enclitic Liaison Words of words 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 *ñ* and with the VP Catenator *n* (see below), this phenomenon is very limited in my informants' speech. It is only invariable in the case of a personal pronoun 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 Zugso bi ba tuuma a si'em la
bàni nà yēl Zūg-sób_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 tuuma*.)
 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'òñ^ε* "who?" [16.3.1.4](#), the manner-adverb prefix and the Personifier clitic the LF-final vowel is *ι* (*υ* after a velar preceded by a rounded vowel):

Ò nìjí_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 gbáñ'e_À-Dàyūug
 and **3PL** seize **PERS-rat:SG**

However, the verb *àęñ^a* "be something" always appears as *àañ*, not *àeñ*.

Ka fù aan anɔ'ɔnɛ? "And who are you?" (Jn 1:19)
Kà fù áań ànɔ'ɔnɛ ^{+∅?}
 And **2SG COP** who **CQ?**

Before the Number prefix *a-* the pre-Liaison vowel is instead *-a*:

Ṁ mór nē bīisá_ àtáń'. "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 L Raising):

Nū'-bíbìs álá kà fù ñyētá ^{+∅?}
 hand-small:**PL** **NUM**:how.many and **2SG** see:**DIPF** **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 bīig. "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.

This distinctive sandhi behaviour before the Number prefix *a-* as opposed to all other vowel-initial Liaison Words (even *ò*) can be explained historically. The number prefix originated as **ŋa*, the old *r^ɛ|a⁺* Class agreement [14.3](#). Original word-internal **ŋ* has disappeared completely throughout Western Oti-Volta (synchronic non-initial *ŋ* resulting always from **mg* or **ng* → *ŋŋ*), whereas word-medial *y w* survive in many contexts. Initial **ŋ* preceding unstressed vowels might be expected likewise to have disappeared early historically; and indeed in Dagbani, the number prefix is *a-* even though root-initial *ŋ* is preserved in full words (*ŋarin* "boat", Kusaal *àńron*².) Sandhi

effects may outlive complete phonetic disappearance of a consonant, as with the French "*H aspiré*." The data could be thus accounted for by supposing that **ŋa* 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*. However, putting this in synchronic phonological terms would be methodologically suspect in view of the absolute neutralisation (Kiparsky 1982) that has taken place, and would add nothing descriptively.

8.2.2.1 Particles of the form *n*

There are two extremely common particles with the underlying form *n* which are always bound to the right: the Nominaliser within *ñ*-clauses 28, and the VP Catenator 23.1. Both particles are Liaison Words, but appear in the form *n* preceded by a modified long form only in a minority of written materials, and even then, not consistently. My informants drop the *n* itself, so that the form of the preceding word alone signals the presence of these particles, except in the very common special case where they follow proclitic personal pronouns, where special fused forms result. This is also the commonest pattern in texts, and in KB the vast majority of instances of *n* follow foreign proper names, with most of the remainder following forms with Apocope Blocking. However, some older materials show *n* frequently in other contexts also, with or without a preceding LF-final reduced affix vowel. Segmentally, the two particles behave in a very similar way in Agolle Kusaal, but they differ tonally, and Toende Kusaal has *segmentally* different forms, using *ne* for the Nominaliser and zero for the Catenator.

Even texts which use *n* frequently nearly always show *e* or *i* after preceding nasal consonants, presumably by dissimilation. This may indicate that the varying spellings of the particles after consonants originally all represented high nasalised vowels, with syllabic nasals as allophones, but the vowels are not now nasalised in my informants' speech.

Nominaliser-*ñ* is bound to the left as well as right, but Catenator-*n* can follow a pause, so that it is not always preceded by a modified Long Form. In such cases it always appears as a syllabic nasal assimilated to the position of articulation of the following consonant, and is written *n*.

I will follow my informants' usage and the texts throughout; the position of the particles is marked \emptyset in interlinear glossing in cases where they lack any surface segmental realisation.

Written materials confirm that these particles are Liaison Words, as preceding forms preserve LF geminate consonants before the affix vowel, e.g.

*ya zuobid wusa **kalli** an si'em*

yà zūébíd wōsa 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)

*tuum kanε ka m **tummi** tisid Wina'am la.*

tùum-kànι kà m túmmī_ ∅ tísìd Wínà'am lā

work-**REL.SG** and **1SG** work:**DIPF CAT** give:**DIPF** God **ART**

"The work which I do for God" (Rom 15:17)

8.2.2.1.1 Nominaliser-*ṅ*

The post-subject clause nominaliser *ṅ* always has a L toneme not subject to L Raising 7.4, causing a preceding M toneme to become H even when the particle has no segmental realisation itself. The particle combines with a preceding pronoun subject to produce a special set of pronouns 16.3.1.1.

Note the contrasts in

mán zàb nà'ab lā

1SG:NZ fight chief:**SG ART**

"I having fought the chief." (*ṅ*-clause)

Mānι_ ∅ záb nà'ab lā.

1SG.CNTR CAT fight chief:**SG ART**

"I have fought the chief." (*n*-focus)

tīnámì_ ∅ zàb nà'ab lā

1PL NZ fight chief:**SG ART**

"we having fought the chief" (*ṅ*-clause)

Tīnámì_ ∅ záb nà'ab lā.

1PL CAT fight chief:**SG ART**

"We have fought the chief." (*n*-focus)

After words with Apocope Blocking, dropping of the /n/ segment leaves the tonal change of preceding M to H as the only sign of the presence of the particle:

Dāy lā záb ná'àb lā.

man:**SG ART** fight chief:**SG ART**

"The man has fought the chief."

Dāy lā gós ná'àb lā.

man:**SG ART** look.at chief:**SG ART**

"The man has looked at the chief."

but *dāy lá_∅ zàb nà'ab lā*
 man:SG ART NZ fight chief:SG ART
 "the man having fought the chief"

dāy lá_∅ gōs ná'àb lā
 man:SG ART NZ look.at chief:SG ART
 "the man having looked at the chief"

8.2.2.1.2 Catenator-*n*

After pause WK realises this particle as a syllabic nasal assimilated to the position of the following consonant. Elsewhere, he has preceding LFs with the loss of final vowel contrast, while the particle itself has no segmental realisation:

Kà ò zó_∅ kēŋ nā. "And he came running"
 And 3AN run CAT come hither.

After a final short vowel which is not a non-clitic word root vowel, WK has a consonantal nasal, assimilated to the position of the following consonant.

This pattern is the commonest in texts also, but forms also appear with the *n* preserved after the modified LF, and with *n* after a SF.

Zero also occurs as a realisation of this particle (as always in Toende Kusaal), particularly after verbs often used as "auxiliaries"; at least some preverbal adverbs probably originated in this way. In other cases, the zero realisation is significantly more frequent in the NT text after words ending in *-m -n -l*, perhaps reflecting complete assimilation to the preceding consonant, and also after words ending in vowels other than non-clitic short root vowels, i.e. after words ending in long vowels or with Apocope Blocking.

The *n* particle of non-verbal predicators [22](#) is identical to the VP Catenator *n* phonologically, and will be regarded as a specialised use of the same particle:

Bō_∅ lá +∅? "What's that?"
 What CAT that CQ?

This particle *n* has no toneme itself; the LF-final toneme before it is M after a M toneme and L otherwise.

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 p̄ b̄w̄dī b̄áa.</i>	"I don't love them."
cf	<i>M̄ p̄ b̄w̄dī f̄s.</i>	"I don't love you."
	<i>Kà m̄ p̄ zábī b̄áa.</i>	"And I didn't fight them."
cf	<i>Kà m̄ p̄ zábī f̄s.</i>	"And I didn't fight you."
	<i>Àn'w̄nì kúv bá?</i>	"Who has killed them?" SF <i>kúv bā</i>

The Locative enclitic n^ϵ does not alter the preceding toneme:

<i>p̄v̄g^a</i>	"inside"	+ n^ϵ	"at"	→ <i>p̄v̄g^v-n^ε/</i>	(Pattern O)
<i>b̄iig^a</i>	"child"	+ n^ϵ	"at"	→ <i>b̄iigⁱ-n^ε/</i>	WK
<i>m̄'ar^ε</i>	"dam, lake"	+ n^ϵ	"at"	→ <i>m̄'arⁱ-n^ε/</i>	
<i>p̄w̄g^ɔ/</i>	"field"	+ n^ϵ	"at"	→ <i>p̄w̄g^u-n^ε</i>	
<i>ȳaad^ε</i>	"graves"	+ n^ϵ	"at"	→ <i>ȳaadⁱ-n^ε/</i>	WK
<i>k̄v̄d̄ib^a</i>	"killers"	+ n^ϵ	"at"	→ <i>k̄v̄d̄ibⁱ-n^ε/</i>	WK
<i>d̄à'a⁼</i>	"market"	+ n^ϵ	"at"	→ <i>d̄ā'a-n^ε/</i> for <i>d̄ā-ā-n^ε/</i> 5.2	

Note that in *dūk lā p̄v̄g^v-n^ε* "inside the pot", *p̄v̄g^a* "inside" shows the normal LF-final M after L/H despite being changed by M Raising [8.4](#).

The Remoteness marker n^ϵ and the postposed 2pl y^a both impose M tone on the preceding LF-final mora, regardless of its intrinsic toneme:

	<i>d̄v̄g^ε</i>	"cook"	+ n^ϵ	rem	→ <i>d̄v̄g^v-n^ε/</i>
	<i>b̄̀d̄ig^ε</i>	"lose"	+ n^ϵ	rem	→ <i>b̄̀d̄igⁱ-n^ε/</i>
	<i>ȳād̄ig^ε/</i>	"scatter"	+ n^ϵ	rem	→ <i>ȳād̄igⁱ-n^ε/</i>
dipf	<i>k̄v̄d^a/</i>	"kill"	+ n^ϵ	rem	→ <i>k̄v̄dⁱ-n^ε/</i>
dipf	<i>ȳād̄ig^da</i>	"scatter"	+ n^ϵ	rem	→ <i>ȳād̄ig^di-n^ε/</i>

Dā d̄̀ll̄i-yá! "Follow ye not!"

m̄ε⁺ "build" + n^ϵ rem → *m̄ēε-n^ε/* for *m̄ē-ē-n^ε/* [5.2](#)

Dāy lā m̄ēε-n "The man built (earlier today.)"

Man:SG ART build-REM

Before enclitic object pronouns, all indicative Base Forms without the Independency marking tone overlay [19.6.1.1](#) change LF-final LM to LL and LF-final MM to MH.

Verb Base Forms without tone overlay:

<i>b̀̀dɪg^ɛ</i>	"lose"	+ <i>m^a</i> "me"	→ <i>b̀̀dɪgɪ m^a</i>
<i>dì⁺</i>	"eat"	+ <i>l⁺</i> "it"	→ <i>dìl l̄⁺/</i>
<i>yāɪgɪ^{ɛ/}</i>	"scatter"	+ <i>m^a</i> "me"	→ <i>yāɪgɪ́ m^a</i>
<i>dūg^ɛ</i>	"cook"	+ <i>l⁺</i> "it"	→ <i>dūgɪ́ l̄⁺/</i>
<i>ḡs^ɛ</i>	"look"	+ ^o "him/her"	→ <i>ḡs-ó^{-o}</i>
<i>kū⁺</i>	"kill"	+ <i>m^a</i> "me"	→ <i>kúv m^a</i> for <i>kūv m^a</i> 5.2

Pattern H Fusion verb Base Forms behave exactly like CVV-stems:

<i>pāe^{+/}</i>	"reach"	+ <i>m^a</i> "me"	→ <i>páa m^a</i>
<i>dīe^{+/}</i>	"get"	+ <i>ba⁺</i> "them"	→ <i>díə bā^{+/}</i>

After other verb forms, the object pronouns do not alter the host tonemes:

<i>zàbɪd^a</i>	"fights"	+ <i>m^a</i> "me"	→ <i>zàbɪdī m^{a/}</i>
<i>dīt^a</i>	"eats"	+ <i>l⁺</i> "it"	→ <i>dītī l̄⁺</i>
<i>yāɪgɪ́d^a</i>	"scatters"	+ <i>ba⁺</i> "them"	→ <i>yāɪgɪ́dī bā⁺</i>
<i>kūvd^{a/}</i>	"kills"	+ <i>m^a</i> "me"	→ <i>kūvdí m^a</i>
<i>sū'e^{ya/}</i>	"own"	+ <i>l⁺</i> "it"	→ <i>sū'ú l̄^{+/}</i>

The sequence *·o-o* resulting from the LF of the 3sg animate pronoun ^o fusing with the vowel before Liaison behaves as one syllable tonally in Levelling [5.2](#):

<i>Ṁ b̄́ɔd·ō.</i>	"I love him/her."	[Ṁbɔ:d̄ɔ]
<i>Ṁ p̄́ b̄́ɔd·ó-o.</i>	"I don't love him/her."	[Ṁpʰɔbɔ:d̄ɔ:]

Irrealis mood forms of Pattern LO verbs:

<i>Ò nà b̄́dɪgɪ m.</i>	"He will lose me."
<i>Ò kù b̄́dɪgɪ má.</i>	"He will not lose me."
<i>Ò nà b̄́dɪgɪ bá.</i>	"She will lose them."
<i>Ò kù b̄́dɪgɪ b́áa.</i>	"She won't lose them."
<i>Ò kù b̄́dɪgɪdɪ 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 mood Pattern LO and indicative Pattern H thus contrast before object pronouns in 2-mora stems:

zābe + *m*^a → *zābi m*^{a/} "...will fight me"
dōge + *m*^a → *dōgí m*^a "...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 [5.4](#).

Base forms without tone overlay:

Kà tì dí_ bā dīb. "And we ate their food."
 And **1PL** eat **3PL** food.

Kà ò bódigì_ bā bùmí. "And he lost their donkeys."
 And **3AN** lose **3PL** donkey:PL.

Kà ò dōgí_ bā dīb. "And he cooked their food."
 And **3AN** cook **3PL** food.

Dynamic imperfective without tone overlay:

Kà tì dítí_ bā dīb. "And we were eating their food."
 And **1PL** eat:DIPF **3PL** food.

Nouns before Fixed-L Liaison Words end in H toneme as expected; I was not able to elicit such forms easily from informants, but there are a few examples in the 1996 audio NT.

bane na yel Zugsobi ba tuuma a si'em la
bàni nà yēl Zūg-sóbí bā 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)

Before Nominaliser-*h* a final M tone becomes H:

dāy lā_ø dāa zāb nà'ab lā
 man:SG **ART NZ TNS** fight chief:SG **ART**
 "the man's having fought the chief"

Before Catenator-*n* the final toneme of a modified LF is M after M toneme and L otherwise. L Raising follows if and only if the *preceding* word would induce it [8.3](#).

M̄ nók sú'ugò_ø kjà 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 Initial L Raising

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. The change cannot take place if the L toneme is Fixed-L [8.3.1](#); in that case any preceding M toneme necessarily becomes H instead [5.4](#).

L Raising follows

all words, clitic or free, ending in M toneme

all other words which are not proclitic *except*

Verb Base Forms without the Independency tone overlay [19.6.1.1](#)

Words with less than three tonemes, affected by M Raising [8.4.1](#)

Words ending in an affix vowel with H toneme

bound subject pronouns [19.6.1.2](#) (including ellipted subjects [24.1.5.2](#))

ò lì bà *except* preceding Independency marking

m̄ fù tì yà *except* preceding Independency marking after *yē*

The VP Catenator *n* is transparent to L Raising [8.2.3](#).

The Number and the Manner-adverb prefixes *à-* [14.3](#) [14.2](#) are followed by L Raising of the stem, probably reflecting an origin in noun class agreement flexions with M toneme, like the bound subject pronouns.

L Raising crosses phrase boundaries if there is no intervening pause, but it does not occur after conjunctions [24.1.3](#) or pre-subject adjuncts [25.1.1](#).

Bà tìs ná'àb lā búj.

3PL give chief:**SG** **ART** donkey:**SG**.

"They gave the chief a donkey (*bùj*^a)."

Bà ñwè' ná'àb lā súḡā. "They beat the chief well (*sùḡā*^{+/-})."
3PL beat chief:**SG** ART good:**ADV**.

Raising is absent after words ending in an affix vowel with H toneme:

M̀ d̀iga lú yā. "My dwarfs have fallen down."
1SG dwarf:**PL** fall **PFV**.

but *M̀ yūḡumá lù yā.* "My camels have fallen down."
1SG camel:**PL** fall **PFV**.

L Raising examples, with *zàb*^ε "fight" *gōs*^ε "look at" *nà'ab*^a "chief":

Kà-clause, without Independency marking tone overlay; all subject pronouns are followed by raising; Base Forms are followed by raising only if ending in M:

Kà m̀ záb nà'ab lā. "And I've fought the chief."
Kà ò záb nà'ab lā. "And he's fought the chief."
Kà m̀ 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 L Raising; 3rd person pronouns are not followed by Raising:

M̀ záb ná'àb lā. "I've fought the chief."
Ò zàb ná'àb lā. "He's fought the chief."
M̀ gōs ná'àb lā. "I've looked at the chief."
Ò gòs ná'àb lā. "He's looked at the chief."

A tonal minimal pair with a contrast between the object enclitic *ba* "them", which is followed by L Raising, and the proclitic *bà* "they, their", which 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)

L Raising has arisen from **rightward M spreading** (H representing ML on a single mora [5.1](#).) With proclitics the only difficulty is with pronouns, which even when followed by L Raising are always L for my informants, though written with M in ILK and in Urs Niggli's materials. In current Agolle, they could here be regarded as followed by a **floating M toneme**. Floating tones could also account for SFs ending in H or L which are followed by L Raising; when an *affix* vowel is deleted by Apocope, its M toneme is left floating, while tonemes of stem-final morae (as in cbs or verb

Base Forms) are deleted altogether. However, it is more straightforward to specify the conditions for L Raising directly. Synchronically, L Raising after word-final L/H is primarily determined by grammatical category⁸. Flexionless singulars ending in L like *mà* "mother" *zɔ̀à* "friend" *du'átà* "doctor", and words with cbs remodelled on a L-final sg, like *lànnig* "squirrel" [9.2.2](#) distinguish a sg followed by L Raising from a cb which is not [9.7](#). The only Pattern LO Invariable verb with no suffix, *bè* "be somewhere/exist", is followed by raising. *Lèè* "but" is followed by raising when affected by Independency-marking [19.6.1.1](#) but it is not a verb, has no flexion, and has not undergone Apocope.

8.3.1 Fixed L tonemes

Certain words carry an initial (or sole) toneme which is invariably L, and is never subject to L Raising.

The Fixed-L words comprise all non-enclitic Liaison Words [8.2.2](#) except for Catenator-*n* [8.2.2.1.2](#), which is toneless, along with the linker particle *kà* "and":

proclitic personal pronouns	<i>m̀ f̀ ò̀ l̀ t̀ ỳ à̀ b̀</i>
personifier clitics	<i>à- ò- m̀-</i>
<i>àn'ò̀n</i> ^ε "who?"	
Nominaliser	<i>ò̀</i> 8.2.2.1.1
all words with number prefixes	<i>à- b̀à- b̀ò-</i>
manner-adverb prefix	<i>à-</i>
linker particle	<i>k̀à</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:

B̀à k̀òv̀d̀í_ b̀á. "They kill them."
3PL kill:DIPF 3PL.OB.

but *B̀à k̀òv̀d̀í_ b̀à b̀òv̀s.* "They kill their goats."
3PL kill:DIPF 3PL goat:PL.

L̀ì à_ ǹé_ à-d̀àal̀ó̀j. "It's a stork"
3INAN COP FOC PERS-stork:SG.

8) This is analogous to the "Consonant Mutations" of the Insular Celtic languages, where loss of word-final segments has caused what were once sandhi phenomena to become purely morphosyntactic processes. A similar but phonologically simpler development has occurred in South-Western Mande (Babaev, Kirill, "Zialo: the Newly-Discovered Mande Language of Guinea" LINCOS 2010, pp39ff.)

ba diib n yit na'ateŋ la na zug

bà **díib** ò yīt ná'-tēŋ lā nā zúg

3PL food NZ emerge:DIPF king-land:SG ART hither upon

"because their food came from the king's land" (Acts 12:20, 1996)

wuu saa naani iank ya nya'aŋ n ti paae ya tuona la.

wūu **sáa** ∅ nāani jǎŋk yà ñyá'aŋ n tí páe_yà tùəna lā

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 Initial M Raising

M Raising takes place exclusively within NPs and AdvPs. It occurs wherever L Raising would, with two exceptions: it does not follow contrastive pronouns (like *mān* "my") and it only follows free forms when they are dependents preceding the head.

Words beginning with M toneme are changed to a H-initial pattern, with any subsequent tonemes L throughout⁹. Uncompounded words *changed* by M Raising are only followed by L Raising or M Raising if they have more than two tonemes [8.4.1](#).

Pattern L and Subpattern HL words are not changed at all (except that L undergoes L Raising); Pattern H words beginning with H on a long vowel fluctuate.

M Raising follows any combining form ending in M toneme, regardless of whether the cb is pre-modifier or head.

Cb as head:

<i>bù-pìəlìg^a</i>	"white goat"	<i>bù-pāalìg^a</i>	"new goat"
<i>bī-púŋ-pìəlìg^a</i>	"white girl"	<i>bī-púŋ-pāalìg^a</i>	"new girl"
<i>n̄-pìəlìg^a</i>	"white hen"	<i>n̄-pāalìg^a</i>	"new hen"

Cb pre-modifier (*n̄ɔr^{ɛ/}* "mouth" cb *n̄-*, and *dīəs^{a/}* "receiver" pl *dīəsídìb^a*):

<i>n̄-dí'əs^a</i>	"chief's interpreter"
pl <i>n̄-dí'əsídìb^a</i>	

9) Unfortunately I did not think to check how words with M noun prefixes behave with M Raising. e.g *dāy lā tíntǎŋrìg* (?*tíntǎŋrìg*) "the man's mole (*tíntǎŋrìg^a*)."

Nothing like M Raising seems to be described in other Western Oti-Volta languages. Historically, it perhaps arose from dissimilation in overlong strings of H (Kusaal M) tones, like Meeussen's Rule in Bantu; the initial H of affected words would result from L Raising of original L. As with L Raising [8.3](#), Apocope has complicated the picture; M Raising *only* occurs after forms which have undergone Apocope [7.2.4](#).

M Raising follows any *dependent* free form which would be followed by L Raising, except for a contrastive personal pronoun.

It applies to *one* word only; this may be a cb.

Examples:

No M Raising after personal pronouns:

<i>m̀ bīg</i>	"my child" (<i>bīg</i> ^a)
<i>m̀ tìg</i>	"my tree" (<i>tìg</i> ^a)
<i>mān bīg</i>	"my child"
<i>mān tìg</i>	"my tree"
<i>m̀ gbīgum</i>	"my lion" (<i>gbīgum</i> ^{nε})
<i>m̀ yūgúm</i>	"my camel" (<i>yūgúm</i> ^{nε})

No M Raising after words which are not followed by L Raising:

<i>m̀ bĵēyá bīs</i>	"my elder same-sex siblings' children (<i>bīs</i> ^ε)"
<i>m̀ bĵēyá fūud</i>	"my elder same-sex siblings' clothes (<i>fūud</i> ^{ε/})"

M Raising after all other dependent free Noun Phrases:

<i>dāy bĵg</i>	"a man's child" (vs <i>dāy-bīg</i> ^a "male child")
<i>dāy tìg</i>	"a man's tree"
<i>nà'ab bĵg</i>	"a chief's child"
<i>dāy lā gbīgum</i>	"the man's lion"
<i>dāy lā yūgùm</i>	"the man's camel"

Unlike L Raising, M Raising occurs only *within* NPs and AdvPs; there is thus a tonal minimal pair between

Bà tìs ná'àb lā bĵg. "They've given (it) to the chief's child."
3PL give chief:**SG** ART child:**SG**. (M raising applied to *bīg*^a "child")

Bà tìs ná'àb lā bīg. "They've given the chief a child."
3PL give chief:**SG** ART child:**SG**. (No M raising applied to *bīg*^a)

It occurs regardless of the meaning or rôle of the preceding dependent:

mōcgu-n wábùg lā "the wild (in-the-bush) elephant (*wābug*^{ɔ/})"

M Raising does follow any free head before a dependent:

	<i>kūg-yínnì</i>	"one stone" with <i>yínnì</i> as adjective 16.4.2.1
but	<i>kūgʊr yīnní</i>	"one stone"
	<i>wābug lā</i>	"the elephant"
	<i>wābɪs pīga</i>	"ten elephants"
	<i>wābɪs pīga lā</i>	"the ten elephants"

M Raising applies sequentially, reflecting the substructure of NPs and AdvPs.

If a head + adjective compound becomes a cb before another adjective or a post-determining pronoun, M Raising applies after the first adjective on the basis of whether the preceding cb now ends in M, regardless of its intrinsic tonemes:

<i>bù-wōk</i>	"tall goat"
<i>nō-wók</i>	"tall hen"
<i>bù-wōk-píəlìg</i>	"tall white goat"
<i>bù-wōk-páalìg</i>	"tall new goat"
<i>nō-wók-píəlìg</i>	"tall white hen"
<i>nō-wók-pāalíg</i>	"tall new hen"

When M Raising applies to a the first component of an existing compound, the second component retains its M-Raising-induced pattern of initial H toneme followed by L tonemes even though the first element no longer ends in M toneme:

<i>bù-píəlìg</i>	"white goat"
<i>bù-pāalíg</i>	"new goat"
<i>nō-píəlìg</i>	"white hen"
<i>nō-pāalíg</i>	"new hen"
<i>dāy lā bú-píəlìg</i>	"the man's white goat"
<i>dāy lā bú-pāalíg</i>	"the man's new goat"
<i>dāy lā nō-píəlìg</i>	"the man's white hen"
<i>dāy lā nō-pāalíg</i>	"the man's new hen"

Contrast

<i>dōg-kánā</i>	"this pot" (<i>dōk</i> ^ɔ cb <i>dōg</i> - "pot")
[<i>sālɪma dúg</i> -]kànā	"this [golden pot]"

The order of successive applications of M Raising may also be revealed by the fact that uncompounded words with less than three tonemes affected by M Raising are not themselves followed by L or M Raising [8.4.1](#). Thus

[*fūug dɔ̀ɔ̀g*] "tent" (*fūug*^ɔ "cloth", *dɔ̀ɔ̀g*^ɔ "house")
pò'usug [*fúùg dɔ̀ɔ̀g*] (not *[*pò'usug fúùg*] *dɔ̀ɔ̀g*)
 "tabernacle" (*pò'usug*^ɔ "worship")

In *Lì kā'* [[[*dāy lā bîg*] *bīar*] *náàf*] *zōvre*.
 "It's not the man's child's elder-same-sex-sibling's cow's tail." WK
 (*bīg*^a "child" *bīar*^{ε/} "elder sib of same sex" *náàf*^ɔ "cow" *zōvr*^ε "tail")

the nesting results in alternating absence of M Raising; the two-toneme words *bîg náàf*, having been themselves affected by M Raising, are not *followed* by it.

The final vowel mora before the Locative enclitic *n*^ε always has M toneme, even when there is no Initial L Raising after the corresponding SF (see below):

dāy lā pɔ̀ɔ̀gū-n "in the man's field (*pɔ̀ɔ̀g*^ɔ)"
dāy lā púɔ̀gū-n "inside the man" (*púɔ̀g*^a "inside")
 like *dāy lā dɔ̀ɔ̀gū-n* "in the man's hut (*dɔ̀ɔ̀g*^ɔ)"

8.4.1 Tone raising after words with M Raising

Regardless of whether it has been subject to M Raising, the final element of a compound induces following L and M raising in accordance with the general rule [8.3](#), i.e. after all sg or pl forms except those ending *-í* or *-á* and after cbs ending in M:

n̄-wók díib "a tall hen's food" (*díib*^ɔ "food")
 like *bò-wók díib* "a tall goat's food"

An uncompounded word *affected* by M Raising is not followed by L or M Raising unless it has three tonemes or more.¹⁰

There is thus a difference in the tone sandhi following such words from that after Subpattern HL words [7.2.1.2](#) and Pattern L words changed to HL by L Raising.

Examples, using the frames "the man's (*dāy lā*) X has got lost (*b̀̀dɪg yā*)" and "my elder same-sex siblings' (*m̀̀ b̄jēyá*) X has got lost":

Pattern L and Subpattern HL, not subject to M Raising:

10) If L raising after sg/pl SFs is attributed to a following floating M tone [8.3](#), this could be restated as M Raising changing a following sequence of three tonemes beginning with M (including floating tonemes) to HLL. 3- and 4-mora stems would then retain the following floating tone. The rule would apply prior to the tonal changes induced by a following locative Liaison Enclitic.

<i>bùŋ</i> ^a	"donkey"	<i>Dāy lā búŋ bódìg yā.</i>
<i>àñrvŋ</i> ^ɔ	"boat"	<i>Dāy lā áñrùŋ bódìg yā.</i>
<i>dòɔg</i> ^ɔ	"house"	<i>Dāy lā dóòg bódìg yā.</i>
<i>à-gáùŋg</i> ^ɔ	"pied crow"	<i>Dāy lā gáùŋg bódìg yā.</i>

Pattern H and O nouns which have not undergone M Raising:

<i>wābug</i> ^{ɔ/}	"elephant"	<i>M bìēyá wābug bódìg yā.</i>
<i>bāŋ</i> ^a	"ring"	<i>M bìēyá bāŋ bódìg yā.</i>
<i>yūgvdir</i> ^ɛ	"hedgehog"	<i>M bìēyá yūgvdir bódìg yā.</i>

Pattern H and O nouns which have undergone M Raising; two tonemes:

<i>wābug</i> ^{ɔ/}	"elephant"	<i>Dāy lā wábùg bòdìg yā.</i>
<i>pɔɔg</i> ^{ɔ/}	"field"	<i>Dāy lā póòg bòdìg yā.</i>
<i>bāŋ</i> ^a	"ring"	<i>Dāy lā bánŋ bòdìg yā.</i>
<i>pūvg</i> ^a	"inside"	<i>Dāy lā púùg bòdìg yā.</i>

With more than two tonemes:

<i>yūgvdir</i> ^ɛ	"hedgehog"	<i>Dāy lā yúgvdir bódìg yā.</i>
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Words with initial H like *náaf*^ɔ "cow" fluctuate, probably by analogy with words with Subpattern HL like *à-gáùŋg*^ɔ, which are not subject to M Raising:

<i>náaf</i> ^ɔ	"cow"	<i>Dāy lā náàf bódìg yā.</i>
		<i>Dāy lā náàf bòdìg yā.</i>

8.5 Segmental contact phenomena

8.5.1 Consonant assimilation

Both the initial consonant and the emic nasalisation of the deictic *ñwà*⁺ "this" are lost when it appears as an enclitic after a word ending in a consonant:

<i>bīis ñwá</i>	"these children"	[bi:sa]
<i>zàam ñwá</i>	"this evening"	[za:ma]
but <i>py'ā ñwá</i>	"this woman" (e.g. as vocative)	[p ^h ɥāwǎ]

The initial *l* of the definite article *lā*⁺ assimilates totally to a preceding word final *-r*, and [r:] simplifies to [r]:

<i>yīr lā</i>	"the house"	[jira]
<i>pòkòǎñr lā</i>	"the widow"	[p ^h ɔk ^h ɔ:ra]

Toende Kusaal shows this assimilation after all final consonants (Niggli 2012). The 1976 New Testament translation (especially Mark) occasionally shows forms like *nidiba* for *nīdib lā* "the people."

Initial *n* of the focus particle *nē*⁺ 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 p ^h ɛ:l:ɛ]
<i>Lì sàñ'am nē.</i>	"It's spoilt."	[lɪ sǎ:m:ɛ]

Other accounts of Kusaal have taken this as a "progressive" flexion *-dɛ/tɛ*; in Toende Kusaal the assimilation of the equivalent particle *mɛ* is invariable after consonants (Niggli 2012), making this interpretation natural enough.

Final nasal consonants of proclitics, cbs and noun prefixes assimilate to the place of articulation of a following stop:

<i>dànkòŋ</i>	"measles"	[daŋk ^h ɔŋ]
<i>nīn-bámmā</i>	"these people"	[nimbam:a]

Before *s z* such word-final nasals are realised as [ŋ]:

<i>bōn-zíidìr</i>	"thing for carrying on head"	[bʊŋzi:dir]
<i>nàm zī'</i>	"still not know"	[naŋzɪ]

In the case of noun prefixes, where no unassimilated forms are available for control, I follow the traditional orthography in writing these nasals as *n* everywhere except before *p b m*, where I write *m*.

8.5.2 Loss of nasalisation

Word-final nasalised short vowels denasalise before a clitic with an initial nasal consonant (see on similar changes word-internally, [4.2.1](#)):

	<i>àñwá</i>	"like this"
but	<i>àwá nā</i>	"like this here"
	<i>kēñ⁺</i>	"come"
but	<i>kē nā</i>	"come hither"

Some unstressed *CVñ-* elements lose nasalisation even when the following consonant is not a nasal. Thus with the compounds of *sūñ^{p/}* "heart":

<i>sū-málsim^m</i>	"joy"
<i>sūñ-kpí'òŋ^ɔ</i>	"boldness"

the NT and other sources write *sukpi'oŋ* or *sukpi'euj* for the second word; similarly *supeen* "anger" for *sūñ-péèn^{ne}*. The loss of nasalisation here probably reflects the process of bleaching and phonological simplification which has created noun prefixes from some original Combining Forms [14.1.4](#). KB has restored the nasalisation in writing: *sunkpí'euj* "boldness", *sunpɛɛn* "anger."

In the case of the verb *àɛñ^a* "be something/somehow" there is loss of nasalisation before the focus particle *nē^{+/}* (for the loss of the *ɛ* in this verb see below [8.5.3](#)):

	<i>M̄ á nē dāy.</i>	"I'm a man."
but	<i>Lì àñ sújā.</i>	"It's fine."

Older written materials almost invariably write *àñ* when it occurs directly before a complement as *a* not *ann*, but KB consistently has *an* [ã] whenever the form is not followed by *nē^{+/}*.

8.5.3 Loss of fronting

Fronting diphthongs arise from the fronting effect of *y on the second mora of a short or long vowel [6.3.2](#), or from vowel fusion before underlying final *gɪ [6.3.1](#).

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](#):

aɛ	→ a	oɛ	→ o	uɛ	→ u
ae	→ aa			ue	→ uu
		ie	→ iə	ue	→ uə

	sāɛñ	"blacksmith"
	sāɛñ lā	"the blacksmith"
but	sàñ-kàṅā	"this blacksmith"

Ò sù'v lór.	"She owns a lorry."	sū'e ^{ya/}	"own"
Lì àñ súnā.	"It's good."	àɛñ ^a	"be" 21.2

Ti ya'a vve, ti vvnε tis Zugsoɓ la.

Tì yá' vūɛ, tì vú nē_∅ tís Zūg-sóɓ 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): *vūɛ*^{a/} "be alive"

Èñrɪgɪm_ ∅ pāa dɪ'átà.

Shift.along:**IMP CAT** reach doctor:**SG**.

"Shift along up to the doctor." (*pāe*^{+/} "reach")

Lì nàa nē.	"It is finished."	nāe ^{+/} "finish"
Dúə wēlá?	"[You] arose how?"	dūe ^{+/} "arise"
	(A morning greeting)	

See also the examples with Fusion verb Base Forms before Liaison at [8.2.1](#).

The SF of the negative verb *kā'e*⁺ "not be" loses the final *ɛ* before the particle *nē* or an object; *kā'e* only occurs VP-finally:

Sɔ' kae na nyanji dɔl zugdaannam ayi'...

Sɔ' kā'e_∅ ná ñyāñi_∅ dɔl zūg-dáàn-nàm àyí...

INDEF.AN NEG.BE CAT IRR prevail **CAT** follow head-owner:**PL NUM:two** ...

"Nobody can serve two masters." (Mt 6:24)

Dāy k̄'ə 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 k̄' 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 *k̄'*)

cf *Ò k̄' bīiga +∅.* "She is not a child."

3AN NEG.BE child:SG NEG.

Word-final *ia ua* are also realised as [iə] [uə] within phrases [4.1.1](#), but the orthography does not reflect this:

sīa lā

"the waist"

[siəla]

sàbùà lā

"the girlfriend"

[sabuela]

This fronting loss is regular in my informants' speech, but NT orthography very frequently writes fronting diphthongs:

voen

= *vōvn*

"would live" (Gal 3:21, 1996)

Kristo da faaen ti

= *Kristo dá fāañ tí*

"Christ saved us." (Gal 5:1)

ILK too has several instances of *m wa'e ne* "I'm going" for *m wá'a nē*. However, the audio version of the NT consistently shows monophthongisation. Even in the NT, *àeñ^a* "be something" always appears as *aa* and not *aae* before Liaison; while this might be due to lack of stress [2.4](#), the rarity of the verb phrase-finally [21.2](#) would much reduce any analogical pressure to introduce phrase-final spellings into phrase-medial contexts. Many examples of apparent preservation of word-final fronting diphthongs involve *fāeñ⁺* "save", perhaps written *faaenn* specifically to distinguish the forms from those of *fāñ⁺* "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 *faangid* "saviour" *faangir* "salvation" [15.1](#).)

Errors like *Nojilim pu naae da* (1 Cor 13:8, 1996 NT) for KB *Nojilim pu naada* "Love does not come to an end" confirm that the orthographic tradition has encompassed the writing of fronting diphthongs for undoubted monophthongs.

Accordingly, it seems probable that the absence of fronting loss in written materials is simply a graphic convention, writing words as they appear before pause.

For LF *nyaine* "brightly, clearly" (*ñyāené* in the audio version) see [6.4](#).

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 *Wìd-ńyá'anj*^a "Woriyanga" (*wìd-ńyá'anj*^a "mare") and *nwadibil* (Mt 2:2, 1996) for *ńwād-bíl*^a "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 ^a*|b*^a, ^g*|s*^ε, ^g*|d*^ε, ^r*|a*⁺ and ^f*|t*⁺ **Noun Classes**. Two unpaired non-count suffixes *-b*^ɔ *-m*^m 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 ^a*|b*^a and ^r*|a*⁺ Classes [16.2.2](#). A few isolated remnants of agreement will be pointed out as they occur.

The deletion of final vowels by Apocope can make the flexional forms that would be expected from straightforward application of phonological rules ambiguous, coinciding with another form from the same paradigm or from another word, or resembling it closely enough that confusion would be likely. This ambiguity may be avoided by **substitution** of a different flexional suffix for that expected for the Class¹¹. (For adjectives see [10.1](#).)

Such substitution has become *regular* in the case of Class ^g*|d*^ε stems ending in *m n* following a short vowel, which always use the plural suffix *-a*⁺ instead of *-d*^ε, creating a ^g*|a*⁺ **Subclass** [9.3.3.1](#).

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 [2.2.2](#). The ^r*|b*^a Subclass of ^a*|b*^a has reinterpreted SFs ending in *m n r l* as *m*^{mε} *n*^{nε} *r*^{rε} *l*^{lε} instead of *m*^a *n*^a *r*^a *l*^a [9.3.1.1](#), and the ^g*|s*^ε Subclass of ^g*|s*^ε [9.3.2.1](#) has reinterpreted SFs ending in *g* after a rounded vowel mora as *g*^ɔ instead of *g*^a.

11) cf Polish locatives, which show *-u* for regular *-e* in exactly those cases where *-e* would cause the loss of stem-final coronal plain/palatal contrasts (Inkelas, 3.1)

Two remaining Subclasses are **semantically** motivated: a Subclass of $a|b^a$ referring to older/important people uses b^a as the *singular* suffix [9.3.1.2](#), and names of languages belong to a Subclass of $r^\varepsilon|a^+$ with the singular suffix l^ε [9.3.4.1](#).

The regular Classes and Subclasses are thus as follows:

$a b^a$	$s\bar{i}d^a$	$s\bar{i}d\bar{i}b^a$	$s\bar{i}d-$	"husband"
$r^\varepsilon b^a$	$B\bar{i}n^{n\varepsilon}$	$B\bar{i}m^{ma}$	$B\bar{i}n-$	"Moba person"
b^a (sg)	$n\grave{a}'ab^a$	$n\grave{a}'-n\grave{a}m^a$	$n\grave{a}'-$	"chief"
$g^a s^\varepsilon$	$b\bar{u}v\bar{g}^a$	$b\bar{u}v\bar{s}^\varepsilon$	$b\bar{u}-$	"goat"
$g^\text{ɔ} s^\varepsilon$	$n\acute{u}'\grave{u}g^\text{ɔ}$	$n\acute{u}'\grave{u}s^\varepsilon$	$n\bar{u}'-$	"hand"
$g^\text{ɔ} d^\varepsilon$	$d\bar{w}\bar{w}g^\text{ɔ}$	$d\bar{w}\bar{w}d^\varepsilon$	$d\bar{w}-$	"hut"
$g^\text{ɔ} a^+$	$g\bar{b}\grave{a}u\eta^\text{ɔ}$	$g\bar{b}\grave{a}na^+$	$g\bar{b}\grave{a}n-$	"book"
$r^\varepsilon a^+$	$n\bar{w}\bar{r}^\varepsilon/$	$n\bar{w}y\acute{a}^+$	$n\bar{w}-$	"mouth"
l^ε	$K\bar{u}s\acute{a}\grave{a}l^\varepsilon$			"Kusaal"
$f \iota^+$	$m\grave{o}l\iota^f$	$m\grave{o}l\iota^+$	$m\grave{o}l-$	"gazelle"
$b^\text{ɔ}$	$s\bar{a}'ab^\text{ɔ}$		$s\grave{a}'-$	"porridge"
m^m	$t\bar{i}lm^m$		$t\bar{i}-$	"medicine"

M -stems with *long* root vowels in the $a|b^a$ Class avoid the plural suffix b^a [9.3.1](#). Some $g^a|s^\varepsilon$ 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 $-s^\varepsilon$ or $n\grave{a}m^a$ [9.4](#) [9.3.7](#). The small $f|\iota^+$ Class has a few members with $f|\iota^+$ suffixes in only one number [9.3.5](#). The diminutive sg suffix $-l^a$ is found in Kusaal only in the adjective $b\bar{i}l^a$ "little", (plural $b\bar{i}b\bar{i}s^\varepsilon$); it is more widespread in other Western Oti-Volta languages.

There are few other cases of irregular sg/pl pairing with nouns; examples are

$p\bar{e}'og^\text{ɔ}/$	$p\bar{e}'\varepsilon s^\varepsilon/$	$p\bar{e}'-$	"sheep"
$g\bar{b}\grave{e}'og^\text{ɔ}$	$g\bar{b}\grave{e}'\varepsilon d^\varepsilon$	$g\bar{b}\grave{e}'-$	"forehead"
	$g\bar{b}\grave{e}da^+$		
$b\bar{j}\bar{a}u\eta^\text{ɔ}$	$b\bar{j}\bar{a}\eta^\text{ad}^\varepsilon$	WK $b\bar{j}\bar{a}\eta^\text{-}$	"shoulder"
	$b\bar{j}\bar{a}\eta^\text{ada}^+$	SB	

The form of the sg suffix remains sufficiently clear in most SFs to identify the Noun Class correctly from this form alone, if it is known whether the word has human reference [16.2.2](#). Where this is not the case, there is often vacillation between

classes, suggesting that speakers do use these criteria to determine class membership; compare the Noun Class membership assignment of loanwords [9.7](#).

Nouns with sg SF ending in a long vowel, or in an unrounded vowel mora followed by a velar, belong to $g^a|s^\varepsilon$; nouns ending in a rounding diphthong followed by a velar belong to $g^\gamma|d^\varepsilon$ or its $g^\gamma|a^+$ Subclass, except for a few in the $g^\gamma|s^\varepsilon$ Subclass of $g^a|s^\varepsilon$ [9.3.2.1](#). All nouns in SF *-f* belong to $f|t^+$.

Human-reference nouns otherwise default to $a|b^a$ and 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 [9.3.1](#). The only $a|b^a$ sg SF ending in a long vowel is *bā'a* "traditional diviner." *Z̄ɔm*^{nɛ} "fugitive" is $r^\varepsilon|a^+$. The b^a -singular Subclass of $a|b^a$ is responsible for most human-reference nouns ending in *-b* in the sg SF, and also for *sàam*^{ma} "father", *dìam*^{ma} "man's parent-in-law", *dàyáam*^{ma} "woman's parent-in-law."

Mass nouns ending in SF *m* belong to the m^m Class, and *b/p* to the b^γ Class. 2-mora stem gerunds in *-m* belong to b^γ rather than m^m .

Names of languages belong to the l^ε 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*^{m/} "gall, common sense" and hence "gall bladder", *pūum*^{m/} "flower(s), flora", *dàalím*^m "male sex organs", *pò'alím*^m "female sex organs." *Pīim*^{m/} "arrow" is a relic of a lost $^\gamma|^\varepsilon$ 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 [9.3.1.2](#).

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*^γ "Hausa" and *Nàsāara*⁺ "European" are the only exceptions in my materials); the place inhabited by the group has sg *-g*^γ [32.5](#).

The $g^\gamma|d^\varepsilon$ 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 $g^\gamma|d^\varepsilon$ seem to be pejorative (*bālērug*^{γ/} "ugly person", *dàbiog*^γ "coward", *z̄ɔlvog*^{γ/} "fool.") Some nouns which historically belonged to $a|b^a$ have been reallocated to $r^\varepsilon|a^+$ for phonological reasons e.g. *bīār*^{ε/} "elder same-sex sibling"; the process is less complete in Toende Kusaal [9.3.1](#).

The Subclass in *-l^ε* includes all names of languages [9.3.4.1](#).

The small $f|l^+$ Class includes two groups of meanings: animals, and small round things. It contains all names of seeds. No $f|l^+$ noun refers to people.

The b^3 Class has only two members in my own materials that are not gerunds: $sā'ab^3$ "millet porridge, TZ" and $tāñp^3$ "war." There is also a word $ki'ib^3$ "soap" in written materials; WK has instead $kīibú^+$ with cb $kīib-$ which is probably a loan from the cognate Mampruli word [15.1](#). Niggli's "Dictionnaire" has Toende $kl'ip$.

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^3 or formally plural.

Deverbal nouns have predictable class membership: agent nouns belong to $a|b^a$, instrument nouns to $g^a|s^ε$, and gerunds take $g^3 r^ε b^3$ 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.

Thus the vowel length changes seen in CV- root-stems are levelled in favour of the singular in e.g.

$fūug^3/$ "clothing" pl $fūt^ε/$ or $fūud^ε/$

and some $r^ε|a^+$ singulars may have short vowels by analogy with plurals [6.1.1.1](#).

Quality changes between singular and plural stem forms occur in the $g^a|s^ε$ Class as a result of the merger of $iəñ uəñ$ with $εεñ ɔɔñ$ [6.3.1](#):

$nūa^+ /$ "hen" $nɔɔs^ε /$ "hens"

Such alternations are never levelled. However, the distribution of oral $iə uə$ versus $εε ɔɔ$ is strikingly different between the $g^a|s^ε$ and the $g^3|d^ε$ Classes. There are only a few stems with the root vowel $iə$ (and none with $uə$) before singular g^3 , such as $dàb̄iog^3$ "coward" (pl $dàb̄iəd^ε$) and $kp̄iɔŋ^3$ "strong" (pl $kp̄iəma^+$), and only a few with root-final oral $εε$ or $ɔɔ$ before the singular g^a : $Gòɔg^a$ sg of $Gòɔs^ε$ "Goosi clan" along with $tè'εg^a$ "baobab". Moreover, there is an actual alternation in the stems used before $g^a|s^ε$ and $g^3|d^ε$ suffixes with the adjective

$b̄i'a^+$ $b̄i'əs^ε$ $b̄j'à'-$ "bad"
 $b̄ē'og^3$ $b̄ē'εd^ε$ $b̄è'-$

The $a|b^a$ Class noun $bī\bar{a}m^m$ "enemy" is derived from the same root with derivational $*m$ [13.1.2](#). The alternation is most likely due to a rule $*iəCv \rightarrow \varepsilon\varepsilon Cv$, parallel to $*uəgv \rightarrow \text{ɔɔ}gv$ [6.3.2](#), with the plural vowels remodelled on the sg; cf $\bar{l}ā\bar{m}-f\bar{ɔ}\bar{ɔ}g^{\text{ɔ}}$ ($\leftarrow *|am-fuəgv$: $\bar{l}ā\bar{m}^{m\varepsilon/}$ "gum" $f\bar{u}e+$ "draw out") pl $\bar{l}ā\bar{m}-f\bar{ɔ}\bar{ɔ}d^{\varepsilon}$ "toothless." The vowel of $d\bar{a}b\bar{i}og^{\text{ɔ}}$ "coward" is perhaps reintroduced from $d\bar{a}b\bar{i}\bar{a}m^m$ "fear." A similar rule might account for the odd form of $p\bar{i}\bar{a}l\bar{i}g^a$ "white" seen in $\bar{z}\bar{u}-p\bar{e}\bar{e}l\bar{u}g^{\text{ɔ}}$ "bald."

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, and this may have been the original rule.

9.2.2 Combining Forms

Combining Forms, lacking a flexional suffix and always subject to Apocope [9.1](#), would be often reduced by the usual rules to ambiguous forms. Often the expected cb has been replaced by a form which is segmentally **but not tonally** that of the singular. Again, this is regular with certain stem types.

$n\bar{i}f^{\text{ɔ}}$	$n\bar{i}n\acute{i}^+$	$n\bar{i}n-$ or $n\bar{i}f-$	"eye"
$z\bar{i}\bar{n}'a^+$	$z\bar{e}\bar{n}'\varepsilon s^{\varepsilon}$	$z\bar{i}\bar{n}'-$ or $z\bar{e}\bar{n}'-$	"red" (adjective)
$w\bar{ɔ}k^{\text{ɔ}}$	$w\bar{a}'ad^{\varepsilon/}$	$w\bar{a}'-$ or $w\bar{ɔ}k-$	"long, tall" (adjective)
$t\bar{a}\bar{n}p^{\text{ɔ}}$		$t\bar{a}\bar{n}p-$	"war" 6.1.1.1
$\bar{z}\bar{u}g^{\text{ɔ}}$	$\bar{z}\bar{u}t^{\varepsilon/}$	$\bar{z}\bar{u}-$ or $\bar{z}\bar{u}g-$	"head"

Mooré and Toende both show $zu-$ consistently in cases where Agolle has $\bar{z}\bar{u}g-$:

<u>Mooré</u>	<u>Toende</u>	<u>Agolle</u>	
$zusoaba$	$z\bar{u}s\acute{o}p$	$\bar{z}\bar{u}g-s\acute{o}b^a$	"boss"
$z\acute{u}k\acute{u}k\acute{a}$	$z\bar{u}k\acute{u}k$	$\bar{z}\bar{u}g-k\bar{u}gv^{\varepsilon}$	"pillow"

$\bar{Z}\bar{u}g-s\acute{o}b^a$ "Lord" is very frequently read $\bar{Z}\bar{u}-s\acute{o}b^a$ in the audio version of the NT. The cb $\bar{z}\bar{u}g-$ behaves tonally like a noun prefix; the original $\bar{z}\bar{u}-$ is probably a one-mora form that has not undergone Apocope [7.2.4](#).

The "regular" cb of $n\bar{i}f^{\text{ɔ}}$ "eye" is $n\bar{i}n-$, but as a head it appears as $n\bar{i}f-$:

$n\bar{i}f-k\acute{a}n\bar{a}$ "this eye"

$N\bar{i}n-$ still predominates as a pre-modifier: $n\bar{i}n-d\acute{a}a$ = "face", $n\bar{i}n-t\acute{a}m^m$ "tears", $n\bar{i}n-g\acute{o}t\bar{i}s^{\varepsilon}$ "spectacles." $Gb\bar{a}u\eta^{\text{ɔ}}$ "letter, book" now has the cb $gb\bar{a}u\eta-$, but the "regular" cb $gb\bar{a}n-$ still occurred as a generic argument in the 1976 NT e.g. $gb\bar{a}nmi'id$ $gb\bar{a}n-m\bar{i}id$ "scribe" ("book-knower") where later versions have $gb\bar{a}u\eta mi'id$. Similarly, the 1976 NT $z\bar{i}ng\bar{b}an'ad$ $\bar{z}\bar{i}m-gb\bar{a}\bar{n}'\bar{a}d$ "fisherman" has been replaced by KB $\bar{z}\bar{i}ng\bar{b}an'ad$.

With *m* and *n* stems, the remodelled forms have become the regular cbs:

<i>zīnzāyᵛ</i> ^{d/}	<i>zīnzāná</i> ⁺	<i>zīnzáyᵛ-</i>	"bat"
<i>àñrvᵛ</i> ^d	<i>àñrīma</i> ⁺	<i>àñrvᵛ-</i>	"boat"

So too with CV-stems in the *r^ε|a*⁺ Class:

<i>gbēr^{ε/}</i>	<i>gbēyá</i> ⁺	<i>gbēr-</i>	"thigh"
<i>kùkōr^{ε/}</i>	<i>kùkōyá</i> ⁺	<i>kùkōr-</i>	"voice"
		(but <i>kùkō-títā'ar</i>	"loud voice" NT)

Vōm^{m/} cb *vōm-* "life", *kūm^m* 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> ^{+/}	<i>kī-</i> or <i>kā-</i>	"cereal, millet"
<i>lā'a^p</i>	<i>līgīdī</i> ⁺	<i>là'-</i> or <i>līg-</i>	"cowrie" pl "money"

Two words have distinct sg- and pl-reference cbs:

<i>dāy</i> ⁺	<i>dāp</i> ^a	<i>dày-</i> sg <i>dàp-</i> pl	"man, male person"
<i>tāyñ</i> ^{+/}	<i>tāñp</i> ^{a/}	<i>tāyñ-</i> sg <i>tāñp-</i> pl	"sib of opposite sex"

Disambiguation is clearly involved with some longer remodelled cbs:

<i>kòlvᵛ</i> ^d	<i>kòñ</i> ^{nε}	<i>kòlvᵛ-</i>	"bag"
<i>lànnīᵛ</i> ^a	<i>lànnī^s</i> ^ε	<i>lànnīᵛ-</i>	"squirrel"
<i>kòlvᵛ-kàñā</i>	"this bag"	cf cb <i>kòl-</i> from	<i>kōlvᵛ</i> ^a "river"
<i>lànnīᵛ-pìəlvᵛ</i>	"white squirrel"	cf cb <i>làñ-</i> from	<i>lāñ</i> ^{nε} "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-sùᵛ</i>	"good man"	cf <i>dāy</i>	"man"
<i>dàp-sù^m</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 bipuᵛ* (Acts 16:16, 1976) for *yàmmug-bī-púᵛ* "slave girl" not *yàmmug bí-púᵛ* "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^3 in singulars in $-g^3 -k^3 -\eta^3$, deletion of **g* after *aa iə uə aañ* *εεñ* *ɔɔñ* with the $g^a|s^ε$ Class sg, consonant assimilation instead of epenthesis in all classes, and the combination of root-vowel-final stems with the flexions ^a sg, ⁺ pl and ^{a+} pl [6.1.1.1](#) [9.3.1](#).

9.3.1 a|b^a Class

Most stems ending in consonants straightforwardly show -^a in the sg:

<i>sīd^a</i>	<i>sīdɪb^a</i>	<i>sìd-</i>	"husband"
<i>sàa^a</i>	<i>sàaɪb^a</i>	<i>sàa-</i>	"human being"
<i>kpāad^{a/}</i>	<i>kpāadɪb^a</i>	<i>kpāad-</i>	"farmer"
<i>kpīkpīn^{na/}</i>	<i>kpīkpīnɪb^a</i>	<i>kpīkpín-</i>	"merchant"
<i>sàam-pīt^{a/}</i>	<i>sàam-pītɪb^a</i>	<i>sàam-pīt-</i>	"father's younger brother"
<i>bì-pīt^{a/}</i>	<i>bì-pītɪb^a</i>	<i>bì-pīt-</i>	"younger child"
<i>wād-tís^a</i>	<i>wād-tísɪb^a</i>	<i>wād-tís-</i>	"lawgiver" NT
<i>zà'-nō-gúr^a</i>	<i>zà'-nō-gúrɪb^a</i>	<i>zà'-nō-gúr-</i>	"gatekeeper" NT
<i>nīd^{a/}</i>	<i>nīdɪb^{a/}</i>	<i>nīn-</i> irreg	"person"

Most deverbal agent nouns are completely regular:

<i>kōvd^{a/}</i>	<i>kōvdɪb^a</i>	<i>kōvd-</i>	"killer"
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Agent nouns from 3-mora stems in *s* regularly drop the *d* formant in sg and cb; they show a regular shift between Tone Pattern L in the sg and Pattern O in the plural for agent nouns from Pattern LO verbs [7.2.3](#). Many also have *nàm^a* plurals [9.4](#).

<i>kùəs^a</i>	<i>kūəsɪdɪb^a</i>	<i>kùəs-</i>	"seller"
<i>pù'us^a</i>	<i>pū'usɪdɪb^a</i>	<i>pù'us-</i>	"worshipper"
<i>dì'əs^a</i>	<i>dī'əsɪdɪb^a</i>	<i>dì'əs-</i>	"receiver"
<i>tù'as-tù'as^a</i>	<i>tū'as-tū'asɪdɪb^a</i>	<i>tù'as-tù'as-</i>	"talker"
<i>sīgɪs^{a/}</i>	<i>sīgɪsɪdɪb^a</i>	<i>sīgɪs-</i>	"lowerer"
<i>dìs^a</i>	<i>dīs-nàm^a</i>	<i>dìs-</i>	"glutton"

The same behaviour is found with agent nouns from a few other verbs too:

<i>sòs</i> ^a	<i>sòsɪdɪb</i> ^a	<i>sòs-</i>	"beggar"	
<i>tìs</i> ^a	<i>tìsɪdɪb</i> ^a	<i>tìs-</i>	"giver"	WK
<i>kīs</i> ^{a/} or <i>kīsɪd</i> ^{a/}	<i>kīsɪdɪb</i> ^a	<i>kīsɪd-</i> (only)	"hater"	

These may be original 3-mora stem verbs with **ss* → *s*. There are also

<i>zàb-zàb</i> ^a	<i>zàb-zàb-nàm</i> ^a	<i>zàb-zàb-</i>	"warrior"
	<i>zàb-zābɪdɪb</i> ^a		
<i>gbān-záb</i> ^a	<i>gbān-záb-nàm</i> ^a	<i>gbān-záb-</i>	"leatherbeater"
<i>ñwī-ték</i> ^a	<i>ñwī-tékɪdɪb</i> ^a		"rope-puller"

Exceptionally, consonant assimilation of **md* does not appear in the plural in

(cf	<i>pɥ'à-sāñ'am</i> ^{ma}	<i>pɥ'à-sāñ'amɪdɪb</i> ^a	<i>pɥ'à-sàñ'am-</i>	"adulterer"
	<i>yūm-yú'ùm</i> ^{na}	<i>yūm-yú'ùmɪb</i> ^a	<i>yūm-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 [2.2.2](#):

<i>dāɥ</i> ⁺	<i>dāp</i> ^a	<i>dàɥ-</i> , <i>dàp-</i>	6.1.1.1 "man" (<i>vir</i>)
<i>tāɥñ</i> ^{+/}	<i>tāñp</i> ^{a/}	<i>tāɥñ-</i> , <i>tāñp-</i>	6.1.1.1 "sib of opposite sex"
<i>sāɛñ</i> ⁺	WK <i>sāañb</i> ^a	<i>sàñ-</i>	"blacksmith"
<i>sāɛñ</i> ^a	DK		
<i>sōɛñ</i> ⁺	WK <i>sōɔñb</i> ^a	<i>sòñ-</i>	"witch"
<i>sōɛñ</i> ^a	DK		

There are also the two original **g*-stems

<i>pɥ'ā</i> ^a ← * <i>pɥaga</i>	<i>pū'ab</i> ^a	<i>pɥ'à-</i>	"woman, wife"
<i>bā'a</i> ⁼ ← * <i>ba'aga</i>	<i>bā'ab</i> ^a	<i>bà'a-</i>	"traditional diviner"

Some CVV stems introduce *-d-* in some forms but not others:

<i>wìd</i> ^a	<i>wìb</i> ^a	<i>wìd-</i>	"hunter"
<i>sōñ'ɔd</i> ^{a/}	<i>sōñ'ɔb</i> ^{a/}	<i>sōñ'ɔd-</i>	agent noun of <i>sōñ'e</i> ^{+/} "be better than"
<i>pūkṗād</i> ^{a/}	<i>pūkṗādɪb</i> ^a	<i>pūkṗá-</i>	"farmer" (but <i>kṗād</i> ^{a/} <i>id</i> is regular)

Sg final *-v* is dropped elsewhere in the paradigm of

<i>pītú⁺</i>	<i>pítíb^a</i>	<i>pīt-</i>	"younger sibling of same sex"
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Sàam-pīt^{a/} "father's younger brother" and *bì-pīt^{a/}* "younger child" are regular.

Historically, a solution to the problem of adding sg ^a to stems ending in a long vowel was to use the suffix *r^ε* in place of ^a; related languages, including Toende Kusaal, still keep the *-b^a* plural forms, but in Agolle Kusaal such words have acquired *-a⁺* plurals and thus passed over entirely into the *r^ε|a⁺* Class:

Agolle	<i>pùkòǎr^ε</i>	<i>pùkòǎya⁺</i>	<i>r^ε a⁺</i>	"widow"
Toende	<i>pókóót</i>	<i>póköp</i>	<i>r^ε b^a</i>	
Farefare	<i>pəkōore</i>	<i>pəkōpa</i>	<i>r^ε b^a</i>	
Mooré	<i>pùgkōoré</i>	<i>pugkōapa</i>	<i>r^ε b^a</i>	
Agolle	<i>dà-kòǎr^ε</i>	<i>dà-kòǎya⁺</i>	<i>r^ε a⁺</i>	"bachelor"
Toende	<i>dákóot</i>	<i>daköp</i>	<i>r^ε b^a</i>	
Farefare	<i>dàkōorè</i>	<i>dakōpa</i>	<i>r^ε b^a</i>	

Such transfers may account for several human-reference nouns found unexpectedly in *r^ε|a⁺*, e.g. *bīār^{ε/}* "elder sibling of the same sex", *pòǎǎr^ε* "cripple", *ǎyē'ēr^{ε/}* "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 *r^ε|a⁺* Class [9.3.1.1](#). All other stems in *-m* have sg *-m^m* instead of *-m^a*: *zū'øm^{m/}* "blind person" etc.

Stems in *n* undergo consonant assimilation in the pl: **nb* → *mm*:

<i>sāan^{a/}</i>	<i>sáam^{ma}</i>	<i>sāan-</i>	"guest, stranger"
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With *m*-stems the assimilation **mb* → *mm* would cause SF sg and pl to coincide segmentally, and also tonally except with Pattern H words. The homophony is avoided by using the plural suffix *s^ε* instead of *b^a* or by pluralising with the word *nàm^a* [9.4](#):

<i>kpī'im^{m/}</i>	<i>kpī'imís^ε</i>	<i>kpī'im-</i>	"dead person, corpse"
<i>zū'øm^{m/}</i>	<i>zū'amís^ε</i>	<i>zū'øm-</i>	"blind person"
<i>tādım^{m/}</i>	<i>tādımıs^ε</i>	<i>tādım-</i>	"weak person"
	<i>tādım-nàm^a</i>		

In two words WK freely accepted *-b^a* pl forms as LFs but not SFs, clearly showing that avoidance of ambiguity drives the variations:

<i>kpɛɛŋm^m</i>	<i>kpɛɛŋmma</i>	LF-only WK	
	<i>kpɛɛŋm-nàm^a</i>	<i>kpɛɛŋm-</i>	"elder"
<i>bɪ'əm^m</i>	<i>bɪ'əmma</i>	LF-only WK	
	<i>bɪ'əm-nàm^a</i>	<i>bɪ'əm-</i>	"enemy"

Ambiguity between sg and pl may instead be avoided by replacing the sg suffix ^a with *g^a*; such words may then develop *g^a|s^ɛ* plurals as well:

<i>dàsāŋ^a</i>	<i>dàsām^{ma}</i>	<i>dàsàŋ-</i>	"young man"
	or <i>dàsāaŋs^ɛ</i>		
<i>Yàaŋ^a</i>	<i>Yàam^{ma}</i>	<i>Yàaŋ-</i>	"Yanga, Yansi person"
	or <i>Yàamɪs^ɛ</i>		
	or <i>Yàaŋs^ɛ</i>		

9.3.1.1 *r^ɛ|b^a* Subclass

Stems in *l n m r* following a *short* root vowel show forms in LF *-ɛ* with the preceding consonant doubled. This probably remodelled from the SF [2.2.2](#), which seems to show no flexion and could be the regular outcome of adding either ^a or *-r^ɛ*. Wherever the SF could *not* be the regular phonological result of the attachment of a sg *-r^ɛ* suffix, ethnonyms with *b^a* plurals always show sg ^a.

The assimilation **nb* → *mm* takes place in the plural:

<i>Dàgbān^{nɛ/}</i>	<i>Dàgbām^{ma/}</i>	<i>Dàgbān-</i>	"Dagomba person"
<i>Bìn^{nɛ}</i>	<i>Bìm^{ma}</i>	<i>Bìn-</i>	"Moba person"
<i>Kùtān^{nɛ/}</i>	<i>Kùtām^{ma/}</i>	<i>Kùtān-</i>	member of EW's clan

An *r*-stem with an irregular stem change in the plural is seen in

<i>Mɔ̄r^{ɛ/}</i>	<i>Mɔ̄ɔm^{ma}</i>	<i>Mɔ̄r-</i>	"Muslim"
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All other words in this Subclass are agent nouns with stems in *-mm -ll* or *-r(r)*, from Variable verb stems in *-mm* and Invariable verb stems in *-ll -r(r)*. Not only do these show *-ɛ* LF sg forms but also analogical *-a⁺* plurals.

	<i>lè̄m-lè̄m^{ma}</i>	<i>lè̄m-lè̄mmɪb^a</i>	<i>lè̄m-lè̄m-</i>	"taster"
or	<i>lè̄m-lè̄m^{mɛ}</i>	<i>lè̄m-lè̄mma⁺</i>		
	<i>ňyà'an-dòl^{la}</i>	<i>ňyà'an-dòllɪb^a</i>	<i>ňyà'an-dòl-</i>	NT "disciple" tones: WK
	<i>ňyā'an-dól^{lɛ}</i>	<i>ňyā'an-dóllà⁺</i>	<i>ňyā'an-dól-</i>	WK's own forms

	<i>gbàn-zāñ</i> ^{la/}	<i>gbàn-zāñllí</i> ^{b^a}	<i>gbàn-zāñl-</i>		"one with a book in hand" KT WK
	<i>bù-zāñ</i> ^{la/}	<i>bù-zāñllí</i> ^{b^a}	<i>bù-zāñl-</i>		"goat-carrier"
or	<i>bù-zāñ</i> ^{lɛ/}	<i>bù-zāñllá</i> ⁺			
	<i>gbàn-m̄r</i> ^{a/}	<i>gbàn-m̄rír</i> ^{b^a}	<i>gbàn-m̄r-</i>	DK	"one who has a book"
	<i>gbàn-tār</i> ^{a/}	<i>gbàn-tārír</i> ^{b^a}	<i>gbàn-tār-</i>	DK	<i>id</i>
	<i>bù-m̄r</i> ^{a/}	<i>bù-m̄rír</i> ^{b^a}	<i>bù-m̄r-</i>		"goat-owner"
or	<i>bù-m̄r</i> ^{ɛ/}	<i>bù-m̄rá</i> ⁺			

Agent nouns with stems in *nn* or in *mm/mn* derived from **md*, like *tùm-tòm*^{na} "servant", do *not* show *r^ɛ|a⁺* forms, because such stems do not show assimilation between the stem-final cluster and *r^ɛ* 6.2.1 and the SFs of the agent nouns and corresponding dynamic adjectives 13.1.1.2.1 therefore remain distinct.

9.3.1.2 *b^a* as singular

A subclass of nouns referring to older/important people has *-b^a* in the sg, and makes the plural with *nàm^a* 9.4:

<i>nà'ab</i> ^a	<i>nà'-nàm</i> ^a	<i>nà'-</i>	"chief"
<i>yáab</i> ^a	<i>yāa-nám</i> ^a	<i>yāa-</i>	"grandparent, ancestor" (* <i>yāágbā</i>)
<i>pùgudí</i> ^{b^a}	<i>pùgud-nàm</i> ^a	<i>pùgud-</i>	"father's sister"
<i>áñsì</i> ^{b^a}	<i>āñs-nám</i> ^a	<i>āñs-</i>	"mother's brother"

With the consonant assimilation **mb* → *mm*:

<i>sàam</i> ^{ma}	<i>sàam-nàm</i> ^a	<i>sàam-</i>	"father"
<i>dìam</i> ^{ma}	<i>dìam-nàm</i> ^a	<i>dìam-</i>	"man's parent-in-law"
<i>dàyám</i> ^{ma}	<i>dàyāam-nám</i> ^a	<i>dàyāam-</i>	"woman's parent-in-law"

9.3.2 *g^a|s^ɛ* Class

Straightforward examples include:

<i>būvg</i> ^a	<i>būvs</i> ^ɛ	<i>bù-</i>	"goat"
<i>tè'ɛg</i> ^a	<i>tè'ɛs</i> ^ɛ	<i>tè'-</i>	"baobab"
<i>tìg</i> ^a	<i>tìs</i> ^ɛ	<i>tì-</i>	"tree"
<i>ñwādíg</i> ^{a/}	<i>ñwādís</i> ^{ɛ/}	<i>ñwād-</i>	"moon, month"
<i>lōdíg</i> ^{a/}	<i>lōdís</i> ^{ɛ/}	<i>lōd-</i>	"corner"
<i>āāñdíg</i> ^a	<i>āāñdís</i> ^ɛ	<i>āāñd-</i>	"Vitex doniana"

<i>b̀̀d̀̀ib̀̀g^a</i>	<i>b̀̀d̀̀ib̀̀s^ε</i>	<i>b̀̀d̀̀ib̀̀-</i>	"male kid"
<i>k̀̀p̀̀iib̀̀g^a</i>	<i>k̀̀p̀̀iib̀̀s^ε</i>	<i>k̀̀p̀̀iib̀̀-</i>	"orphan"
<i>ỳ̀amm̀̀ig^a</i>	<i>ỳ̀amm̀̀s^ε</i>	<i>ỳ̀am̀̀-</i>	"slave"
<i>k̀̀ɔ̀l̀g^a</i>	<i>k̀̀ɔ̀l̀s^ε</i>	<i>k̀̀ɔ̀l̀-</i>	"river"
<i>k̀̀p̀̀ùk̀̀p̀̀àr̀̀ig^a</i>	<i>k̀̀p̀̀ùk̀̀p̀̀àr̀̀s^ε</i>	<i>k̀̀p̀̀ùk̀̀p̀̀àr̀̀-</i>	"palm tree"
<i>p̀̀ūs̀̀ig^{a/}</i>	<i>p̀̀ūs̀̀s^{ε/}</i>	<i>p̀̀ūs̀̀-</i>	"tamarind"
<i>z̀̀ɔ̀ɔ̀g^a</i>	<i>z̀̀ɔ̀ɔ̀s^ε</i>		"run, race" 12.1.1.1.1
<i>b̀̀òd̀̀ig^a</i>			"planting" 12.1.1.1.1

Root-stems in *Caa Cìə Cuə* delete the *g of the sg suffix -g^a [6.3.1](#):

<i>b̀̀ā^a</i> = 8.1	<i>b̀̀ās^ε</i>	<i>b̀̀à-</i>	"dog"
<i>s̀̀ā⁺</i>	<i>s̀̀ās^ε</i>	<i>s̀̀à-</i>	"waist"
<i>s̀̀àb̀̀ù^{a+}</i>	<i>s̀̀àb̀̀ùs^ε</i>	<i>s̀̀àb̀̀ù-</i>	"lover, girlfriend"

Nasal *iañ uañ* here alternates with *εñ ɔñ* [6.3.1](#)

<i>z̀̀iñ^{a+}</i>	<i>z̀̀èñ^ε</i>	<i>z̀̀iñ⁻</i> or <i>z̀̀èñ⁻</i>	"red" (adjective)
<i>ǹ̀ū⁺-íñ^{a+}</i>	<i>ǹ̀ū⁺-éñ^ε</i>	<i>ǹ̀ū⁺-éñ⁻</i>	"fingernail"
<i>M̀̀ù^{a+}</i>	<i>M̀̀òɔ̀s^ε</i>	<i>M̀̀ò-</i>	"Mossi person"
<i>ǹ̀ū^{a+/}</i>	<i>ǹ̀òɔ̀s^{ε/}</i>	<i>ǹ̀ò-</i>	"hen"

Historical *Cag- *C̣iag- *Cuag- stems [6.1.1.1](#) show singulars with -k^a:

<i>z̀̀àk^a</i>	<i>z̀̀à^ε</i>	<i>z̀̀à-</i>	"compound"
<i>p̀̀ỳ̀āk^a</i>	<i>p̀̀ỳ̀ās^ε</i>	<i>p̀̀ỳ̀à-</i>	"female" (adjective)

Stems in *CVg- display consonant assimilation in the sg via *gg → kk:

<i>g̀̀ìk^a</i>	<i>g̀̀ìg̀̀s^ε</i>	<i>g̀̀ìg̀̀-</i>	"dumb person"
<i>k̀̀ūk^a</i>	<i>k̀̀ūg̀̀s^ε</i>	<i>k̀̀ūg̀̀-</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>b̀̀āŋ^a</i>	<i>b̀̀āñs^ε</i>	<i>b̀̀àŋ-</i>	"ring, chain, fether"
<i>t̀̀ēŋ^a</i>	<i>t̀̀ēñs^ε</i>	<i>t̀̀èŋ-</i>	"land"
<i>p̀̀àŋ^a</i>	<i>p̀̀àñs^ε</i>	<i>p̀̀àŋ-</i>	"power"

<i>bòŋ^a</i>	<i>bòmɪs^ε</i>	<i>bòŋ-</i>	"donkey"
<i>nāŋ^a</i>	<i>nāmɪs^ε</i>	<i>nàŋ-</i>	"scorpion"
<i>sú'əŋ^a</i>	<i>sū'əmís^ε</i>	<i>sū'əŋ-</i>	"rabbit"
<i>ñwāaŋ^a</i>	<i>ñwāamɪs^ε</i>	<i>ñwàaŋ-</i>	"monkey"
<i>níiŋ^a</i>	<i>nís^ε</i>	<i>nīiŋ-</i>	"bird"
	<i>nīimís^ε</i>		
<i>kòlɪŋ^a</i>	<i>kòlɪs^ε</i>	<i>kòlɪŋ-</i>	"door"
	<i>kòlɪmɪs^ε</i>		
<i>kō'alíŋ^a</i>	<i>kō'alís^ε</i>	<i>kō'alíŋ-</i>	sleeveless traditional
	<i>kō'alímìs^ε</i>		smock

So too with all deverbal instrument nouns:

<i>mēɛdɪŋ^a</i>	<i>mēɛdɪs^ε</i>	<i>mēɛdɪŋ-</i>	"building tool"
	<i>mēɛdɪmɪs^ε</i>		
<i>pīəsíŋ^a</i>	<i>pīəsís^ε</i>	<i>pīəsíŋ-</i>	"sponge"
	<i>pīəsímìs^ε</i>		← <i>pīe^{+/}</i> "wash (self)"

Various irregular stem alternations are seen in

<i>bīiŋ^a</i>	<i>bīs^ε</i>	<i>bī-</i> or <i>bì-</i>	"child"
<i>bèrɪŋ^a</i>	<i>bèrɪŋɪs^ε</i>		a plant used for fibre
<i>tàmpūa⁺</i>	<i>tàmpōɔs^ε</i>	<i>tàmpò-</i>	"housefly" DK (no <i>ñ</i>)
<i>bōtɪŋ^a</i>	<i>bōtɪs^ε</i>	<i>bòtɪŋ-</i>	"cup" 2.4

Very irregular in both flexion and phonology, though apparently *g^a|s^ε* Class, is

<i>sāŋá⁺</i>	<i>sānsá⁺</i> [saŋsa]	<i>sān-</i>	"time"
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These human-reference nouns have alternative plurals with the suffix *-b^a*:

<i>dàsāŋ^a</i>	<i>dàsām^{ma}</i>	<i>dàsàŋ-</i>	"young man"
	or <i>dàsāaŋs^ε</i>		
<i>Yàaŋ^a</i>	<i>Yàam^{ma}</i>	<i>Yàaŋ-</i>	"Yanga, Yansi person"
	or <i>Yàamɪs^ε</i>		
	or <i>Yàaŋs^ε</i>		
<i>Sà'dàbùa⁺</i>	<i>Sà'dàbùəb^a</i>		clan name 32.5
	or <i>Sà'dàbùəs^ε</i>		

9.3.2.1 $g^{\text{p}}|s^{\text{e}}$ Subclass

Several s^{e} -plural stems with rounded vowels have sg g^{p} , by reinterpretation of $g^{\text{a}}|s^{\text{e}}$ Class sg as g^{p} when the SF forms coincide [2.2.2 9.1](#). WK avoids the change to g^{p} with human-reference nouns. No regular deverbal instrument noun takes $-g^{\text{p}}$. Some of these words also have d^{e} plurals, and some may have become $g^{\text{p}}|d^{\text{e}}$ entirely.

	<i>kūug^{a/}</i>	<i>kūus^{e/}</i>	<i>kū-</i>	"mouse"
or	<i>kūug^{p/}</i>			
	<i>sù'ug^a</i>	<i>sù'us^e</i>	<i>sù'-</i>	"knife"
or	<i>sù'ug^p</i>			
	<i>nú'ùg^p</i>	<i>nú'ùs^e</i>	<i>nū'-</i>	"hand"
	<i>zùnzòη^a</i>	<i>zùnzòçñs^e</i>	<i>zùnzòη-</i>	"blind person"
or	<i>zùnzòη^p</i>			
	<i>tèη-zùη^p</i>	<i>tèη-zùvñs^e</i>		"foreign land"
but		<i>ɸjàñ'-zùna⁺</i>		"foreign language"
	<i>yù'uh^p</i>	<i>yù'umís^e</i>	<i>yù'uh-</i>	"night"
	<i>zùuñg^p</i>	<i>zùuñs^e</i>	<i>zùñ-</i>	"vulture"
		or <i>zùuñd^e</i>		

Compare Mampruli *nuuwa* pl *nuusi* "hand", *suuwa* pl *suusi* "knife", *kuuwa* pl *kuusi* "mouse", *zuuwa* pl *zuusi* "vulture" (but *yunηu* 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^{p} :

	<i>yàmmug^a</i> WK	<i>yàmmis^e</i>	<i>yàm-</i>	"slave"
or	<i>yàmmug^p</i>			

Some $g^{\text{p}}|s^{\text{e}}$ *m*-stems were probably originally $g^{\text{p}}|d^{\text{e}}$, but have disambiguated the plural by substituting pl $-s^{\text{e}}$ for $-d^{\text{e}}$ instead of the usual $-a⁺$ [9.3.3.1](#):

	<i>à-dàalúη^p</i>	<i>à-dàalís^e</i> WK	<i>à-dàalúη-</i>	"stork"
		<i>à-dàalímís^e</i>		
cf	<i>sī'úη^p</i>	<i>sī'imís^e</i>	<i>sī'uh-</i>	a kind of big dish
	<i>dìsúη^p</i>	<i>dìsís^e</i>	<i>dìsúη-</i>	"spoon"
		<i>dìsímà⁺</i>		

Two words of this type drop *-s-* from the stem in the plural:

	<i>wīlísúη^p</i>	<i>wīlimís^e</i>	<i>wīlísúη-</i>	a kind of snail
	<i>yālísúη^p</i>	<i>yālimís^e</i>	<i>yālísúη-</i>	"quail"

9.3.3 $g^{\text{ɔ}}|d^{\text{ɛ}}$ Class

Before the sg $-g^{\text{ɔ}}$ $-k^{\text{ɔ}}$ $-\eta^{\text{ɔ}}$ 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 $g^{\text{ɔ}}|a^+$ Subclass instead, along with all stems which include a derivational suffix [9.3.3.1](#).

$d\grave{a}ug^{\text{ɔ}}$	$d\grave{a}ad^{\text{ɛ}}$	$d\grave{a}-$	"piece of wood"
$f\grave{e}\check{n}'og^{\text{ɔ}}/$	$f\grave{e}\check{n}'\epsilon d^{\text{ɛ}}/$	$f\grave{e}\check{n}'-$	"ulcer"
$v\bar{i}ug^{\text{ɔ}}/$	$v\bar{i}id^{\text{ɛ}}/$	$v\bar{i}-$	"owl"
$v\bar{a}u\check{n}g^{\text{ɔ}}/$	$v\bar{a}a\check{n}d^{\text{ɛ}}/$	$v\bar{a}\check{n}-$	"leaf"
$m\bar{o}cg^{\text{ɔ}}$	$m\bar{o}cd^{\text{ɛ}}$	$m\bar{o}-$	"grass, bush"
$d\grave{o}nd\grave{u}ug^{\text{ɔ}}$	$d\grave{o}nd\grave{u}ud^{\text{ɛ}}$	$d\grave{o}nd\grave{u}-$	"cobra"
$d\grave{a}b\bar{i}og^{\text{ɔ}}$	$d\grave{a}b\bar{i}\epsilon d^{\text{ɛ}}$	$d\grave{a}b\grave{j}\grave{a}-$	"coward"
	$z\grave{u}\epsilon d^{\text{ɛ}}$		"friendship"
$w\bar{a}bug^{\text{ɔ}}/$	$w\bar{a}b\text{ɪ}d^{\text{ɛ}}/$	$w\bar{a}b-$	"elephant"
$z\bar{u}\epsilon b\acute{u}g^{\text{ɔ}}$	$z\bar{u}\epsilon b\text{ɪ}d^{\text{ɛ}}$	$z\bar{u}\epsilon b-$	"(human head) hair"
$b\bar{a}l\bar{e}r\text{u}g^{\text{ɔ}}/$	$b\bar{a}l\bar{e}r\text{ɪ}d^{\text{ɛ}}/$	$b\bar{a}l\bar{e}r-$	"ugly person"
	or $b\bar{a}l\bar{e}r\text{ɪ}s^{\text{ɛ}}/$		
$b\bar{e}sv\text{u}g^{\text{ɔ}}$	$b\bar{e}s\text{ɪ}d^{\text{ɛ}}$	$b\bar{e}s-$	kind of pot
$D\grave{e}nn\text{u}g^{\text{ɔ}}$			Denugu (place name)

Some stems ending in root vowels have plurals of the form $CVt^{\text{ɛ}}$ [6.1.1.1](#):

$d\grave{o}cg^{\text{ɔ}}$	$d\grave{o}cd^{\text{ɛ}}$ or $d\grave{o}t^{\text{ɛ}}$	$d\grave{o}-$	"hut, room; clan"
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So too $p\bar{o}cg^{\text{ɔ}}$ "farm, field", $f\bar{u}ug^{\text{ɔ}}$ "clothing, shirt"; exceptionally, the *singular* also shows a short vowel in the following word, probably a true 1-mora stem:

$z\bar{u}g^{\text{ɔ}}/$	$z\bar{u}t^{\text{ɛ}}/$	$z\bar{u}-$ or $z\bar{u}g-$	"head"
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Historical $*Cag-$ $*C\grave{j}ag-$ $*C\grave{u}ag-$ stems [6.1.1.1](#) show singular $-k^{\text{ɔ}}$, and ya becomes ɔ before $-k^{\text{ɔ}}$ [6.3.2](#):

$b\grave{o}k^{\text{ɔ}}$	$b\grave{o}'ad^{\text{ɛ}}$	$b\grave{u}'\grave{a}-$	"hole, pit"
$l\grave{o}k^{\text{ɔ}}$	$l\grave{o}'ad^{\text{ɛ}}$	$l\grave{u}'\grave{a}-$	"quiver (for arrows)"
$l\bar{a}uk^{\text{ɔ}}$	$l\bar{a}'ad^{\text{ɛ}}$	$l\bar{a}'-$	"(item of) goods"
$b\grave{j}\bar{a}u\check{n}k^{\text{ɔ}}$	$b\grave{j}\bar{a}\check{n}'ad^{\text{ɛ}}$	WK $b\grave{j}\bar{a}\check{n}'-$	"shoulder"
	$b\grave{j}\bar{a}\check{n}'ada^+$	SB	

Stems in CVd show $-t-$ in the pl [6.2.1](#) via $*dd \rightarrow tt$:

<i>ùdvg</i> ^{ɔ/}	<i>ùt</i> ^ɛ	<i>ùd-</i>	"(piece of) chaff"
<i>gādvḡ</i> ^{ɔ/}	<i>gāt</i> ^{ɛ/}	<i>gād-</i>	"bed" (Hausa <i>gadoo</i>)

Stems in CVg develop *kk* in the singular via **gg* → *kk*:

<i>dōk</i> ^{ɔ/}	<i>dōgvɔ</i> ^{ɛ/}	<i>dōg-</i>	"cooking pot"
	<i>dōgvb dút</i> ^ɛ		"cooking pots" SB

Stems in *l* develop the cluster *nn* in the pl via **ld* → *nn*:

<i>yōlvḡ</i> ^{ɔ/}	<i>yōn</i> ^{nɛ/}	<i>yōl-</i>	"sack; 200 cedis"
<i>zōlvḡ</i> ^{ɔ/}	<i>zōn</i> ^{nɛ/}	<i>zōl-</i>	"fool"
<i>sìlvḡ</i> ^ɔ	<i>sìn</i> ^{nɛ} or <i>sìls</i> ^ɛ	<i>sìl-</i>	"hawk"

The only *m n* stems making plurals with *-d*^ɛ are CVVC root-stems [6.1.1.2](#):

<i>làngáuvḡ</i> ^ɔ	<i>làngāamá</i> ⁺ or <i>làngáam</i> ^{mɛ}	<i>làngāvḡ-</i>	"crab"
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and the synonymous *màngāúvḡ*^ɔ, the plural-only *sūñ-péèn*^{nɛ} "anger" and perhaps the placename *Tèmpáan*^{nɛ} "Tempane" [32.3](#).

9.3.3.1 *g*^ɔ|*a*⁺ Subclass

All stems in *n m* following a short vowel use the plural suffix *a*⁺ instead of *d*^ɛ.

They show *-ŋ-* in the sg, via **ng* → *ŋŋ* and **mg* → *ŋŋ*, and normally use the sg segmental (but not tonal) form as cb [9.2.2](#).

<i>gbàuvḡ</i> ^ɔ	<i>gbàna</i> ⁺	<i>gbàn-</i> or <i>gbàuvḡ-</i>	"letter, book"
<i>zīnzāuvḡ</i> ^{ɔ/}	<i>zīnzāná</i> ⁺	<i>zīnzāvḡ-</i>	"bat"
<i>àñrvḡ</i> ^ɔ	<i>àñrma</i> ⁺	<i>àñrvḡ-</i>	"boat"
<i>mālvḡ</i> ^ɔ	<i>mālma</i> ⁺	<i>màlvḡ-</i>	"sacrifice"

The expected *u*-glide is absent in the sg and cb of

<i>nìn-gbīvḡ</i> ^{ɔ/}	<i>nìn-gbīná</i> ⁺	<i>nìn-gbīvḡ-</i>	"body"
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This may represent the influence of the alternate sg form *nìn-gbīn*^{nɛ/}. The formal plural *nìn-gbīná*⁺ is often used for singular "body."

All regular gerunds of 3-mora and 4-mora stem Variable verbs belong to the

$g^{\text{D}}|a^+$ Subclass except for those with stems in velars and Fusion verbs [11.1](#), which have the singular suffix r^{E} [12.1.1.1](#).

<i>gàadug^D</i>	←	<i>gàad^E</i>	"(sur)pass"
<i>liəbug^D</i>	←	<i>liəb^E</i>	"become"
<i>dīgulúg^D</i>	←	<i>dīgul^{E/}</i>	"lay down"
<i>yāarúg^D</i>	←	<i>yāar^{E/}</i>	"scatter"
<i>sīgı̄súg^D</i>	←	<i>sīgı̄s^{E/}</i>	"lower"

Only stems in *-s-* and *-sim-* have plurals, always with *-a⁺*:

<i>bū'əsúg^D</i>	<i>bū'əsá⁺</i>	<i>bū'əs-</i>	"question"
<i>zàaňsúg^D</i>	<i>zàaňsímà⁺</i>	<i>zàaňsúg-</i>	"dream"

Gerunds of 3-mora *n*-stem verbs, uniquely, never assimilate **ng* → *ŋŋ* (just as they never assimilate **nd* in their dynamic imperfectives [11.1 6.2.1.1](#))

<i>dìgı̄nug^D</i>	←	<i>dìgı̄n^E</i>	"lie down"
<i>zìň'inug^D</i>	←	<i>zìň'in^E</i>	"sit down"

Gerunds of 3-mora *m*-stems may optionally not assimilate **mg* → *ŋŋ*:

<i>tóɔŋ^D</i>	←	<i>tóɔm^{m/}</i>	"depart, disappear"
or <i>tóɔmúg^D</i>			
<i>sàň'ı̄g^D</i>	←	<i>sàň'am^m</i>	"destroy"
or <i>sàň'amug^D</i>			
<i>kàrı̄g^D</i>	←	<i>kàrım^m</i>	"read"
or <i>kàrımug^D</i>			

Gerunds of 4-mora *m*-stems always assimilate:

<i>zàaňsúg^D</i>	←	<i>zàaňsım^m</i>	"dream"
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9.3.4 $r^{\text{E}}|a^+$ Class

Straightforward examples include:

<i>kūgır^{E/}</i>	<i>kūgá⁺</i>	<i>kūg-</i>	"stone"
<i>dìgır^E</i>	<i>dìgá⁺</i>	<i>dìg-</i>	"dwarf"
<i>būgır^E</i>	<i>būgá⁺</i>	<i>būg-</i>	"abode of a <i>wīn^{nE}</i> (spirit, god)"

<i>bàlànɣɪ</i> ^ε	<i>bàlànɣa</i> ⁺	<i>bàlànɣ-</i>	"hat"
<i>yūɣvdɪ</i> ^ε	<i>yūɣvda</i> ⁺	<i>yùɣvd-</i>	"hedgehog"
<i>ɸʉ'à-sādɪ</i> ^{ε/}	<i>ɸʉ'à-sādá</i> ⁺	<i>ɸʉ'à-sād-</i>	"young woman"
<i>nóbɪr</i> ^ε	<i>nōbá</i> ⁺	<i>nōb-</i>	"leg"
<i>lībɪr</i> ^ε	<i>lība</i> ⁺	<i>līb-</i>	"twin"
<i>sōnnɪ</i> ^ε	<i>sōnna</i> ⁺	<i>sòn-</i>	"inner compound wall"
<i>sāngúnnɪr</i> ^ε	<i>sāngúnnà</i> ⁺	<i>sāngún-</i>	"millipede"
<i>bì'isɪr</i> ^ε	<i>bì'isa</i> ⁺	<i>bì'is-</i>	"woman's breast"
<i>sūmmɪr</i> ^ε	<i>sūmma</i> ⁺	<i>sùm-</i>	"groundnut"
<i>yīmmɪr</i> ^ε	<i>yīmmá</i> ⁺	<i>yīm-</i>	"solitary" (adjective)

along with all gerunds of 3-mora stem verbs in *-k^ε -ŋ^ε* and undeleted *-g^ε* like:

<i>yùugvɪ</i> ^ε	"delay"
<i>nōkír</i> ^ε	"taking"
<i>nìŋɪr</i> ^ε	"doing"

For the allomorphy in CVV root-stems before the plural *-a⁺* see [6.1.1.1](#).

Unglottalised vowel stems:

<i>zōvɪ</i> ^ε	<i>zōya</i> ⁺	<i>zò-</i>	"tail"
<i>bīər</i> ^{ε/}	<i>bīēyá</i> ⁺	<i>bīā-</i>	"elder same-sex sib"
<i>zūər</i> ^ε	<i>zūēya</i> ⁺	<i>zūà-</i>	"hill"
<i>nōɔr</i> ^{ε/}	<i>nōyá</i> ⁺	<i>nō-</i>	"mouth"
<i>yòɔr</i> ^ε	<i>yòya</i> ⁺	<i>yò-</i>	"soldier ant"

Glottalised vowel stems:

<i>yū'vɪ</i> ^{ε/}	<i>yūdá</i> ⁺	<i>yū'-</i>	"name"
<i>tītā'ar</i> ^ε	<i>tītāda</i> ⁺	<i>tītá'-</i>	"big" (adjective)
<i>ɸòñ'ɔr</i> ^ε	<i>ɸòñda</i> ⁺	<i>ɸòñ'-</i>	"cripple"
<i>ñyē'ɛr</i> ^{ε/}	<i>ñyēdá</i> ⁺	<i>ñyē'-</i>	"next-younger sibling"
<i>ɸò-tèñ'ɛr</i> ^ε	<i>ɸò-tèñda</i> ⁺	<i>ɸò-tèñ'-</i>	"mind"
<i>yū'ər</i> ^ε	<i>yūāda</i> ⁺	<i>yū'ər-</i> 9.2.2	"penis"

Stems in historical *g deleted after a short vowel which then becomes glottalised [6.1.1.1](#) may have forms made by analogy with these original glottalised-vowel stems, instead of or alongside forms with vowel fusion:

<i>bà'ar^ε</i>	<i>bà'a⁺</i> or <i>bàda⁺</i>	<i>bà'-</i>	"idol" (Farefare <i>bàgrè</i>)
<i>ňyā'ar^ε</i>	<i>ňyā'a⁺</i>	<i>ňyà'-</i>	"root" (← * <i>neg-</i>)
<i>sjà'ar^ε</i>	<i>sjà'a⁺</i>	<i>sjà'-</i>	"forest"
<i>bjāñ'ar^{ε/}</i>	<i>bjāñ'a⁺</i>	<i>bjāñ'-</i>	"wet mud, riverbed"
<i>mù'ar^ε</i>	<i>mụ'àa⁺</i> or <i>mù'ada⁺</i>	<i>mụ'à-</i>	"reservoir, dam"
<i>zànkù'ar^ε</i>	<i>zànkụ'àa⁺</i> or <i>zànkù'ada⁺</i>	<i>zànkụ'à-</i>	"jackal"
<i>kùndù'ar^ε</i>	<i>kùndụ'àa⁺</i> or <i>kùndù'ada⁺</i>	<i>kùndụ'à-</i>	"barren woman"

So too, despite the derivation from *dà⁺* "buy", where the glottalisation is not derived from **g* historically:

<i>kì-dà'ar^ε</i>	<i>kì-dà'ada⁺</i> WK	"bought-in millet"
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Stems in deleted **g* after a long vowel include

<i>vúər^ε</i>	<i>vūáa⁼</i>	<i>vūē-</i>	"fruit of <i>vúəŋ^a</i> tree"
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and all Fusion verb gerunds [11.1](#) like

<i>gbāñ'ar^ε</i>	←	<i>gbāñ'e^{+/}</i>	"grab"
<i>dí'ər^ε</i>	←	<i>dī'e^{+/}</i>	"get"
<i>dúər^ε</i>	←	<i>dūe^{+/}</i>	"rise"

Some root-stems show CV with a short vowel before the *r^ε|a⁺* sg [9.2.1](#). They regularly use the segmental form of the sg for cb.

<i>gbēr^{ε/}</i>	<i>gbēyá⁺</i>	<i>gbēr-</i>	"thigh"
<i>kùkōr^{ε/}</i>	<i>kùkōyá⁺</i>	<i>kùkōr-</i>	"voice"

Similarly *kpàkūr^{ε/}* "tortoise" *gāñr^{ε/}* "ebony fruit" *gūmpūzēr^{ε/}* "duck" *ňyò-vūr^{ε/}* "life".

2-mora stem verbs make gerunds in *-r^ε* instead of *-b^ɔ* after a noun cb:

<i>n̄-íóòr^ε</i>	"fasting" ("mouth-tying")
<i>fū-yéèr^ε</i>	"shirt-wearing"

These set expressions show shortening of the vowel, but this is not productive:

<i>nā'-lór^ε</i>	"place in the compound for tying up cows"
<i>wìd-lōr^{ε/}</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^ε</i>	<i>kùkpàra⁺</i>	<i>kùkpàr-</i>	"palm fruit"
<i>Ñwād-dár^ε</i>			"Venus"
<i>tān^{nε}</i>	<i>tāna⁺</i>	<i>tàn-</i>	"earth"
<i>kpān^{nε}</i>	<i>kpāna⁺</i>	<i>kpàn-</i>	"spear"
<i>má'an^{nε}</i>	<i>mā'aná⁺</i>	<i>mā'an-</i>	"okra"
<i>pībɪn^{nε}</i>	<i>pībina⁺</i>	<i>pìbɪn-</i>	"covering"
<i>dūm^{nε}</i>	<i>dūma⁺</i>	<i>dùm-</i>	"knee"
<i>zɔɔm^{nε}</i>	<i>zɔɔma⁺</i>	<i>zòɔm-</i>	"fugitive"
<i>yùum^{nε}</i>	<i>yùma⁺</i>	<i>yùum-</i>	"year" 6.1.1.2
<i>gbìgɪm^{nε}</i>	<i>gbìgɪma⁺</i>	<i>gbìgɪm-</i>	"lion"
<i>yōgúm^{nε}</i>	<i>yōgúma⁺</i>	<i>yōgum-</i>	"camel"
<i>gél^{lε}</i>	<i>gēlá⁺</i>	<i>gēl-</i>	"egg"
<i>íɪ^{lε}</i>	<i>īlá⁺</i>	<i>īl-</i>	"horn"

With unusual sandhi in the sg, and presumably analogical levelling

<i>ñwān^{nε}</i> SB	<i>ñwāna⁺</i> NT	<i>ñwàn-</i>	"calabash"
<i>ñwām^{mε}</i> WK	<i>ñwāma⁺</i>	<i>ñwàm-</i>	
	SB WK NT		

An exceptional suppletive plural, segmentally and tonally, is seen in

<i>dāar^ε</i>	<i>dābá⁺</i>	<i>dà-</i>	"day"
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These two *r^ε|a⁺* Class words probably have 1-mora stems:

[Mampruli <i>zari</i>]	<i>zā^{+/}</i>	<i>zā-</i>	"millet"
<i>yīr^{ε/}</i>	<i>yā^{+/}</i>	<i>yī-</i>	"house"

Yīr^{ε/} also has the irregular locative forms sg *yín^{nε}* pl *yáan^ε* [17.3](#).

9.3.4.1 /^ε 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> ^ε	Kusaal	<i>Kūsáàs</i> ^ε	Kusaasi
<i>Bùsáàñ</i> ^ε	Bisa	<i>Bùsáàñs</i> ^ε	Bisa
<i>Mòòl</i> ^ε	Mooré	<i>Mòòs</i> ^ε	Mossi
<i>Sìmīil</i> ^ε	Fulfulde	<i>Sìmīis</i> ^ε	Fulbe
<i>Zàngbèèl</i> ^ε	Hausa	<i>Zàngbèèd</i> ^ε	Hausa
<i>Nàsāal</i> ^ε	English/French	<i>Nàsàa-nàm</i> ^a	Europeans

After stems ending in a consonant other than $-r-$ the suffix is either replaced by r^ϵ , or assimilates to the stem final in a way which is indistinguishable from r^ϵ :

<i>Nàbir</i> ^ε	Nabit	<i>Nàbɪdɪb</i> ^a	Nabdema
<i>Tùənnɪr</i> ^ε	Toende Kusaal	<i>Tùən</i> ^{nε}	Toende area
<i>Dàgbān</i> ^{nε/}	Dagbani	<i>Dàgbām</i> ^{ma/}	Dagomba
<i>Bìn</i> ^{nε}	Moba	<i>Bìm</i> ^{ma}	Moba
<i>Yàan</i> ^{nε}	Yansi	<i>Yàañs</i> ^ε	Yansi
<i>Gūrín</i> ^{nε}	Farefare	<i>Gūrís</i> ^ε	Farefare
<i>Tàlɪn</i> ^{nε}	Talni	<i>Tàlɪs</i> ^ε	Tallensi
<i>Bùl</i> ^{lε}	Buli	<i>Bùlɪs</i> ^ε	Bulsa
<i>Àgòl</i> ^{lε}	Agolle Kusaal	<i>Àgòl</i> ^{lε}	Agolle area

However, stems in $-r-$ show the distinctive assimilation $*r/ \rightarrow tt$ [6.2.1](#):

<i>Yāt</i> ^{ε/}	Yarsi	<i>Yāɪs</i> ^{ε/}	Yarsi
<i>Bāt</i> ^{ε/}	Bisa	<i>Bāɪs</i> ^{ε/}	Bisa

Unexpected epenthesis [6.2.1](#) occurs in:

<i>Kàmbònr</i> ^ε	Twi	<i>Kàmbòmɪs</i> ^ε	Ashanti
<i>Ñwāmpūr</i> ^{lε/}	Mampruli	<i>Ñwāmpūɪs</i> ^{ε/}	Mamprussi

9.3.5 $\mathcal{P}|i^+$ Class

The plural $-i^+$ causes the stem vowels *aa iə eε* to undergo "umlaut" to *ii*.
Straightforward examples for the $\mathcal{P}|i^+$ Class are

<i>mòli\mathcal{P}</i>	<i>mòli$^+$</i>	<i>mòl-</i>	"gazelle"
<i>bīlíl\mathcal{P}</i>	<i>bīlíl$^+$</i>	<i>bīl-</i>	"seed"
<i>ñyīrí\mathcal{P}</i>	<i>ñyīrí$^+$</i>	<i>ñyīr-</i>	"egusi"
<i>zūrí\mathcal{P}</i>	<i>zūrí$^+$</i>	<i>zūr-</i>	"dawadawa seed"
<i>bōn-búvdì\mathcal{P}</i>			"plant"

Two 1-mora stem $\mathcal{P}|i^+$ nouns are

no sg	<i>kī$^+$/</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$^+$</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>náaf\mathcal{P}</i>	<i>nīgí$^+$</i>	<i>nā'-</i>	"cow"
<i>wáaf\mathcal{P}</i>	<i>wīgí$^+$</i>	<i>wā'-</i>	"snake"

Stems in $-n-$ show consonant assimilation in the sg $*nf \rightarrow \tilde{v}f$ [6.2.1](#):

<i>nī\mathcal{P}/</i>	<i>nīnί$^+$</i>	<i>nīn-</i> or <i>nīf-</i>	"eye"
<i>píiñ\mathcal{P}</i>	<i>pīinί$^+$</i>	<i>pīin-</i>	"genet"
<i>kíiñ\mathcal{P}</i>	<i>kīinί$^+$</i>		"millet seed"
<i>zúvñ\mathcal{P}</i>	<i>zūvinί$^+$</i>		"dawadawa seed"

In the word

<i>míi\mathcal{P}</i>	<i>mīinί$^+$</i>		"okra seed"
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the singular is probably remodelled after an umlauted pl: cf *má'an*^{NE} "okra."

In two words stem $-d-$ is lost in the sg:

<i>wìə\mathcal{P}</i>	<i>wìd$^+$</i>	<i>wìd-</i>	"horse"
<i>lā'a\mathcal{P}</i>	<i>līgud$^+$</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^a</i>	<i>zīmí⁺</i>	<i>zīm-</i>	"fish"
<i>wāɫg^a</i>	<i>wāɫs^ε</i>	<i>wàl-</i>	a kind of gazelle
	or <i>wālí⁺</i> tones sic WK		
<i>sībɪg^{a/}</i>	<i>sībí⁺</i>	<i>sīb-</i>	a kind of termite
<i>sīĩŋ^{f/}</i>	<i>sīĩŋs^{ε/}</i>	<i>sīñ-</i>	"bee"
or <i>sīĩŋg^{a/}</i>			
<i>sūñ^{f/}</i>	<i>sūñyá⁺</i>	<i>sūñ-</i>	"heart"
or <i>sūuñ^{ε/}</i>			

One such word also irregularly deletes the final stem consonant of the cb:

<i>kpā'úŋ^ɔ</i>	<i>kpĩ'iní⁺</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^ɔ</i>	<i>sà'-</i>	"millet porridge, TZ"
<i>tāñp^ɔ</i>	<i>tāñp-</i>	"war" 6.1.1.1

Written sources also have *ki'ib^ɔ*, probably *kĩ'ib^ɔ* "soap", cf Toende *kí'ɪp* in Niggli's "Dictionnaire." WK has instead *kīibú⁺*, borrowed from Mampruli [15.1](#).

However, all regular gerund forms of 2-mora stem Variable verbs belong here:

<i>kōub^{ɔ/}</i>	←	<i>kō⁺</i>	"kill"
<i>dōgub^{ɔ/}</i>	←	<i>dōg^ε</i>	"cook"
<i>dō'ab^ɔ</i>	←	<i>dɔ'á^a</i>	"bear, beget"
<i>kādɪb^ɔ</i>	←	<i>kàd^ε</i>	"drive away"
<i>pīɪb^ɔ</i>	←	<i>pìl^ε</i>	"cover"
<i>kpārɪb^ɔ</i>	←	<i>kpàr^ε</i>	"lock"
<i>bāsɪb^ɔ</i>	←	<i>bàs^ε</i>	"abandon, go away"

Stems in *b* show -p- via *bb → pp

<i>sōp^{ɔ/}</i>	←	<i>sōb^ε</i>	"write"
<i>lōp^{ɔ/}</i>	←	<i>lōb^ε</i>	"throw stones at"

Stems in *m* show the consonant assimilation **mb* → *mm*

<i>kīm^{mɔ}</i>	←	<i>kìmm^m</i>	"tend a flock/herd"
<i>wūmm^{mɔ}</i>	←	<i>wùmm^m</i>	"hear"

Stems in *n* do not assimilate, however (cf 3-mora *n*-stem gerunds [9.3.3.1](#))

<i>būnɪb^ɔ</i>	←	<i>bùn^ɛ</i>	"reap"
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The verb *yīs^ɛ* "make go/come out" has the expected gerund *yīsɪb^ɔ*;
 exceptionally the alternate form *yīs^{ɛ/}* also makes its gerund in the *b^ɔ* Class: *yīsɪb^ɔ*,
 probably the only noun in the *b^ɔ* Class which does not have a 2-mora stem.

9.3.7 *m^m* Class

Countable nouns in *m^m* Class form plurals with *-a⁺* or *-s^ɛ*, or use *nàm^a* [9.4](#).
 Straightforward forms include:

<i>dāam^{m/}</i>	<i>dā-</i>	"millet beer, pito"
<i>zīim^{m/}</i>	<i>zī-</i>	"blood"
<i>kù'əm^m</i>	<i>kɥ'à-</i>	"water"
<i>mèlɪgim^m</i>		"dew"
<i>kōdum^m</i>		"olden days"
<i>dū'uním^m</i>	<i>dū'un-</i>	"urine"
<i>zàam^m</i>	<i>zà-</i>	"evening"
<i>dàalum^m</i>		"masculinity"
<i>pò'alum^m</i>		"femininity"
<i>yàarim^m</i>	<i>yàar-</i>	"salt"
<i>zāańsím^m</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^{m/}</i>	<i>vōm-</i>	"life"
<i>kūm^m</i>	<i>kùm-</i>	"death"
<i>zōm^{m/}</i>	<i>zōm-</i>	"flour"
<i>yām^{m/}</i>	<i>yām-</i>	"gall; gall bladder"

m^m 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^m</i>		<i>bùgúm-</i> or <i>bùgūm-</i>	"fire"
<i>pūum^{m/}</i>		<i>pūum-</i>	"flowers, flora"
<i>bìilím^m</i>			"childhood"
<i>bì'isím^m</i>			"milk"
<i>dàalím^m</i>	<i>dàalímìs^ε</i>	<i>dàalím-</i>	"male sex organs"
<i>pè'alím^m</i>	<i>pè'alímìs^ε</i>	<i>pè'alím-</i>	"female sex organs"
<i>pīim^{m/}</i>	<i>pīimá⁺</i>	<i>pīim-</i>	"arrow" 6.1.1.2

Pīim^{m/} "arrow" is a remnant of an old ɔ|^ε Class, preserved in e.g. the Gurma languages and Nawdm: cf Nawdm *fí:mú* "arrow", plural *fí:mí*.

9.4 *Nàm^a* plurals

There is an alternative way of making plural nouns, with the word *nàm^a*, 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 pre-modifier; 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^a* are made for:

(a) a few human-reference nouns which have a sg consisting of a bare stem alone:

<i>mà⁺</i>	<i>mà nám^a</i>	<i>mà-</i>	"mother"
	(tone <i>sic</i> , behaving as uncompounded)		
<i>bā^{+/}</i>	<i>bā'-nám^a</i>	<i>bā'-</i>	"father"
<i>zụà⁺</i>	<i>zụà-nàm^a</i>	<i>zụà-</i>	"friend"

(b) Nouns which use the suffix *-b^a* as singular, and those where the usual plural stem differs from the sg or where the regular plural would be ambiguous [9.3.1](#).

(c) loanwords, unless they have been fitted into the Class system by analogy:

<i>tìp^a</i>	<i>tìp-nàm^a</i>	<i>tìp-</i>	"healer"
<i>bòrkìn^a</i>	<i>bòrkìn-nàm^a</i>	<i>bòrkìn-</i>	"honourable person"

(d) several pronouns

<i>àń'òń</i>	"who" asking for a plural answer "what people?"
<i>nēⁱ</i>	inanimate pronoun "this" in the New Testament ; but my informants use animate pl <i>bàn</i> rather than <i>nēⁱ-nám</i> .

<i>dāan</i> ^a	<i>dàan-nàm</i> ^a	<i>dàan-</i>	"owner of ..."
<u>16.10.3.1</u>			
<i>tīrààn</i> ^a	<i>tīrààn-nàm</i> ^a	<i>tīrààn-</i>	"neighbour, peer"

(e) quantifiers used as Noun Phrase heads, e.g.

pīiga nám^a "tens"

Àyí námá_ àyí á nē nāasí.

NUM:two PL NUM:two COP FOC four.

"Two two's are four."

(f) plural forms with singular meaning:

<i>dà-pūvdá nám</i> ^a	"crosses"
<i>kūt nám</i> ^a	"nails"; sg also "iron"
<i>bē'ed nám</i> ^a	"evils"

(g) mass nouns used with count meanings:

<i>bùgúm nám</i> ^a	"fires, lights"
<i>sā'ab nám</i> ^a	"portions of millet porridge"
<i>dāam nám</i> ^a	"beers"

(h) forms with the Personifier particle *À-* 16.6:

À-zī'_ ∅ kpí nám kpîd né kà téñbìd.

PERS-NEG.KNOW CAT die PL die:DIPF FOC and tremble:DIPF

"Those who don't know death, are dying with a struggle." (Proverb)

(i.e. "It's a storm in a teacup.")

9.5 Plurals used as singulars

A number of words referring to uncountables or abstracts are plural in form:

<i>bāñ'as</i> ^ε	<i>bāñ'-</i>	"disease"
<i>ñyō'os</i> ^{ε/}	<i>ñyō'-</i>	"smoke"
<i>tàdımís</i> ^ε		"weakness"
<i>zōlımís</i> ^ε		"foolishness"
<i>mēt</i> ^{ε/}	<i>mēt-</i> <u>9.2.2</u>	"pus"

<i>kūt^ε</i>	<i>kùt-</i> 9.2.2	"iron"
<i>zùød^ε</i>		"friendship"
<i>bōvd^ε</i>		"innocence"
<i>sīñd^{ε/}</i>		"honey"
<i>nīn-púvd^ε</i>		"pus"
<i>wāad^{ε/}</i>		"cold weather"
<i>sōñ-péèn^{nε}</i>		"anger"
<i>ky'à-nūud^{ε/}</i>		"thirst"
<i>sālima⁺</i>	<i>sālim-</i>	"gold"
<i>sìda⁺</i>	<i>sìd-</i>	"truth"

Kūt^ε is used not only as "iron" but also for "nail"; the original singular *kūdvǝ*^ɔ appears in the personal name *Ā-Kūdvǝ*^ɔ [32.2](#).

So too with a number of irregularly formed abstract nouns from verbs:

<i>gēñmís^ε</i>	"madness"	← <i>gēñm^{m/}</i>	"madden, go mad"
<i>bùdımís^ε</i>	"confusion"	← <i>bùdım^m</i>	"confuse"
<i>tītōmıs^ε</i>	"sending"	← <i>tòm^m</i>	"send"
<i>zīd^{ε/}</i>	"carrying on head"	← <i>zī⁺</i>	"carry on head"
<i>vūud^{ε/}</i>	"noise"	← <i>vū⁺</i>	"make a noise"
<i>kēn^{nε/}</i>	"arrival"	← <i>kēñ⁺</i>	"come"
<i>pǝñ'ad^ε</i>	"word, speech"	← <i>pǝñ^a</i>	"speak" (irreg. tones)

[sg *pǝñ'ad^ε* exists, but the pl is generally used for "speech"]

<i>tēñ'εsá⁺</i>	"thought"	cf <i>tēñ'εsá yīnní</i>	"one thought" (Acts 4:32)
<i>dì'əma⁺</i>	"festival"	← <i>dì'əm^m</i>	"play, not be serious"
<i>tōuma⁺</i>	"work"	← <i>tòm^m</i>	"work"
[sg <i>tōum^{mε}</i>	"deed"]		

For *nà'así⁺* "honour", *kābirí⁺*, "permission to enter" and *sūgvuró⁺* "forbearance" see [9.6](#).

A single object may be referred to by the name of its parts:

	<i>dà-pōvdá⁺</i>	"cross"
pl	<i>dà-pōvdá nàm^a</i>	
cf	<i>dà-pōvdír^ε</i>	"cross-piece"

A Kusaal plural may just happen to correspond to an English mass noun:

	<i>lāuk^ɔ</i>	"piece of goods"
pl	<i>lā'ad^ɛ</i>	"goods"

A piece of West African history underlies

	<i>līgidi⁺</i>	"money"
sg	<i>lā'a^ɸ</i>	"cowrie"

See also on the ^a|*b*^a Subclass with *-b^a* as a sg suffix [9.3.1.2](#).

9.6 Nouns with Apocope Blocking

A number of nouns ending in *-i⁺* or *-u⁺* display Apocope Blocking [6.4](#):

<i>būudi⁺</i>	<i>būud-</i>	"tribe"
<i>pīini⁺</i>	<i>pīin-</i>	"gift"
<i>nà'asi⁺</i>		"honour"
<i>kābirí⁺</i>		"entry permission"
<i>sūgvrú⁺</i>		"forbearance"

It is unlikely that this *-i⁺* represents the *ɸ|i⁺* Class plural suffix. There are no traces of any *ɸ* sg forms, and the *ɸ|i⁺* Class does not otherwise include abstract nouns. Cognates of *būudi⁺* in related languages in fact show that the *-di* component represents the equivalent of the *g^ɔ|d^ɛ* Class plural: Farefare *búúrí* "race, sort, espèce, clan", *bu-zāŋka* "race étrangère"; Mooré *búudu* "famille, espèce" sg *búugu*; *nà'asi⁺* may similarly represent a *g^a|s^ɛ* Class pl with Apocope Blocking.

Other words in final *-i⁺* or *-u⁺* are probably loanwords from languages where citation forms do not undergo Apocope, e.g. WK's Mampruli loan *kīibú⁺* "soap" [15.1](#). Both *kābirí⁺* and *sūgvrú⁺* are also unusual in having an apparent *-r-* derivational suffix, which is probably to be accounted for by their being loans with the equivalent of the *r^ɛ* sg Noun Class suffix [13.2.1.4](#); the related verbs *kābir^{ɛ/}* "ask for admission", *sūgvr^{ɛ/}* "forbear, be patient with" would then need to be explained as back-formations.

9.7 Loanwords

Some loanwords [15.1](#) are fitted into Noun Classes by analogy (cf [9.1](#)):

<i>àrazà^a</i>	<i>àrazà'as^ε</i>	<i>àrazà'-</i>	"riches" Hausa <i>arzikii</i>
<i>màlġāk^{a/}</i>	<i>màlġā'as^{ε/}</i>	<i>màlġā'-</i>	"angel" DK (Arabic)
<i>gādv^{ɔ/}</i>	<i>gāt^{ε/}</i>	<i>gād-</i>	"bed" Hausa <i>gadoo</i>
<i>lòmbò'ɔg^ɔ</i>	<i>lòmbò'ɔd^ε</i>	<i>lòmbò'-</i>	"garden" Hausa <i>lambu</i>
<i>lór^ε</i>	<i>lòyà⁺ tones sic</i> or <i>lóm^{ma}</i>	<i>lór-</i>	"car, lorry" cf <i>Mōr^ε</i> 9.3.1.1
<i>àlópìr^ε</i>	<i>àlópìyá⁺</i>		"aeroplane" SB
<i>wādir^{ε/}</i>	<i>wādá⁺</i>	<i>wād-</i>	pl "customs, law"

(English "order", via Hausa, with sg and cb back-formations)

Others make *nàm^a* plurals [9.4](#):

<i>gādv⁺</i>	<i>gādv-nám^a</i>	<i>gādv-</i>	"bed" WK
<i>kèékè⁺</i>	<i>kèékè-nàm^a</i>	<i>kèékè-</i>	"bicycle" Hausa <i>kèekè</i>
<i>dāká⁺</i>	<i>dāká-nàm^a</i>	<i>dāká-</i>	"box" Hausa <i>àdakàa</i>
<i>téébùl^ε</i>	<i>téébùl-nàm^a</i>	<i>téébùl-</i>	"table"
<i>Nàsāara⁺</i>	<i>Nàsàar-nàm^a</i> or <i>Nàsàa-nàm^a</i>	<i>Nàsàar-</i> <i>Nàsàa-</i>	"white person, European" 32.5 ; ultimately from Arabic <i>نصارى Nas^{ra}:ra:</i> "Christians"; cf Hausa <i>Nàsaara</i>

Loanwords ending in L or H toneme distinguish sg from cb by the fact that L Raising 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>dūniya⁺</i>	"world" (Arabic دنيا <i>dunya:</i>)
<i>dūniyá-kàṅā</i>	"this world"

10 Adjective flexion

Primary adjectives are **descriptive**; many, though by no means all, have corresponding descriptive-aspect 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*^a "goat"

<i>bù-pìəlīg</i> ^a	<i>bù-pìəlis</i> ^ε	<i>bù-pìəl-</i> (<i>g</i> ^a <i>s</i> ^ε)	"white goat"
<i>bù-pìəl</i> ^ε	<i>bù-pìəla</i> ⁺	<i>bù-pìəl-</i> (<i>r</i> ^ε <i>a</i> ⁺)	<i>id</i>

WK claims a meaning difference in intensity in gradable adjectives with suffixes of different classes, consistently ranking the singular suffixes *g*^a *r*^ε *g*^ɔ 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*^m suffix for agreement with mass or abstract nouns. This is probably driven by the strong association of the *m*^m Class with meaning; there is similarly a notable preference for plural *s*^ε over *a*⁺ for human reference:

<i>nīn-sábilis</i> ^ε	"Africans"
<i>nīn-sábilà</i> ⁺	accepted by informants but much less common
<i>Zyà-wiis</i> ^ε	"Red Zoose Clan"
	though <i>wiug</i> ^ɔ "red" is usually <i>r</i> ^ε <i>a</i> ⁺ ~ <i>g</i> ^ɔ <i>d</i> ^ε type

The ^a|*b*^a and ^f|*l*⁺ suffixes are found only in set expressions and *b*^ɔ never occurs. Most often, *r*^ε|*a*⁺ Class suffixes occur along with either *g*^a|*s*^ε or *g*^ɔ|*d*^ε but not both; this perhaps reflects an intermediate stage in the collapse of the historical agreement system in which *g*^a|*s*^ε and *g*^ɔ|*d*^ε 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^ϵ 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^ϵ , 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:

$zì\check{n}'a^+$	$zè\check{n}'\epsilon s^\epsilon$	$zè\check{n}'-$	"red"
$zè\check{n}'og^\gamma$	$zè\check{n}'\epsilon d^\epsilon$		
	$zè\check{n}'da^+$		

$b\bar{l}'a^+$	$b\bar{l}'\alpha s^\epsilon$	$b\bar{l}'\grave{\alpha}-$	"bad"
$b\bar{\epsilon}'og^\gamma$	$b\bar{\epsilon}'\epsilon d^\epsilon$	$b\bar{\epsilon}'-$	
$b\bar{\epsilon}'\epsilon d^\epsilon$ is often used as sg, with a $n\grave{\alpha}m^a$ plural			

Other primary adjectives use either $g^a|s^\epsilon$ or $g^\gamma|d^\epsilon$ suffixes but not both:

$w\grave{\alpha}b\iota g^a$	$w\grave{\alpha}b\iota s^\epsilon$	$w\grave{\alpha}b-$	"lame"
$w\grave{\alpha}b\iota r^\epsilon$	$w\grave{\alpha}ba^+$		
$v\grave{\epsilon}\check{n}l\iota g^a$	$v\grave{\epsilon}\check{n}l\iota s^\epsilon$		"beautiful"
	$v\grave{\epsilon}\check{n}l\iota a^+$		
$v\grave{\epsilon}n\eta g^a$	$v\grave{\epsilon}n\eta s^\epsilon$	$v\grave{\epsilon}n-$	"beautiful"
$v\grave{\epsilon}n\eta r^\epsilon$ rare	$v\grave{\epsilon}n\eta a^+$		

and similarly $w\grave{\epsilon}n\eta r^\epsilon$ "resembling."

$s\grave{\alpha}b\iota l\iota g^a$	$s\grave{\alpha}b\iota l\iota s^\epsilon$	$s\grave{\alpha}b\iota l-$	"black"
$s\grave{\alpha}b\iota l\iota^\epsilon$	$s\grave{\alpha}b\iota l\iota a^+$		

and similarly $p\grave{\alpha}a\iota l\iota g^a$ "new" $z\acute{\alpha}a\iota^\epsilon$ "empty" $b\grave{\alpha}a\check{n}\iota g^a$ "slim" $p\grave{\iota}\alpha\iota l\iota g^a$ "white"

$t\bar{i}t\grave{\alpha}'og^\gamma$ rare	$t\bar{i}t\grave{\alpha}da^+$	$t\bar{i}t\grave{\alpha}'-$	"big"
$t\bar{i}t\grave{\alpha}'ar^\epsilon$			
$n\grave{\epsilon}og^\gamma$	$n\grave{\epsilon}\epsilon d^\epsilon$	$n\grave{\epsilon}-$	"empty"
$n\grave{\epsilon}\epsilon r^\epsilon$	$n\grave{\epsilon}ya^+$		
$w\grave{\iota}ug^\gamma$	$w\grave{\iota}id^\epsilon$	$w\grave{\iota}-$	"red"
$w\grave{\iota}ir^\epsilon$	$w\grave{\iota}ya^+$		

<i>wōk</i> ^{ɔ/}	<i>wā'ad</i> ^{ε/}	<i>wā'</i> - or <i>wōk</i> -	"long, tall"
<i>wā'ar</i> ^{ε/} rare	<i>wā'á</i> ⁺		

<i>bèdvug</i> ^ɔ		<i>bèd</i> -	"great"
<i>bèdir</i> ^ε rare	<i>bèda</i> ⁺		

<i>kōdvug</i> ^ɔ	<i>kōt</i> ^ε rare	<i>kòd</i> -	"old"
<i>kōdir</i> ^ε	<i>kōda</i> ⁺		

S-stems do not use pl *s*^ε:

<i>bōvusig</i> ^a		<i>bōvus</i> -	"soft"
<i>bōvusír</i> ^ε	<i>bōvusá</i> ⁺		

Similarly *mā'asír*^ε "cold, wet" *mālsír*^ε "sweet" *tēbísír*^ε "heavy" *lābísír*^ε "wide", and also

<i>ρòɔdig</i> ^a		<i>ρòɔd</i> -	"few, small"
<i>ρòɔdir</i> ^ε	<i>ρòɔda</i> ⁺		

Stems in *m n* do not use sg *r*^ε, except for

<i>sùŋ</i> ^ɔ		<i>sùŋ</i> -	"good"
<i>sùm</i> ^{mε}	<i>sùma</i> ⁺		

As usual with adjectives, the singular may show either *g*^a or *g*^ɔ but not both.

<i>gīŋ</i> ^a	<i>gīma</i> ⁺	<i>gīŋ</i> -	"short"
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<i>dēεŋ</i> ^a	<i>dēεñs</i> ^ε		"first"
	<i>dēεmıs</i> ^ε	<i>dēεŋ</i> -	
	<i>dēεna</i> ⁺		

Because (as with nouns) stems in *m n*, and all 3-mora stems, use pl *-a*⁺ instead of *-d*^ε, most adjectives in *m n* simply belong to the *g*^ɔ|*a*⁺ Subclass [9.3.3.1](#):

<i>dà-zēmmúg</i> ^ɔ	<i>dà-zēmmá</i> ⁺	<i>dà-zēm</i> -	"equal piece of wood"
<i>tūvlúg</i> ^ɔ	<i>tūvlá</i> ⁺	<i>tūvl</i> -	"hot"
<i>lāllúg</i> ^ɔ	<i>lāllá</i> ⁺	<i>lāl</i> -	"distant"
<i>mì'isug</i> ^ɔ	<i>mì'isa</i> ⁺	<i>mì'is</i> -	"sour"
<i>wàuŋ</i> ^ɔ	<i>wàna</i> ⁺	<i>wàuŋ</i> -	"wasted, thin"

<i>kpī'orŋ</i> ^ɔ	<i>kpī'əma</i> ⁺	<i>kpī'orŋ-</i>	"hard, strong"
<i>zùlvŋ</i> ^ɔ	<i>zùlvma</i> ⁺	<i>zùlvŋ-</i>	"deep"

and so also *yàlvŋ*^ɔ "wide" *ñyālúŋ*^ɔ "wonderful" *yēl-nárùŋ*^ɔ "necessary thing", along with the probably originally 3-mora stems (via **rr* → *r*, **ss* → *s* 6.2.1):

<i>yī-póŋrùg</i> ^ɔ	<i>yī-póŋrà</i> ⁺		"nearby house"
<i>kísùg</i> ^ɔ	<i>kīsá</i> ⁺	<i>kīs-</i>	"hateful, taboo"

Other single-class adjectives are:

<i>puāk</i> ^a	<i>pū'as</i> ^ε	<i>pu'à-</i>	"female" (human)
<i>ñyá'an</i> ^a	<i>ñyá'as</i> ^ε	<i>ñyá'an-</i>	"female" (animal)
	or <i>ñyā'amís</i> ^ε		
<i>ñyèesíŋ</i> ^a	<i>ñyèensís</i> ^ε	<i>ñyèesíŋ-</i>	"self-confident"
<i>vōr</i> ^{ε/}	<i>vōyá</i> ⁺	<i>vōr-</i>	"alive"
<i>dāvŋ</i> ^ɔ	<i>dāad</i> ^ε	<i>dà-</i>	"male"
<i>tōvg</i> ^ɔ	<i>tōvd</i> ^ε	<i>tò-</i>	"bitter"

and other derivatives in *-m-*: *vèñllíŋ*^a "beautiful" *mālvísŋ*^a "pleasant" *lāllíŋ*^a "distant."

Extremely **irregular** is

<i>bīl</i> ^a	<i>bībvs</i> ^ε	<i>bīl-</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 seems often to have a diminutive sense: thus Farefare (Niggli) *níílá* "chick", *pìlilà* "lamb", *bùdíblá* "boy", *púglá* "girl", *kíílá* "young guinea fowl"; Mooré *bìríblá* "boy", *bìpúglá* "girl." The plural stem *bib-* is presumably 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^ε|a*⁺ Class sg and pl suffixes, but may also take another sg suffix; this is *g^a* for WK, but *g^ɔ* for KT:

<i>kōvdír</i> ^ε	<i>kōvdá</i> ⁺	<i>kōvd-</i>	"murderous;
<i>kōvdíg</i> ^a WK			liable to be killed"
<i>kōvdúg</i> ^ɔ KT			

<i>tōmmur</i> ^ε	<i>tōmma</i> ⁺ WK <i>tōmna</i> ⁺ KT	<i>tòm-</i>	"working, helpful"
<i>sīnnír</i> ^ε rare	<i>sīnná</i> ⁺	<i>sīn-</i>	"silent"
<i>sīnníg</i> ^a			
<i>dēl</i> ^{ε/}	<i>dēllá</i> ⁺	<i>dēl-</i>	"leaning"
<i>mōr</i> ^{ε/}	<i>mōrá</i> ⁺	<i>mōr-</i>	"having"
<i>nō-záñ</i> ^ε	<i>nō-záñlla</i> ⁺		"hen for holding"
<i>kùg-dēl</i> ^{ε/}	<i>kùg-dēllá</i> ⁺		"chair for leaning on"
<i>bōn-gúl</i> ^ε	<i>bōn-gúlla</i> ⁺		"thing for suspending"

Stems in *g k ŋ* do not use the sg suffixes *g^a g^ɔ*:

<i>bōn-túlgir</i> ^ε	<i>bōn-túlgá</i> ⁺		"heating thing"
<i>ñwī-tékir</i> ^ε	<i>ñwī-téká</i> ⁺	<i>ñwī-ték-</i>	"pulling-rope"
<i>bōn-súgír</i> ^ε	<i>bōn-súgá</i> ⁺		"helpful thing"
<i>bì-nòŋir</i> ^ε	<i>bì-nòŋá</i> ⁺		"beloved child"

Adjectives derived from 4-mora stem verbs in *-m* in KT's speech take *g^a* or *g^ɔ* sg and *-a⁺* pl; they may drop the *-m-* in the plural:

<i>nīn-pú'alig^a</i>	<i>nīn-pú'alima</i> ⁺	"harmful person"
<i>nīn-záaňsùg^ɔ</i>	<i>nīn-záaňsà</i> ⁺	"dreamy person"

Resultative adjectives are derived from Variable verbs with the suffix **-lum-*. They inflect regularly as *g^ɔ|a⁺* Subclass *m*-stems. KT (not WK) also has forms without *-m-* in both sg and pl:

<i>kpiilúg^ɔ</i>	<i>kpiilímá</i> ⁺	<i>kpiilúg-</i>	"dead"	WK
<i>nīn-kpíilùg^ɔ</i>	<i>nīn-kpíilímá</i> ⁺		"dead person"	KT
<i>gēēñlúg^ɔ</i>	<i>gēēñlímá</i> ⁺	<i>gēēñlúg-</i>	"tired"	WK
<i>nīn-gēēñlùg^ɔ</i>	<i>nīn-gēēñlímá</i> ⁺		"tired person"	KT
<i>pè'elúg^ɔ</i>	<i>pè'elímá</i> ⁺	<i>pè'elúg-</i>	"full"	WK KT
	<i>dūg-pé'elá</i> ⁺		"full pots"	KT

11 Verb flexion

Though written solid with the verb in traditional orthography, Remoteness marker n^E [27.1.1](#) and subject pronoun y^a [19.7.3](#) are not flexions but Liaison Enclitics.

Historically, imperfective verb forms were created by the addition of *derivational* * d or * y ($\leftarrow *l$) before an original imperfective flexion * $-a$ [7.3](#), but in the case of verbs which also appear in other aspects, extensive levelling has produced a system which is synchronically flexional, and indeed strikingly regular.

11.1 Variable verbs

About 90% of the verbs in my materials are Variable verbs: prototypical verbs expressing activities, accomplishments and achievements, and inflecting for aspect.

The unmarked Base Form is used for the perfective and resultative aspects, and the dynamic imperfective aspect adds a flexional suffix $-d^a$. The suffix $-m^a$ marks imperative mood when and only when the verb word itself has tone overlay due to Independency marking [19.6.2.2](#).

Examples cite the unmarked perfective/resultative Base Form, the dynamic imperfective and $-m^a$ imperative in order. The $-m^a$ imperative always shows tone overlay due to Independency marking. [19.6.1.1](#).

Straightforward examples of verb inflexion include:

$k\bar{u}^+$	$k\bar{u}d^a/$	$k\bar{u}m^a$	"kill"
$kp\grave{e}\check{n}'^+$	$kp\grave{e}\check{n}'\epsilon d^a$	$kp\grave{e}\check{n}'\epsilon m^a$	"enter"
$k\grave{i}\grave{a}^+$	$k\grave{i}\epsilon d^a$	$k\grave{i}\epsilon m^a$	"cut"
$k\grave{u}\bar{a}^+$	$k\bar{u}\epsilon d^a/$	$k\bar{u}\epsilon m^a$	"hoe"
$g\grave{w}\check{n}'^+$	$g\grave{w}\check{n}'d^a$	$g\grave{w}\check{n}'m^a$	"hunt"
$d\bar{u}g^E$	$d\bar{u}g\upsilon d^a/$	$d\bar{u}g\upsilon m^a$	"cook"
$y\grave{u}ug^E$	$y\grave{u}ug\upsilon d^a$	$y\grave{u}ug\upsilon m^a$	"delay, get late"
$y\bar{a}d\iota g^E/$	$y\bar{a}d\iota g\acute{d}^a$	$y\bar{a}d\iota g\iota m^a$	"scatter"
$p\grave{i}\bar{a}\check{n}'^a$	$p\grave{i}\bar{a}\check{n}'ad^a/$	$p\grave{i}\bar{a}\check{n}'am^a$	"speak; praise"
$d\grave{u}'\grave{a}^a$	$d\grave{u}'ad^a$	$d\grave{u}'am^a$	"bear, beget"
$n\bar{u}k^E/$	$n\bar{u}k\acute{d}^a$	$n\bar{u}k\iota m^a$	"take"
$s\grave{i}\grave{a}k^E$	$s\grave{i}\grave{a}k\iota d^a$	$s\grave{i}\grave{a}k\iota m^a$	"believe, agree"
$g\bar{a}\eta^E/$	$g\bar{a}\eta\acute{d}^a$	$g\bar{a}\eta\iota m^a$	"choose"
$kp\grave{e}'\eta^E$	$kp\grave{e}'\eta\iota d^a$	$kp\grave{e}'\eta\iota m^a$	"strengthen"
$kp\grave{a}r^E$	$kp\grave{a}r\iota d^a$	$kp\grave{a}r\iota m^a$	"lock"
$s\bar{u}g\upsilon r^E/$	$s\bar{u}g\upsilon r\acute{d}^a$	$s\bar{u}g\upsilon r\iota m^a$	"forgive"
$b\grave{a}s^E$	$b\grave{a}s\iota d^a$	$b\grave{a}s\iota m^a$	"go/send away"
$s\bar{i}g\iota s^E/$	$s\bar{i}g\iota s\acute{d}^a$	$s\bar{i}g\iota s\iota m^a$	"lower"
$n\bar{a}'m\iota s^E/$	$n\bar{a}'m\iota s\acute{d}^a$	$n\bar{a}'m\iota s\iota m^a$	"(make) suffer"

Some root-stems in CVV- show a CV- allomorph in both dynamic imperfective and imperative, with *-t-* for *-d-* and *-mm-* for *-m-* [6.1.1.1](#):

<i>dì⁺</i>	<i>dìt^a</i>	<i>dìm^{ma}</i>	"eat"
<i>ňyē⁺</i>	<i>ňyēt^{a/}</i>	<i>ňyèm^{ma}</i>	"see"

and so also *lì⁺*, *lù⁺* "fall" *dō⁺* "go up" *yī⁺* "go/come out" *zò⁺* "run, fear."

Stems in *-d-* show *-t-* in the dipf via **dd* → *tt*:

<i>bùd^ε</i>	<i>bùt^a</i>	<i>bùdɪm^a</i>	"plant"
<i>gàad^ε</i>	<i>gàt^a</i> 6.3.3	<i>gàadɪm^a</i>	"pass, surpass"

Stems in *l* generate a cluster in the dipf via **ld* → *nn* [6.2.1](#):

<i>vōl^ε</i>	<i>vōn^{na/}</i>	<i>vòlɪm^a</i>	"swallow"
<i>màal^ε</i>	<i>màan^{na}</i>	<i>màalɪm^a</i>	"make; sacrifice"
<i>dīgɪl^{ε/}</i>	<i>dīgín^{na}</i>	<i>dīgɪlɪm^a</i>	"lay down"

Only 2-mora stems assimilate **bm* → *mm*:

<i>lèb^ε</i>	<i>lèbɪd^a</i>	<i>lèm^{ma}</i>	"return"
<i>sōb^ε</i>	<i>sōbɪd^{a/}</i>	<i>sòm^{ma}</i>	"write"
<i>lìəb^ε</i>	<i>lìəbɪd^a</i>	<i>lìəbɪm^a</i>	"become"
<i>ēēñb^{ε/}</i>	<i>ēēñbɪd^a</i>	<i>ēēñbɪm^a</i>	"lay a foundation"

Only 2-mora *n*-stems show **nd* → *nn*; only *kēŋ^{ε/}* (below) shows **nm* → *mm*:

<i>bùn^ε</i>	<i>bùn^{na}</i>	<i>bùnɪm^a</i>	"reap"
<i>mōn^ε</i>	<i>mōn^{na/}</i>	<i>mònɪm^a</i>	"make porridge"
<i>gò'ɔn^ε</i>	<i>gò'ɔnɪd^a</i>	<i>gò'ɔnɪm^a</i>	"extend neck"
<i>dìgɪn^ε</i>	<i>dìgɪnɪd^a</i>	<i>dìgɪnɪm^a</i>	"lie down"

The *nn*-stem *sùn^ε* [6.2.1](#) does not assimilate at all:

<i>sùn^{nε}</i>	<i>sùnnɪd^a</i>	<i>sùnnɪm^a</i>	"bow head"
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4-mora *m*-stems always assimilate **md* → *mn*, *mm*:

<i>siilɪm^m</i>	<i>siilɪm^{ma}</i>	<i>siilɪm^{ma}</i>	"quote proverbs"
<i>lāŋɪm^m</i>	<i>lāŋɪm^{ma}</i>	<i>lāŋɪm^{ma}</i>	"wander searching"

3-mora *m*-stems assimilate optionally [6.2.1](#):

<i>kàrɪm^m</i>	<i>kàrɪm^m</i> or <i>kàrɪmɪd^a</i>	<i>kàrɪm^{ma}</i>	"read"
<i>tɔɔm^{m/}</i>	<i>tɔɔm^{ma}</i> or <i>tɔɔmɪd^a</i>	<i>tòɔm^{ma}</i>	"depart"

Stems in *-mm-* never assimilate in the dynamic imperfective, but simplify **mmm* → *mm* in the imperative:

<i>tàm^m</i>	<i>tàmmɪd^a</i>	<i>tàm^{ma}</i>	"forget"
<i>zàm^m</i>	<i>zàmmɪd^a</i>	<i>zàm^{ma}</i>	"cheat, betray"
<i>dàm^m</i>	<i>dàmmɪd^a</i>	<i>dàm^{ma}</i>	"shake"
<i>lèm^m</i>	<i>lèmmɪd^a</i>	<i>lèm^{ma}</i>	"sip, taste"

There are no verb stems of the form **CVbim*, so these *-mm* stems can probably be ascribed to the assimilation **bm* → *mm* at derivational level [6.2.1](#).

2-mora stems normally assimilate:

<i>tùm^m</i>	<i>tùm^{ma}</i>	<i>tùm^{ma}</i>	"work"
<i>wùm^m</i>	<i>wùm^{ma}</i>	<i>wùm^{ma}</i>	"hear"
<i>kìm^m</i>	<i>kìm^{ma}</i>	<i>kìm^{ma}</i>	"tend flock/herd"
<i>dùm^m</i>	<i>dùm^{ma}</i>	<i>dùm^{ma}</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 Base Form 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](#). Base Forms before Liaison likewise drop the **g*.

<i>fāeñ^{+/}</i>	<i>fāañd^{a/}</i>	<i>fàañm^a</i>	"save"
<i>dīe^{+/}</i>	<i>dīəd^{a/}</i>	<i>dìəm^a</i>	"get, receive"
<i>dūe^{+/}</i>	<i>dūəd^{a/}</i>	<i>dùəm^a</i>	"rise, raise"
<i>pūñ'e^{+/}</i>	<i>pūñ'əd^{a/}</i>	<i>pùñ'əm^a</i>	"rot" WK

Contrast the tonemes of the Gerunds *fāañr^ε dī'ər^ε dú'ər^ε pūñ'ər^ε*.

For the forms taken by Fusion verb Base Forms before Liaison see [8.2.1](#).

11.1.1 Irregular

Most irregularities involve the stem showing a derivational suffix in the Base Form which is dropped in the dynamic 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> ^ε	<i>gɔ̄sɪd</i> ^{a/} or <i>gɔ̄t</i> ^{a/}	<i>gòsɪm</i> ^a <i>gòm</i> ^{ma}	"look"
<i>tìs</i> ^ε	<i>tìsɪd</i> ^a or <i>tìt</i> ^a	<i>tìsɪm</i> ^a	"give"

Before Liaison Word objects the Base Form may also be *tì-*, e.g. *tì f* "give you."

<i>yèl</i> ^ε	<i>yèt</i> ^a	<i>yèlɪm</i> ^a	"say"
<i>wìk</i> ^ε	<i>wìid</i> ^a 6.1.1.1	<i>wìkɪm</i> ^a	"fetch water"
<i>jāñk</i> ^{ε/}	<i>jāñ'ad</i> ^{a/}	<i>jāñkɪm</i> ^a	"leap, fly"
<i>gìlɪg</i> ^{ε/}	<i>gīn</i> ^{na/}	<i>gìlɪgɪm</i> ^a	"go around"
<i>kēŋ</i> ^{ε/}	<i>kēn</i> ^{na/}	<i>kèm</i> ^{ma}	"go"

The verb

<i>dèlɪm</i> ^m	[<i>dēl</i> ^{a/}]	<i>dèlɪm</i> ^{ma}
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is used as inchoative to *dēl*^{a/} "be leaning (of a person);" compare *gùl*^ε dipf *gùn*^{na} "suspend" beside the Stance verb *gùl*^a "be hanging."

Only two Variable verbs are irregular in the actual flexional suffixes taken:

<i>kē</i> ⁺	<i>kēt</i> ^{a/}	<i>kèl</i> ^a	"let, allow"
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has *-l*^a not *-m*^a, for the imperative form with Independency marking.

The verb

<i>kēñ</i> ⁺	<i>kēn</i> ^{a/}	<i>kèm</i> ^a	"come"
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has dynamic imperfective *-n*^a for *-d*^a; this verb is also remarkable in always being immediately followed by *nā*^{+/} "hither" [20.7](#) which disambiguates the forms which are homophonous with those of *kēŋ*^{ε/} "go" above:

Kèm nā!

"Come!"

Kèm sá!

"Go!"

The verb

*nòŋ^ε**nòŋɪm^a*

"love"

is morphologically regular, but the base form always has descriptive aspect [11.2.2.1](#):

	<i>M̄ nójī f.</i>	"I love you."	(Family, spiritual.)
cf	<i>M̄ bódī f.</i>	"I love you."	(Romantic, sexual.)

In WK's speech, the verb aligns with other imperfective forms in not being followed by the particle *yā⁺* when it is phrase-final and has undergone tone overlay due to Independency marking [19.6.2.1](#).

M̄ nój. "I love him." (e.g. in reply to a question) WK

WK specifically stated that **M̄ nój yā* was an impossible form.

The agent noun *nòŋɪd^a* is tonally aberrant, with Pattern L instead of O. It is also remarkable as the only Pattern L 4-mora stem which is not a *m*-stem and does not have the stem tonemes LH.

Ò nòŋɪd kā'e. "Nobody loves him." WK
("His lover does not exist.")

11.2 Invariable verbs

About 10% of the verbs in my materials have only one finite form. As a lexical matter in each case, this may be dynamic imperfective or descriptive stative.

Four Descriptive verbs consist of bare roots with no suffix:

<i>mī⁺</i>	"know"
<i>zī⁺</i>	"not know"
<i>bè⁺</i>	"be somewhere/exist"
<i>kā'ɛ⁺</i> (← *kagɪ)	"not be"

Though they resemble Variable verb perfectives, the particle *yā⁺* does not occur after these words [19.6.2.1](#) and the Tone Pattern LO word *bè⁺* "be somewhere, exist" is followed by L Raising [8.3](#). (The irregular Variable verb *nòŋ^ε* "love" also behaves in these respects as Descriptive [11.1.1](#).)

All other Invariable verbs have a flexional suffix showing LF-final *-a*.

Before this suffix, Dynamic Invariable verbs historically showed a *derivational* suffix **y* (← **ʌ*); for its combinations with the preceding root see [6.2.1.1](#). Forms without **y* appear in perfective gerunds, agent nouns and dynamic adjectives. In Descriptive verbs **y* is either absent or has fused with the preceding root in all related words. (The *-y-* in the LFs of *àɛŋʰ^a* "be something/somehow", *vūɛ^a* "be alive" and *t̄ɛ^a* "be bitter" is root-final *-y-* preserved before the *-a* [6.1.1.1](#).)

This difference is reflected in Tone Patterns [7.3.3](#), but segmentally, there has been levelling. Dynamic Invariable verbs with roots ending in *n / r* have generalised the form with gemination due to **y* to all related stems. For WK, Descriptive verbs with roots in *m* have acquired a secondary gemination of the *m*; this is not seen in written sources or found with other informants, and even for WK, Tone Pattern H 3-mora-stem verbs have the tonemes which would be expected *without* gemination:

<i>kp̄ɛm^{ma/}</i>	not	<i>*kp̄ɛm^{ma}</i>	"be strong, hard"
<i>wā'am^{ma/}</i>	not	<i>*wá'am^{ma}</i>	"be long, tall" KT

The Dagbani cognate of *kp̄ɛm^{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 *má'an^{nɛ}* sg *mā'aná⁺* pl "okra.")

11.2.1 Dynamic

Most Dynamic Invariable verbs are **Stance verbs**:

<i>īgɪ^{ya/}</i>		"be kneeling down"
<i>dīgɪ^{ya/}</i>		"be lying down"
<i>vābɪ^{ya/}</i>		"be lying prone"
<i>lābɪ^{ya}</i>		"crouch hidden behind something"
<i>tābɪ^{ya}</i>		"be stuck to something"
<i>zì'e^{ya}</i>		"be standing still"
<i>zìñ'i^{ya}</i>		"be sitting down"
<i>tī'i^{ya/}</i>		"be leaning" (of an object)
<i>sùr^a</i>		"have head bowed"
<i>dēi^{la/}</i>		"be leaning" (of a person)
<i>gù^{la}</i>		"be hanging"
<i>gō'e^{ya/}</i>	WK ← <i>*gɔɔya</i>	"have neck extended" 6.2.1.1
<i>gōr^{a/}</i>	DK ← <i>*gɔrya</i>	
<i>gō^{la/}</i>	KT ← <i>*gɔlyā</i>	

Other Dynamic Invariable verbs are

<i>wà'e</i> ^{ya}	"travel to"
<i>sīn</i> ^{na/}	"be silent"
<i>dō</i> ^{la/}	"attend on, be with in a subordinate rôle"
<i>zāñ</i> ^{la/}	"carry in one's hands"
<i>gūr</i> ^{a/}	"guard"
<i>tèñr</i> ^a	"remember"

Stance verbs are *dynamic*. They distinguish a continuous/progressive sense from a habitual/propensity sense with the focus particle *nē*^{+/} just like dynamic imperfectives of Variable verbs [19.2.2.2](#), the derived Assume-stance verbs [13.2.1.1](#) cannot use the Base Form as a resultative, as verbs expressing a change of state in the subject can [30.1.2.1.2](#), and it is not possible to form a resultative adjective [13.1.1.2.2](#) from a Stance verb. With the non-stance Dynamic Invariable verbs a stative interpretation would in any case seem forced.

For some informants, Stance verb stems also occur with the Variable verb dipf suffix *-d*^a, here confined to the habitual/propensity meaning; other informants use the dipf of the derived Assume-stance Variable verb instead:

	<i>Ò zìñ'i nē.</i>	"She's sitting down." WK KT
	<i>Ò pō zìñ'idā.</i>	"She doesn't sit down" WK
but	<i>Ò pō zìñ'inìdā.</i>	"She doesn't sit down." KT
	<i>Ò zìñ'i nē.</i>	"She's sitting down."
	<i>Ò pō zìñ'idā.</i>	"She doesn't sit down" WK
but	<i>Ò pō zìñ'inìdā.</i>	"She doesn't sit down." KT
	<i>Ò vābı nē.</i>	"He's lying prone."
	<i>Ò pō vābıdā.</i>	"He doesn't lie prone." WK
but	<i>Ò pō vābınìdā.</i>	"He doesn't lie prone." KT
	<i>Ò dīgı nē.</i>	"She's lying down."
	<i>Ò pō dīgıdā.</i>	"She doesn't lie down" WK
	<i>Lì zì'ə nē.</i>	"It's standing up."
	<i>Lì pō 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 pō tì'iyá.</i>	"It's not leaning against something."
	<i>Lì pō tì'idá.</i>	"It's not for leaning against something." WK

Other Dynamic Invariable verbs, like Variable verbs, show no flexional distinction between the two dynamic imperfective meanings:

<i>Ò sìṅ.</i>	"She's silent."
<i>Ò sìṅ 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."

Non-stance Dynamic Invariable verbs have no separate derived inchoative Variable verbs, but use the same Invariable verb form in such senses:

<i>Sìṅ!</i>	"Be quiet!"
<i>Dòllī m.</i>	"Follow me!"
<i>Kà bà sīṅ.</i>	"And they fell silent."
And 3PL be.silent.	

Dynamic Invariable verbs make gerunds (whether perfective or imperfective) capable of expressing events, which can be used in the immediate-future construction with *bòòd*^a "want" + gerund 19.3.2. They make deverbal nouns and adjectives by adding *-d-* to the stem, like Variable verbs. Unlike Descriptive 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 *tēñríd*^a "remember-er" and the variant *gūríd*^a "guard" beside *gū'ud*^a and *-gúr*^a.

11.2.2 Descriptive

Descriptive verbs divide into two groups on the basis of **agency**. Agentive verbs, like Dynamic Invariable verbs and most Variable verbs, can be used in direct commands and are capable of forming derived agent nouns 13.1.1.1. All these are transitive Relational verbs. Non-agentive Descriptive verbs are Adjectival verbs, expressing predicative adjective meanings.

11.2.2.1 Relational

Relational verbs include

<i>àeñ^a</i>	"be something/somehow" 6.1.1.1
<i>bè⁺</i>	"be somewhere/exist" (no agent noun)
<i>kā'e⁺</i> (← *kagɪ)	"not be" (negative to both <i>àeñ^a</i> and <i>bè⁺</i>)
<i>mā^ra/</i>	"have"
<i>tā^ra/</i>	"have"
<i>sū'e^{ya/}</i>	"own"
<i>sōñ'e^{ya/}</i>	"be better than"
<i>mī⁺</i>	"know"
<i>zī⁺</i>	"not know"
<i>nēn^{na/}</i>	"envy"
<i>kīs^{a/}</i>	"hate"
<i>zēm^{ma/}</i>	"be equal to"
<i>kpēēñm^{ma/}</i>	"be older than"
<i>wēn^{na/}</i>	"resemble" 20.4

The verb *bòɔd^a* "want, like" is formally the dipf of *bò⁺* "seek", but has become an independent Relational verb. Similarly the dipf of *zò⁺* "run" is used as a Relational verb "fear; experience emotion" with a direct object expressing the emotion and an indirect object expressing the cause of the emotion [20.1](#). The irregular Variable verb *nòŋ^ε* "love" has a finite form which is syntactically Relational [11.1.1](#) [19.6.2.1](#).

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.

<i>vōe^{a/}</i>	"be alive"	<i>vūr^{ε/}</i>	"alive"
<i>tōe^{a/}</i>	"be bitter"	<i>tōɔɔ^ɔ</i>	"bitter"
<i>mā'as^{a/}</i>	"be cool"	<i>mā'asír^ε</i>	"cool"
<i>bōgus^{a/}</i>	"be soft"	<i>bōgusír^ε</i>	"soft"
<i>tēbīs^{a/}</i>	"be heavy"	<i>tēbīsír^ε</i>	"heavy"
<i>mālis^{a/}</i>	"be sweet"	<i>mālisír^ε</i>	"sweet"
<i>lābīs^{a/}</i>	"be wide"	<i>lābīsír^ε</i>	"wide"
<i>mì'is^a</i>	"be sour"	<i>mì'isug^ɔ</i>	"sour"
<i>vèn^{na}</i>	"be beautiful"	<i>vènnig^a</i>	"beautiful"
<i>vèñl^{la}</i>	"be beautiful"	<i>vèñllig^a</i>	"beautiful"
<i>lāl^{la/}</i>	"be far"	<i>lāllúɔ^ɔ</i>	"far"
<i>pòɔd^a</i>	"be few"	<i>pòɔdíg^a</i>	"few"

<i>s̀̀m</i> ^{ma}	"be good"	<i>s̀̀ŋ</i> ^{ɔ̌}	"good"
<i>kpĩ̀əm</i> ^{ma/}	"be strong"	<i>kpĩ̀oŋ</i> ^{ɔ̌}	"strong"
<i>yàlɪm</i> ^{ma}	"be wide"	<i>yàlɪŋ</i> ^{ɔ̌}	"wide"
<i>z̀̀lɪm</i> ^{ma}	"be deep"	<i>z̀̀lɪŋ</i> ^{ɔ̌}	"deep"
<i>tàdɪm</i> ^{ma}	"be weak"	<i>tādɪm</i> ^{m/}	"weak person"
<i>gĩm</i> ^{ma/}	"be short"	<i>gĩŋ</i> ^a	"short"
<i>d̀̀r</i> ^a	"be many"		(no adjective)
<i>k̀̀r</i> ^a	"be few"		(no adjective)

With stem changes between adjective and verb:

<i>t̀̀l</i> ^{a/}	"be hot"	<i>t̀̀lɔ́</i> ^{ɔ̌}	"hot"
<i>ńỳ̀ɛs</i> ^a	"be self-confident"	<i>ńỳ̀ɛsɪŋ</i> ^a	"self-confident"
<i>wā'am</i> ^{ma/}	"be long"	<i>wōk</i> ^{ɔ̌}	"long"

The verb *nā*^{a/} "be necessary" has a related adjective *nà*^{ɔ̌} "necessary" (??tone) but the verb is probably primary; it is much commoner than the adjective. The verb *p̀̀ńr*^a "be near (to)" has an adjectival form seen in WK's *yĩ-p̀̀ńr̀̀*⁺ "nearby houses" but makes the perfective gerund *p̀̀ńr̀̀ɪb*^{ɔ̌}. The verb *tũ*^{ñ'e} "be able" occurs almost exclusively as an auxiliary verb in VP Chaining constructions [23.3.1](#); it has no extant Long Form in my materials.

12 Stem conversion

Nouns may be formed by added Noun Class suffixes to a verb stem, or by using an existing noun stem in a different class.

12.1 Nouns from verbs

12.1.1 Perfective gerunds

Almost all verbs other than Adjectival verbs can form a **gerund**, a derived abstract noun which expresses the process, event or state described by the verb.

Gerunds play little rôle in the verb system itself, in contrast to languages like Hausa where they are an integral part of the formation of many tenses or aspects. Gerunds do make an immediate future construction with *bòòd*^a "want" [19.3.2](#):

Tùg lā bòòd līg. "The tree is about to fall."
 Tree:**SG ART** want fall:**GER**.

This is only possible with gerunds that can have event/process meanings, i.e. those derived from Variable verbs and Dynamic Invariable verbs. Relational verbs have abstract nouns derived from their single forms, and like other imperfective-based forms occurring in certain contexts these are classified as "imperfective" gerunds [13.1.1.4](#), but the term "gerund" will be used by default for the formations discussed in this section. Abstract nouns associated with Adjectival verbs are not regarded as gerunds, although they show some syntactic resemblances [16.10.2.1](#).

Although gerunds can be expanded with arguments [16.10.3](#) the resulting NPs cannot be used adverbially to express attendant circumstances, nor as complements of verbs in place of Content clauses.

The Tone Patterns of all regularly formed gerunds are predictable [7.5.1](#).

12.1.1.1 From Variable verbs

Variable verbs freely form gerunds by adding the following Class suffixes to the stem. The choice after 3-mora stems reflects avoidance of suffixes which would give rise to obscure SFs, with the usual *-g*^ɔ replaced by *-r*^ɛ after stems ending in underlying **g*. Those irregular 2-mora stem verbs which avoid the regular *b*^ɔ Class suffix similarly include a significant proportion of stems in *-b* and *-m* [12.1.1.1.1](#).

2-mora stems	<i>-b</i> ^ɔ but <i>-r</i> ^ɛ as final element of a compound
3-mora stems in * <i>g</i>	
[surface <i>-g</i> ^ɛ <i>-k</i> ^ɛ <i>-ŋ</i> ^ɛ <i>-ae</i> ⁺ <i>-ie</i> ⁺ <i>-ue</i> ⁺]	<i>-r</i> ^ɛ
all others	<i>-g</i> ^ɔ

Gerunds differ in flexion from other substantives in frequently resisting the assimilations **mg* → *ŋŋ* **ng* → *ŋŋ* [6.2.1](#). They rarely shorten a CVV- stem before *-r^ε*. 4-mora stems in *-sim -lum* follow the rule and use *-g^ɔ*:

<i>siilum^m</i>	"cite proverbs"	→	<i>siilúŋ^ɔ</i>
<i>zàańsim^m</i>	"dream"	→	<i>zàańsúŋ^ɔ</i>

but stems in **gim* drop the *-m-* and use *-r^ε*:

<i>wàŋim^m</i>	"waste away"	→	<i>wàŋir^ε</i>
<i>lāŋím^m</i>	"wander"	→	<i>lāŋír^ε</i>
<i>zàkum^m</i>	"itch"	→	<i>zàkir^ε</i>

For examples of regular gerunds see [9.3](#) under Noun Flexion.

2-mora stems regularly use *-r^ε* not *b^ɔ* in compounds; see [16.10.1](#).

<i>pu'à-dīr^ε</i>	"marriage"
<i>nīn-kúùr^ε</i>	"murder"
<i>dā-núùr^ε</i>	"beer-drinking"
<i>mò-pīl^ε</i>	"grass roof"
<i>fū-yéér^ε</i>	"shirt-wearing" WK

12.1.1.1.1 Irregular formations

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^ε</i>	"give"	→	<i>tīstb^ɔ</i>
<i>kē⁺</i>	"let"	→	<i>kēɛb^ɔ/</i>
<i>gùl^ε</i>	"suspend"	→	<i>gūlb^ɔ</i>

However, with 2-mora stems almost 20% of the regular verbs in KED use suffixes other than *b^ɔ*. A smaller number of these are also tonally irregular. No segmentally regular gerund in *-b^ɔ* shows tonal irregularity. Forms with the suffix *-g^ɔ* are Pattern L from Pattern LO verbs unless there are variant forms with *g^a* or *s^ε* and the formation is thus shown to belong in fact to the *g^ɔ|s^ε* Subclass [9.3.2.1](#).

A high proportion of these verbs have stems in *m* or *b*; the regular formation with *-b^ɔ* has probably been avoided because it would create ambiguous SFs [9.1](#).

Examples:

<i>li</i> ⁺	"fall"	→	<i>liig</i> ^a	
<i>zi</i> ⁺	"carry on head"	→	<i>ziid</i> ^{ε/}	
<i>bèñ</i> ⁺	"fall ill"	→	<i>bèñ'εs</i> ^ε	
<i>kēñ</i> ⁺	"come"	→	<i>kēn</i> ^{nε/}	
<i>zò</i> ⁺	"run"	→	<i>zūa</i> ⁺	also <i>zɔɔg</i> ^ɔ
<i>vū</i> ⁺	"make noise"	→	<i>vūug</i> ^{ɔ/}	
<i>pjāñ</i> ^{1a}	"speak"	→	<i>pjàuñk</i> ^ɔ	
<i>bòd</i> ^ε	"plant"	→	<i>būdɪg</i> ^a	also <i>būdug</i> ^ɔ
<i>yèl</i> ^ε	"say, tell"	→	<i>yèlvug</i> ^ɔ	cf Mooré <i>yèele</i> ; ?? * <i>yjə</i> → <i>yε</i>
<i>kūl</i> ^ε	"go home"	→	<i>kūlɪg</i> ^{a/}	also <i>kūlvug</i> ^{ɔ/}
<i>tàñs</i> ^ε	"shout"	→	<i>tàñsug</i> ^ɔ	
<i>sōñs</i> ^ε	"converse"	→	<i>sóñsìg</i> ^a	
<i>gōs</i> ^ε	"look"	→	<i>gósìg</i> ^a	
<i>sòs</i> ^ε	"pray, beg"	→	<i>sósɪg</i> ^a	
<i>kīr</i> ^ε	"hurry"	→	<i>kìkírùg</i> ^ɔ	or <i>kīrɪb</i> ^{ɔ/}
<i>lèb</i> ^ε	"return"	→	<i>lēbɪg</i> ^a	
<i>tèb</i> ^ε	"carry in both hands"	→	<i>tēbɪg</i> ^a	
<i>kàñb</i> ^ε	"scorch"	→	<i>kāñbɪr</i> ^ε	
<i>òñb</i> ^ε	"chew"	→	<i>ōñbɪr</i> ^ε	
<i>lūb</i> ^ε	"buck"	→	<i>lūbɪr</i> ^{ε/}	
<i>zàb</i> ^ε	"fight"	→	<i>zàbɪr</i> ^ε	
<i>tèñb</i> ^ε	"tremble"	→	<i>tèñbug</i> ^ɔ	
<i>tùm</i> ^m	"work"	→	<i>tūuma</i> ⁺	
<i>tùm</i> ^m	"send"	→	<i>tìtōmɪs</i> ^ε	
<i>wòm</i> ^m	"hear"	→	<i>wōm</i> ^{mɔ}	or <i>wòm mug</i> ^ɔ 13.1.1.4

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 *yīs*^{ε/} "make go/come out" has *yīsɪb*^ɔ, like the alternate form *yīs*^ε with regular *yīsɪb*^{ɔ/}.

There are a number of abstract verbal nouns in the *m*^m Class formed from 3-mora verb stems in *-s-* which resemble gerunds in tone. They may owe their *m*^m 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> ^ε	"greet, thank"	→	<i>pù'usɪm</i> ^m	"worship"
			or <i>pù'usug</i> ^ɔ	
<i>kō</i> ⁺	"kill"	→	<i>nīn-kūsɪm</i> ^m	"murderousness"
<i>yōlɪs</i> ^{ε/}	"untie"	→	<i>yōlɪsɪm</i> ^m	"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 [7.5.1](#). They are idiosyncratic with regard to the class suffix selected, however.

<i>zìñ'iy^a</i>	"be sitting"	→	<i>zīñ'ig^a</i>	also "place", regular <i>g^a s^ε</i> Class
<i>zì'e^{ya}</i>	"be standing"	→	<i>zī'a⁺</i> KED	<i>zī'æg^a</i> DK KT
			(wholly exceptional undeleted <i>g</i> 6.3.1)	
<i>dīgi^{ya/}</i>	"be lying"	→	<i>dīk^{a/}</i> KT	<i>dīgir^{ε/}</i> WK
<i>īgi^{ya/}</i>	"be kneeling"	→	<i>īk^{a/}</i> KT	<i>īgir^{ε/}</i> WK
<i>vābi^{ya/}</i>	"be lying prone"	→	<i>vāp^{ɔ/}</i> KT	<i>vābir^{ε/}</i> WK
<i>tī'iy^{a/}</i>	"be leaning"	→	<i>tī'ib^{ɔ/}</i>	
	(of an object)			
<i>gùl^{la}</i>	"be hanging"	→	<i>gūlb^ɔ</i>	

The Adjectival verb *pòñr^a* also makes a perfective gerund:

<i>pòñr^a</i>	"be near"	→	<i>pōñrīb^ɔ</i>
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However, most Invariable verbs, including the Dynamic type, with stems in // *nn r(r)* form imperfective gerunds [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>ēñbír^ε</i>	"(physical) foundation"	<i>ēñbúb^ɔ</i>	"laying a foundation"
<i>dūk^{ɔ/}</i>	"cooking pot"	<i>dūgub^{ɔ/}</i>	"cooking"
<i>dà'a⁼</i>	"market"	<i>dā'ab^ɔ</i>	"buying"
<i>kūk^a</i>	"chair"	<i>kūgub^ɔ</i>	"resting on something"
<i>zūg-kūgur^ε</i>	"pillow"		
<i>sūāk^{a/}</i>	"hiding place"	<i>sū'ab^{ɔ/}</i>	"hiding"
<i>sōbir^{ε/}</i>	"piece of writing"	<i>sōp^{ɔ/}</i>	"writing, orthography"
<i>kūt^ε</i>	"iron, nail" 9.5	<i>kūdub^ɔ</i>	"working iron"
<i>kùəsim^m</i>	"merchandise"	<i>kùəsv^ɔ</i>	"selling"
<i>pèbısim^m</i>	"wind"	<i>pèbısv^ɔ</i>	"blowing of the wind; wind"

See also on *pù'alım^m* *dàalım^m* [13.1.2](#).

The forms *vābir*^{ε/} *lābir*^{ε/} *dīgir*^{ε/} *īgir*^{ε/} 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*^{ɔ/} etc.

Three concrete deverbal nouns, from *pìbir*^ε "cover", *zāñbir*^ε "tattoo", *màal*^ε "sacrifice" show single *-n-* in place of *-l-*:

<i>pìbir</i> ^{nε}	<i>pìbirna</i> ⁺	<i>pìbir-</i>	"covering"
<i>zāñbir</i> ^{nε}	<i>zāñbirna</i> ⁺	<i>zāñbir-</i>	"tattoo" (NT "sign")
<i>māan</i> ^{nε}	<i>māana</i> ⁺	<i>māan-</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* "couverture" [6.2.1.1](#). Toende, like Mooré, has Pattern L for these words: *zābín*, *māan*. As *nn* is the regular reflex of **ld* [6.2.1](#), these forms may be derivatives with **d* in a sense related to its appearance in instrument nouns [13.1.1.3](#); compare *tūodir*^ε "mortar", from *tuà*⁺ "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> ^ɔ	"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> ^ɔ	<i>zōɔs</i> ^ε		"race"
<i>bū'əsúg</i> ^ɔ	<i>bū'əsá</i> ⁺	<i>bū'əs-</i>	"question"
<i>zàańsúg</i> ^ɔ	<i>zàańsímà</i> ⁺	<i>zàańsúg-</i>	"dream"

Such words may be formally plural but construed as singular [9.5](#)

<i>dì'əma</i> ⁺	"festival"
<i>pjàń'ad</i> ^ε	"word, language"
<i>tēń'əsá</i> ⁺	"thought"

Thus *tēń'əsá yínní* "one thought" (Acts 4:32).

12.2 Nouns from nouns and adjectives

The partial association of Noun Class and meaning [9.1.1](#) can be exploited to change the meaning of a stem.

Examples are the regular relationship between names of ethnic groups, which belong to the $^a|b^a$ or $g^a|s^e$ Classes, their languages, which belong to the $-l^e$ Subclass of $r^e|a^+$ [9.3.4.1](#) and the associated place, which has the suffix $-g^o$:

<i>Kūsáá</i> ⁼ sg	<i>Kūsáàs</i> ^e pl	Kusaasi person
<i>Kūsáàl</i> ^e		Kusaal language
<i>Kūsáùg</i> ^o		Kusaasi territory

See many examples in [32.5](#).

A further example of sg $-g^o$ deriving associated place names is:

<i>wèéd</i> ^a or <i>wìd</i> ^a	"hunter"
<i>wèog</i> ^o	"deep bush"

The suffix $-d^e$ is found with some names of liquids which are not m^m Class [9.5](#); hence also

<i>sīĩñ</i> ^l	"bee"
<i>sīĩñd</i> ^e	"honey"

Names of trees are almost all $g^a|s^e$ Class, while their fruits belong to either the $r^e|a^+$ or the $g^o|d^e$ Class [32.6](#).

The strong association of the m^m Class with abstracts may lead to conversion of adjective stems to abstract nouns when used with $-m^m$ or, less commonly, the sg suffix $-g^o$. When there is an associated Adjectival verb, these abstracts bear a somewhat analogous relationship to the verb as gerunds do to Variable and Dynamic Invariable verbs, and can, for example, be preceded by Combining Forms in senses resembling generic arguments before gerunds [16.10.1](#) [16.10.2.1](#). However, such abstract nouns cannot be used in the immediate future construction with *bòòd*^a "want" [12.1.1](#), and unlike imperfective gerunds derived from Dynamic Invariable verbs and Relational verbs [13.1.1.4](#), which show the expected Tone Patterns for gerunds, they show the **same tone pattern as the adjective**.

Examples of Adjectival verbs with corresponding abstract nouns:

<i>vūē^{a/}</i>	"be alive"	<i>vūm^{m/}</i>	"life"
<i>sù^mma</i>	"be good"	<i>sù^mm</i>	"goodness"
<i>pòòd^a</i>	"be few"	<i>pòòd^mm</i>	"scarcity"
<i>vèn^{na}</i>	"be beautiful"	<i>vènn^mm</i>	"beauty"
<i>vèñ^{la}</i>	"be beautiful"	<i>vèñll^mm</i>	"beauty"
<i>būgvs^{a/}</i>	"be soft"	<i>būgvs^mm</i>	"softness"
<i>tēb^{a/}</i>	"be heavy"	<i>tēb^mm</i>	"weight"
<i>mā'as^{a/}</i>	"be cool, wet"	<i>mā'as^mm</i>	"coolness, damp"
<i>mā^{a/}</i>	"be sweet"	<i>mā^mm</i>	"sweetness"
<i>lā^{a/}</i>	"be wide"	<i>lā^mm</i>	"width"
<i>ñyēs^a</i>	"be confident"	<i>ñyēs^mm</i>	"self-confidence"
<i>lāl^{la/}</i>	"be far"	<i>lālú^o</i>	"distance"
<i>kpī'ə^{ma/}</i>	"be strong, hard"	<i>kpī'or^o</i>	"hardness, strength"
<i>yà^{ma}</i>	"be wide"	<i>yà^o</i>	"width"
<i>mì'is^a</i>	"be sour"	<i>mì'is^o</i>	"sourness"
<i>tōē^{a/}</i>	"be bitter"	<i>tōō^o</i>	"bitterness"
<i>zù^{ma}</i>	"be deep"	<i>zù^o</i>	"depth"
<i>tū^{la/}</i>	"be hot"	<i>tūvú^o</i> or <i>tūll^mm</i>	"heat"

Abstract nouns derived from other adjectives (often used as adverbs) include

<i>pìəl^a</i>	"white"	→	<i>pìəl^mm</i>	"brightness"
<i>tītā'ar^ε</i>	"big"	→	<i>tītā'am^m</i>	"multitude"
<i>kōdv^o</i>	"old"	→	<i>kōd^mm</i>	"old times"
<i>zēm^o</i>	"equal"	→	<i>zēm^o</i>	"equality"

Some nouns referring to people form similarly derived abstract nouns:

<i>sāan^{a/}</i>	"guest"	→	<i>sāú^o</i>	"hospitality"
<i>kpēēñ^m</i>	"elder"	→	<i>kpēōñ^o</i>	"eldership"
<i>sōēñ^a</i>	"witch"	→	<i>sōōñ^o</i>	"witchcraft"
<i>zū⁺</i>	"friend"	→	<i>zūō^ε</i>	"friendship"
<i>gbáñyà'a⁼</i>	"lazy person"	→	<i>gbáñyà'am^m</i>	"laziness"
<i>dàmà'a⁼</i>	"liar"	→	<i>dàmà'am^m</i>	"lying"

Human-reference noun stems may also form abstract *m^m* Class derivatives with the derivational suffix *-l^m* [13.1.2](#).

12.3 Adverbs from adjectives

The *m*^m Class suffix with adjective stems often creates manner adverbs:

<i>pāalíg^a</i>	"new"	→	<i>pāalím^m</i>	"recently"
<i>bāañlíg^a</i>	"quiet"	→	<i>bāañlím^m</i>	"quietly"
<i>záal^lε</i>	"empty"	→	<i>zāalím^m</i>	"emptily"
<i>nèεr^ε</i>	"empty"	→	<i>nèεm^m</i>	"for free"

Several adjective stems form manner-adverbs with an ending **-ga⁺**, i.e. *g^a|s^ε* Class sg along with Apocope Blocking [6.4](#):

<i>sùŋā^{+/}</i>	"well; very much"
<i>mā'asígā^{+/}</i>	"coolly"
<i>tūlígā^{+/}</i>	"hotly"
<i>gīŋa⁺</i>	"shortly"
<i>būgusígā^{+/}</i>	"softly"
<i>sàalíŋā^{+/}</i>	"smoothly"
<i>ñyèεsíŋā^{+/}</i>	"self-confidently"

Cf also *yīigá⁺* "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.

There are only six unequivocal derivational suffixes: *-g -s -n -l -d -m*, and of these *-n* may represent historical **ld* [6.2.1.1](#). A suffix *-r* occurs only in a few words, which are probably loans.

-g -s -n never follow another derivational suffix. *-g* and *-s* cause a preceding $CVVC$ to become CVC , and a preceding oral 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 [6.2.1.1](#).

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 [7.5.1](#).

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 *mm*-stem Variable verbs and *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 some of the examples. The name "agent noun" is not altogether felicitous; as with English deverbal derivatives in "-er", the formation may be found with verbs whose subject is not an agent. Agent nouns can be created from most Descriptive verbs which can be used in direct commands, i.e. from Relational but not Adjectival verbs [11.2.2](#).

The formant of agent nouns is the derivational suffix *-d*, found also in dynamic adjectives. It is probably historically related to the *-d* of the dynamic imperfective flexion *-d^a*, but the tonemes differ, and derivational *-d* shows much less regularity in its mode of attachment, with some differences in this regard among different types of derived word. These differences arise from a tendency to limit stem length in derivation, resulting in deletion of either *-d* itself or the suffix preceding it. The absence or presence of the suffix affects the Tone Pattern of the stem in forms derived from Pattern LO verbs, with words having *-d* being Pattern O and those without it being L [7.5.1](#). Agent nouns show more levelling and regularisation than dynamic adjectives.

Most **Variable verbs** have an agent noun with a singular form segmentally identical with the dynamic imperfective. For tones see [7.5.1](#). If there are alternate forms, the less "regular" form appears as the agent noun.

<i>kō⁺</i>	"kill"	→	<i>kōvd^{a/}</i>	"killer"
<i>mè⁺</i>	"build"	→	<i>mēɛd^a</i>	"builder"
<i>dì⁺</i>	"eat"	→	<i>dīt^a</i>	"eater"
<i>gōs^ɛ</i>	"look"	→	<i>gōt^{a/}</i>	"seer, prophet"
<i>dōg^ɛ</i>	"cook"	→	<i>dōgvd^{a/}</i>	"cook"
<i>dɥ'à^a</i>	"bear, beget"	→	<i>dō'ad^a</i>	"elder relation"
<i>kàd^ɛ</i>	"drive away"	→	<i>saríyà-kāt^a</i>	"judge" 20.1
<i>sōb^ɛ</i>	"write"	→	<i>sōbd^{a/}</i>	"writer"
<i>bùn^ɛ</i>	"reap"	→	<i>būn^{na}</i>	"reaper"
<i>tùm^m</i>	"work"	→	<i>tùm-tūm^{na}</i>	"worker"
<i>kìm^m</i>	"tend flock"	→	<i>kōñb-kīm^{na}</i>	"herdsman, shepherd"
<i>kpàr^ɛ</i>	"lock"	→	<i>kpāríd^a</i>	"lock-er"
<i>gbīs^ɛ</i>	"sleep"	→	<i>gbīsíd^{a/}</i>	"sleeper"
<i>sjàk^ɛ</i>	"believe"	→	<i>sjàkíd^a</i>	"believer"

<i>jāñk^{ε/}</i>	"jump, fly"	→	<i>jāñ'ad^{a/}</i>	"flier"	11.1.1
<i>sùŋ^ε</i>	"help"	→	<i>sūŋɪd^a</i>	"helper"	
<i>bàŋ^ε</i>	"understand"	→	<i>bāŋɪd^a</i>	"wise man"	
<i>kēŋ^{ε/}</i>	"go"	→	<i>kēn^{na/}</i>	"traveller"	11.1.1
<i>gàad^ε</i>	"pass"	→	<i>tùen-gāt^a</i>	"leader"	
<i>mōɔl^{ε/}</i>	"proclaim"	→	<i>mōɔl-móɔn^{na}</i>	"proclaimer"	
<i>màal^ε</i>	"sacrifice"	→	<i>màal-māan^{na}</i>	"sacrificer"	
<i>pà'al^ε</i>	"teach"	→	<i>pā'an^{na}</i>	"teacher"	
<i>sūgvr^{ε/}</i>	"forbear"	→	<i>sūgvrɪd^a</i>	"forgiver"	
<i>yō'um^{m/}</i>	"sing"	→	<i>yōum-yó'ùm^{na}</i>	"singer"	
			pl <i>yōum-yó'ùmɪb^a</i>		
<i>sàñ'am^m</i>	"spoil"	→	<i>ɸʉ'à-sāñ'am^{na}</i>	"adulterer"	
			pl <i>ɸʉ'à-sāñ'amɪdɪb^a</i>		

Pattern H Fusion verbs [7.3.1 11.1](#), which delete the H toneme of the stem in the dynamic imperfective, show the same form for the agent noun:

<i>nāe^{+/}</i>	"finish"	→	<i>nāad^{a/}</i>	"someone who doesn't give up easily" WK
<i>dīe^{+/}</i>	"receive"	→	<i>dīəd^{a/}</i>	"receiver"
<i>ñwà'e⁺</i>	"cut wood"	→	<i>ñwā'ad^a</i>	"woodcutter"
<i>gbāñ'e^{+/}</i>	"catch"	→	<i>zīm-gbāñ'àd^a</i>	"fisherman"
<i>pīe^{+/}</i>	"wash"	→	<i>pīəd^{a/}</i>	"washer"
<i>fāeñ^{+/}</i>	"save"	→	<i>fāañd^{a/}</i>	"saviour" WK

The NT/KB have *faangid* for "saviour"; see [15](#).

3-mora stems in *-s* consistently drop the *-d* in the sg and cb:

<i>sīgɪs^{ε/}</i>	"lower"	→	<i>sīgɪs^{a/}</i>	"lowerer"
			pl <i>sīgɪsɪdɪb^a</i>	
<i>kùəs^ε</i>	"sell"	→	<i>kùəs^a</i>	"seller"
			pl <i>kùəsɪdɪb^a</i>	
<i>pù'us^ε</i>	"worship"	→	<i>pù'us^a</i>	"worshipper"
			pl <i>pù'usɪdɪb^a</i>	
<i>tù'as^ε</i>	"talk"	→	<i>tù'as-tù'as^a</i>	"talker"
			pl <i>tù'as-tù'asɪdɪb^a</i>	
<i>dīəs^{ε/}</i>	"receive"	→	<i>nō-dí'əs^a</i>	"chief's spokesman"
			pl <i>nō-dí'əsɪdɪb^a</i>	("linguist", see 34)

Some 2-mora stems also irregularly drop the *-d* in the sg and cb:

<i>zàb</i> ^ε	"fight"	→	<i>zàb-zàb</i> ^a	"warrior"
			<i>gbān-záb</i> ^a	"leather-worker"
<i>tìs</i> ^ε	"give"	→	<i>tìs</i> ^a	"giver"
<i>sòs</i> ^ε	"beg"	→	<i>sòs</i> ^a	"beggar"

Stems in *-mm-* drop the *-d-* throughout; such nouns may use *r^ε|a⁺* Class suffixes instead of ^a|*b^a* [9.3.1.1](#) (cf Invariable verbs in *nn ll r(r)* below):

<i>dàm</i> ^m	"shake"	→	<i>dàm-dām</i> ^{ma}	"shaker"
			<i>dàm-dām</i> ^{mε}	(cf dipf <i>dàmmɪd^a</i>)

The *nn*-stem *sùn*^{nε} "bow the head" [6.2.1](#) likewise drops *-d-*:

<i>sùn</i> ^{nε}	"bow head"	→	<i>sūn</i> ^{na}	"deep thinker, close
			pl <i>sūnnɪb^a</i>	observer" WK 34
			cb <i>sùn-</i>	(cf dipf <i>sūnnɪd^a</i>)

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-*:

<i>yādɪg</i> ^{ε/}	"scatter"	→	<i>yāt</i> ^{a/}	technical term for one
				participant in a
				housebuilding ritual

Various irregular formations in my materials include:

<i>tēk</i> ^{ε/}	"pull"	→	<i>ñwī-ték</i> ^a	"rope-puller"
			pl <i>ñwī-tékɪdɪb^a</i>	
<i>nòŋ</i> ^ε	"love"	→	<i>nòŋɪd</i> ^a	"lover"; tones irreg
<i>tì'əb</i> ^ε	"heal"	→	<i>tī'əb</i> ^a	"healer"; tones irreg;
				?noun primary 34

For 4-mora stems: KT has no agent nouns; WK drops the final *-m-* and proceeds as for 3-mora stems:

<i>siilum</i> ^m	"cite proverbs"	→	<i>sīin</i> ^{na}	"speaker of proverbs"
			pl <i>sīinnɪb^a</i>	
<i>pò'alum</i> ^m	"harm"	→	<i>pō'an</i> ^{na}	"harmer"
<i>zàańsɪm</i> ^m	"dream"	→	<i>zàańs</i> ^a	"dreamer"
			pl <i>zāańsɪdɪb^a</i>	

Invariable verbs with stems ending in vowels or plosives add *-d-* to form the agent noun stem:

<i>zĩñ'ya</i>	"be sitting down"	→	<i>zĩñ'id^a</i>	"sitter"
<i>zi'e^{ya}</i>	"be standing still"	→	<i>zĩ'əd^a</i>	"stander"
<i>mĩ⁺</i>	"know"	→	<i>mĩ'id^{a/}</i>	"knower"
			<i>gbàn-mĩ'id^{a/}</i>	"scribe" NT ("book-knower")
<i>zĩ⁺</i>	"not know"	→	<i>zĩ'ɪd^{a/}</i>	"ignorant person"
<i>sũ'e^{ya/}</i>	"own"	→	<i>sũ'ʊd^{a/}</i>	"owner"
<i>sũñ'e^{ya/}</i>	"be better than"	→	<i>sũñ'ɔd^{a/}</i> pl <i>sũñ'ɔb^{a/}</i> 9.3.1	
<i>dĩg^{ya/}</i>	"be lying down"	→	<i>dĩgɪd^{a/}</i>	"lier-down"
<i>ĩgɪ^{ya/}</i>	"be kneeling"	→	<i>ĩgɪd^{a/}</i>	"kneeler"
<i>vābɪ^{ya/}</i>	"be lying prone"	→	<i>vābɪd^{a/}</i>	"liar prone"
<i>lābɪ^{ya}</i>	"be crouching"	→	<i>lābɪd^a</i>	"croucher in hiding"

Agent nouns from stems in *nn ll r(r)* drop the *-d* formant throughout, showing the same stem as the finite verb, with gemination as in the verb. Those in *ll r(r)* may use *r^ε|a⁺* Class suffixes, falling together in form with the corresponding dynamic adjectives [9.3.1.1](#).

<i>sĩn^{na/}</i>	"be silent"	→	<i>nĩn-sín^{na}</i>	"silent person"
<i>nēn^{na/}</i>	"envy"	→	<i>nĩn-nén^{na}</i>	"envious person"
<i>dɔ̃^{la/}</i>	"be with"	→	<i>ñyà'an-dò^{la}</i> or <i>ñyà'an-dò^ɛ</i>	"disciple" (irreg. tone)
<i>zāñ^{la/}</i>	"be holding"	→	<i>nō-záñ^{la}</i> or <i>nō-záñ^ɛ</i>	"holder of hens"
<i>dē^{la/}</i>	"be leaning"	→	<i>nĩn-dé^{la}</i>	"person prone to lean"
<i>mōr^{a/}</i>	"have"	→	<i>bù-mōr^{a/}</i> or <i>bù-mōr^{ɛ/}</i>	"owner of goats"
<i>tār^{a/}</i>	"have"	→	<i>bù-tār^{a/}</i> or <i>bù-tār^{ɛ/}</i>	"owner of goats"

Variant formations occur in

<i>kīs^{a/}</i>	"hate"	→	<i>kīs^{a/}</i> or <i>kīsɪd^{a/}</i>	"hater"
<i>tēñr^a</i>	"remember"	→	<i>tēñrɪd^a</i>	"rememberer"
<i>gūr^{a/}</i>	"be on guard"	→	<i>gūrɪd^{a/}</i> <i>gūr'ud^{a/}</i> <i>zà'-nō-gúr^a</i>	"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 pre-modifier. 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*⁺ "cooked groundnuts" WK, *ziṅdvigida* = *zīṅ-dúgvdà*⁺ "cooked fish" (Lk 24:42), beside the more usual sense in *ni'im dvigida* = *nīm-dúgvdà*⁺ "meat for cooking" (1 Samuel 2:15.)

When used without a preceding noun cb, dynamic adjective forms have the meaning of agent nouns:

kōvdír^ε pl *kōvdá*⁺ "killer" = *kōvd*^{a/} pl *kōvdíb*^a

With a preceding cb the meanings differ:

py'à-kōvd^{a/} "woman-killer, killer of women"
py'à-kōvdír^ε "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> ⁺	"hunt"	→	<i>py'à-gṵṵñdir</i> ^ε	"prostitute" ("wandering woman")
<i>là</i> ⁺	"laugh"	→	<i>py'à-lā'adir</i> ^ε	"woman prone to laughter/ woman to be laughed at"
<i>ñyē</i> ⁺	"see"	→	<i>būn-ñyétir</i> ^ε	"visible object"
<i>kyā</i> ⁺	"hoe"	→	<i>nā'-dá-kūədír</i> ^ε	"ox for ploughing"
<i>yè</i> ⁺	"don clothes"	→	<i>fū-yéédír</i> ^ε <i>fū-yéédùg</i> ^ᶑ	"shirt for wearing" WK KT
<i>kū</i> ⁺	"kill"	→	<i>tì-kōvdím</i> ^m	"poison" ("killing medicine")
<i>dy'à</i> ^a	"bear/beget"	→	<i>tèṅ-dū'adig</i> ^a	"native land"
<i>dōg</i> ^ε	"cook"	→	<i>sūm-dúgvdà</i> ⁺	"cooked groundnuts" WK
<i>sīg</i> ^ε	"descend"	→	<i>yī-sígídír</i> ^ε	"lodging-house"
<i>sy'à</i> ^a	"hide"	→	<i>yēl-sú'adir</i> ^ε	"confidential matter"

<i>òñb^ε</i>	"chew"	→	<i>būn-óñbídà⁺</i>	"solid food"
<i>bùn^ε</i>	"reap"	→	<i>būn-búnnìr^ε</i>	"thing for reaping"
<i>tòm^m</i>	"work"	→	<i>būn-túmmìr^ε</i>	"useful thing"
<i>vōl^ε</i>	"swallow"	→	<i>tì-vōnním^m</i>	"oral medication"
<i>gbīs^ε</i>	"sleep"	→	<i>pu'à-gbīsídír^ε</i>	"woman always sleeping"

3-mora stems in **g* drop *-d* in all cases except where the **g* derivational suffix is deleted in the dynamic 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^{ε/}</i>	"go around"	→	<i>pu'à-gīnníg^a</i>	"prostitute"
<i>sūñ^{+/}</i>	"anoint"	→	<i>kpā-sóóñdìm^m</i>	"anointing oil"
<i>tōlg^{ε/}</i>	"heat up"	→	<i>būn-túlgìr^ε</i>	"heater, thing for heating"
<i>pèlg^ε</i>	"whiten"	→	<i>būn-pélgìr^ε</i>	"whitening thing, whitener"
<i>yādīg^{ε/}</i>	"scatter"	→	<i>būn-yátìr^ε</i>	"scattering thing, scatterer" (cf the agent noun <i>yāt^{a/}</i>)
<i>jàñk^{ε/}</i>	"fly, jump"	→	<i>būn-jàñ'adìr^ε</i>	"flying creature"
<i>pàk^ε</i>	"surprise"	→	<i>yēl-pákìr^ε</i>	"disaster"
<i>tēk^{ε/}</i>	"pull"	→	<i>ñwī-tékìr^ε</i>	"rope for pulling with"
<i>kēḡ^{ε/}</i>	"go"	→	<i>bòḡ-kēnnír^ε</i>	"donkey that doesn't sit still"
<i>sòḡ^ε</i>	"help"	→	<i>būn-súḡìr^ε</i>	"helpful thing"
<i>nòḡ^ε</i>	"love"	→	<i>bì-nòḡìr^ε</i>	"beloved child"

3-mora stems in *-m* retain the *-d*, forming the consonant cluster *-mm-*:

<i>sàñ'am^m</i>	"destroy"	→	<i>bù-sāñ'ammìr^ε</i>	"scapegoat" WK
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3-mora stems in *-s* all drop the *-d*:

<i>pèlìs^ε</i>	"sharpen"	→	<i>būn-péllìsìr^ε</i>	"sharpening thing"
<i>kùø^ε</i>	"sell"	→	<i>būn-kúø^εsìr^ε</i>	"item for sale"

4-mora stems (all examples KT) all drop *-d* (whereas agent nouns drop stem-final *-m*):

<i>sīllm^m</i>	"cite proverbs"	→	<i>būn-síllóḡ^ᶑ</i>	"thing relating to proverbs"
<i>pò'alum^m</i>	"harm"	→	<i>nīn-pú'alíḡ^a</i>	"harmful person"
			<i>pu'à-pò'alíḡ^a</i>	"harmful woman"
<i>zàañsım^m</i>	"dream"	→	<i>nīn-záañsùḡ^ᶑ</i>	"dreamy person"
			<i>pu'à-zàañsúḡ^ᶑ</i>	"dreamy woman"

The adjectives associated with Adjectival verbs are not deverbal but primary descriptive adjectives; dynamic adjectives from **Dynamic Invariable verbs** show the same stem as the agent noun [13.1.1.1](#):

<i>dīg</i> ^{ya/}	"be lying"	→	<i>bùŋ-dīgídír</i> ^ε	"donkey that lies down a lot"	
<i>vāb</i> ^{ya/}	"be prone"	→	<i>bùŋ-vābídír</i> ^ε	"donkey always lying prone"	
<i>zìñ'</i> ^{ya}	"be sitting"	→	<i>kūg-zìñ'idìr</i> ^ε	"stone for sitting on" (i.e. not a <i>būgv</i> ^ε WK)	
<i>zāñ'</i> ^{la/}	"be holding"	→	<i>nō-zāñ'</i> ^{lε}	"hen for holding"	
<i>dēl</i> ^{la/}	"be leaning"	→	<i>nīn-dēl'</i> ^{lε}	"person you can lean on" WK	
			→	<i>kūg-dēl'</i> ^{lε/}	"chair for leaning on"
<i>gù</i> ^{la}	"be hanging"	→	<i>būn-gùl'</i> ^{lε}	"thing for suspending"	

13.1.1.2.2 Resultative

Resultative adjectives are only derived from Variable verbs with finite resultative forms [19.2.2.1](#). 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> ⁺	"die"	→	<i>kpīlúŋ</i> ^ɔ	"dead"
<i>gēñ</i> ⁺	"get tired"	→	<i>gēñlúŋ</i> ^ɔ	"tired"
<i>pè'el</i> ^ε	"fill"	→	<i>pè'elúŋ</i> ^ɔ	"full"
<i>kò</i> ⁺	"break"	→	<i>kòlúŋ</i> ^ɔ	"broken"
<i>yè</i> ⁺	"wear"	→	<i>yèlúŋ</i> ^ɔ	"worn" (of a shirt)
<i>yò</i> ⁺	"close"	→	<i>yòlúŋ</i> ^ɔ	"closed"
<i>pù'alum</i> ^m	"harm"	→	<i>pù'alúŋ</i> ^ɔ	"damaged"
<i>àeñ</i> ⁺	"tear"	→	<i>àeñlúŋ</i> ^ɔ	"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^a|s^ε* Class. In a few cases the meaning overlaps with that of agent nouns.

<i>kō</i> ⁺	"kill"	→	<i>kōvđıŋ</i> ^a	"thing for killing with"
<i>lō</i> ⁺	"tie"	→	<i>sjà-lōvđıŋ</i> ^a	"belt" ("waist-tying thing")
<i>dōg</i> ^ε	"cook"	→	<i>dōgvđıŋ</i> ^a	"cooking utensil"
<i>sōb</i> ^ε	"write"	→	<i>sōbvđıŋ</i> ^a	"writing implement"
<i>kpàr</i> ^ε	"lock"	→	<i>kpārvđıŋ</i> ^a	"thing for locking"
<i>ñwà'e</i> ⁺	"cut wood"	→	<i>ñwā'advđıŋ</i> ^a	"axe"
<i>pīe</i> ^{+/}	"wash self"	→	<i>pīevđıŋ</i> ^a	"thing for washing oneself"
<i>sù</i> ⁺	"bathe"	→	<i>sūvđıŋ</i> ^a	"sponge"
<i>gōs</i> ^ε	"look"	→	<i>nīn-gótıŋ</i> ^a	"mirror"
			<i>nīn-gótıs</i> ^ε	"spectacles" [<i>nīn</i> - "eye"]
<i>bùd</i> ^ε	"plant"	→	<i>būtıŋ</i> ^a 2.4	"cup" (originally "seed cup")
<i>pīəs</i> ^{ε/}	"clean"	→	<i>pīəsıŋ</i> ^a	"cleaning implement"
<i>kùəs</i> ^ε	"sell"	→	<i>kūəsıŋ</i> ^a	"professional salesperson"
<i>dā'e</i> ^{+/}	"push"	→	<i>dā'advđıŋ</i> ^a	"pusher (person or thing)"
<i>zīñ'i</i> ^{ya}	"be sitting"	→	<i>zīñ'idıŋ</i> ^a	"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*^m Class. **Vowel-stems add *-lum-***, where the *-l-* may represent historical **ʕ* already assimilated to the preceding consonant in the stems in *-ll -nn -r(r)* and otherwise appearing as *-y-* before *-a* [11.2 6.2.1.1](#).

<i>sū'e</i> ^{ya/}	"own"	→	<i>sū'vlím</i> ^m cf <i>so'olimkan</i> Mt 12:25, 1996
<i>mī</i> ⁺	"know"	→	<i>mī'ilím</i> ^m
<i>zī</i> ⁺	"not know"	→	<i>zī'vlím</i> ^m
<i>àeñ</i> ^a	"be something"	→	<i>àañlím</i> ^m
<i>bè</i> ⁺	"be somewhere"	→	<i>bèllím</i> ^m
<i>kā'e</i> ⁺	"not be"	→	<i>kā'alím</i> ^m
<i>sōñ'e</i> ^{ya/}	"be better than"		has no gerund
<i>mōr</i> ^{a/}	"have"	→	<i>mōrím</i> ^m
<i>tār</i> ^{a/}	"have"	→	<i>tārím</i> ^m
<i>nār</i> ^{a/}	"be necessary"	→	<i>nārím</i> ^m
<i>nēn</i> ^{na/}	"envy"	→	<i>nēnním</i> ^m
<i>wēn</i> ^{na/}	"resemble"	→	<i>wēnním</i> ^m [?? misheard for <i>wēnním</i> ^m]
<i>sīn</i> ^{na/}	"be silent"	→	<i>sīnním</i> ^m
<i>dōl</i> ^{a/}	"accompany"	→	<i>dōllím</i> ^m
<i>zāñl</i> ^{a/}	"hold in the hand"	→	<i>zāñllím</i> ^m
<i>dēl</i> ^{a/}	"be leaning" (of a person)	→	<i>dēllúg</i> ^ɔ or <i>dēllím</i> ^m

	<i>gūr^{a/}</i>	"guard"	→	<i>gūrím^m</i>	
	<i>těňr^a</i>	"remember"	→	<i>těňrīb^ɔ</i>	
				or <i>těňrím^m</i> [?? misheard for <i>těňrím^m</i>]	
But	<i>kīs^{a/}</i>	"hate"	→	<i>kísùg^ɔ</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^a* "want" [12.1.1](#).

Variable verbs which have a dynamic imperfective form which has become an independent Descriptive verb lexeme may also form imperfective gerunds; however, when formed from Pattern L verbs they do not show the third-mora H toneme:

<i>bòɔdım^m</i>	"will" (Pattern L, unlike <i>bòɔdir^ɛ</i> "desirable")
	contrast the perfective gerund <i>bòɔb^ɔ</i> "seeking"
<i>gòɔñdım^m</i>	"wandering" (<i>gòñ⁺</i> "hunt")
<i>zòtım^m</i>	"fear" [<i>M zót nē</i> "I'm afraid."]]
	contrast <i>zòg^ɔ</i> "running"

This probably simply means that the stems do not contain *-m-* and have only three morae; cf the *dàalım^m* "masculinity", *pù'alım^m* "femininity" alongside *dàalím^m* "male sex organs", *pù'alím^m* "female sex organs" and *bìilím^m* "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^m* "hear" (written *wumug* in pre-2016 orthography, but read with *-mm-* in the 1996 audio NT) is perhaps a formation of this kind, representing **wumduɔ*.

Unequivocal imperfective gerund forms with *-m-* derived from almost all agentive verbs occur as pre-modifiers of the bound noun

<i>-tāa⁼</i>	<i>-tāas^ɛ</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⁺</i>	"know"	→	<i>mīilım-tāa⁼</i>	"partner in knowledge"	
<i>zī⁺</i>	"not know"	→	<i>zī'ilım-tāa⁼</i>	"partner in ignorance"	
<i>bē⁺</i>	"exist"	→	<i>bēllım-tāa⁼</i>	"partner in existence"	WK
<i>dōl^{la/}</i>	"be with"	→	<i>dōllım-tāa⁼</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> ⁺	"build"	→	<i>mèdím-tāa</i> ⁼	"fellow-builder"
<i>dì</i> ⁺	"eat"	→	<i>dìtím-tāa</i> ⁼	"messmate"
<i>pū</i> ⁺	"share"	→	<i>pūvdím-tāa</i> ⁼	"fellow-sharer"
<i>kpěñ'</i> ⁺	"enter"	→	<i>kpěñ'edím-tāa</i> ⁼	"fellow-resident"
<i>zàb</i> ^ε	"fight"	→	<i>zàbidím-tāa</i> ⁼	"enemy"
<i>dōg</i> ^ε	"cook"	→	<i>dōgvdím-tāa</i> ⁼	"fellow-cook"
<i>fāñ'</i> ⁺	"snatch"	→	<i>fāñ'dím-tāa</i> ⁼	"fellow-robber"
<i>tùm</i> ^m	"work"	→	<i>tùmmím-tāa</i> ⁼	"co-worker"
<i>pù'us</i> ^ε	"worship"	→	<i>pù'usím-tāa</i> ⁼	"fellow-worshipper"
<i>dìis</i> ^ε	"feed"	→	<i>dìisím-tāa</i> ⁼	"fellow-feeder"
<i>sùŋ</i> ^ε	"help"	→	<i>sùŋím-tāa</i> ⁼	"fellow-helper"
			or <i>sùŋidím-tāa</i> ⁼	
<i>sjàk</i> ^ε	"agree"	→	<i>sjàkím-tāa</i> ⁼	"fellow in agreement"

Stance verbs may use *-dím-* or *-lím-* 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> ^{ya/}	"be kneeling"	→	<i>īgulím-tāa</i> ⁼	"fellow-kneeler"	
			or <i>īgidím-tāa</i> ⁼	"fellow-kneeler"	WK
<i>zìñ'i</i> ^{ya}	"be sitting"	→	<i>zìñ'ilím-tāa</i> ⁼	"fellow-sitter"	
			or <i>zìñ'idím-tāa</i> ⁼	"fellow-sitter"	WK
<i>vābi</i> ^{ya/}	"lie prone"	→	<i>vābilím-tāa</i> ⁼	"fellow lier-prone"	
			or <i>vābidím-tāa</i> ⁼	"fellow lier-prone"	WK
<i>làbi</i> ^{ya}	"be crouched"	→	<i>làbulím-tāa</i> ⁼	"fellow croucher in hiding"	
<i>zì'e</i> ^{ya}	"be stood"	→	<i>zì'əlím-tāa</i> ⁼	"fellow-stander"	
			or <i>zì'ədím-tāa</i> ⁼	"fellow-stander"	WK
<i>dīgi</i> ^{ya/}	"be lying"	→	<i>dīgulím-tāa</i> ⁼	"fellow-lier"	
			or <i>dīgulím-tāa</i> ⁼	"fellow-lier"	WK

For the irregular verb *nòŋ*^ε WK has two forms with different nuances [11.1.1](#)

<i>nòŋ</i> ^ε	"love"	→	<i>nòŋulím-tāa</i> ⁼	"fellow liker"
			or <i>nòŋidím-tāa</i> ⁼	"fellow lover"

13.1.1.5 Other deverbal formations

-s- appears in a few concrete nouns derived from verbs:

<i>dīgísá</i> ⁺	"lairs"	←	<i>dīgi</i> ^{ya/}	"be lying down"
<i>dōvsá</i> ⁺	"steps"	←	<i>dō</i> ⁺	"go up"

-m- derives nouns from verbal roots in

<i>zōm</i> ^{mε}	"refugee"	cf	<i>zò</i> ⁺	"run"
<i>kp̄'im</i> ^{m/}	"corpse"	cf	<i>kp̄i</i> ⁺	"die"

-d- appears as an instrument noun formant instead of the usual *-dum-* in

<i>tūēdir</i> ^ε	"mortar"	←	<i>tūà</i> ⁺	"grind in a mortar"
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See also on *pībin*^{nε} "covering" etc, where the *n* may represent **ld* [12.1.2](#).

-b- possibly derives nouns from verbal roots in

<i>kp̄iibig</i> ^a	"orphan"	cf	<i>kp̄i</i> ⁺	"die"
<i>dà'abir</i> ^ε	"slave"	cf	<i>dà</i> ⁺	"buy"

This *-b* may be connected with the stem of *bīig*^a "child"; cf Gurmanche *kp̄ēbīgā* "orphan", *kp̄é* "die", *bīgā* "child". Kusaal has no synchronic process to turn a root into a suffix; however, there may be relics of such processes in *bī-díbiŋ*^a "boy" (Mooré *biríblá*), *bī-púj*^a "girl" (Mooré *bipúglá*) beside *dāy*⁺ "man" *py'ā*^a "woman" (← **pyaga*), in the reduplicated plural *bībis*^ε of *bīl*^a "small", and the personal name *À-Sāan-dú*⁺, cf *sāan*^{a/} "stranger", *dāy*⁺ "man."

13.1.2 From nouns and adjectives

-s- forms adjectives and cognate Adjectival verbs.

<i>mā'asír</i> ^ε	"cold, wet"	cf	<i>mā'e</i> ^{+/}	"cool down"
<i>mā'as</i> ^{a/}	"be cold, wet"			
<i>bōvusír</i> ^ε	"soft"	cf	<i>būk</i> ^{ε/}	"weaken"
<i>bōvus</i> ^{a/}	"be soft"			
<i>tēbisír</i> ^ε	"heavy"	cf	<i>tēbig</i> ^{ε/}	"get heavy"
<i>tēbis</i> ^{a/}	"be heavy"			
<i>mì'isug</i> ^ɔ	"sour"	cf	<i>mì'ig</i> ^ε	"get sour"
<i>mì'is</i> ^a	"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> ^ε	"hedgehog"
	<i>lā'aP</i>	"cowrie"
pl	<i>līgidi</i> ⁺	"money" * <i>lagid-</i>
	<i>pògvdi</i> ^a	"father's sister"

It appears in a number of ^a|^b^a 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>Nàbidi</i> ^a	"Nabdema"	but	<i>Nàbir</i> ^ε	"Nabit language"
<i>Dàgáàd</i> ^a	"Dagaaba person" =		Dagaare <i>Dagao</i>	
<i>nīdib</i> ^{a/}	"people" =		Mooré <i>nébà</i>	

-m- appears in both concrete and abstract nouns, with no single common meaning:

<i>bī'am</i> ^m	"enemy"	cf	<i>bī'a</i> ⁺	"bad"
<i>tādīm</i> ^{m/}	"weak person"	cf	<i>tàdig</i> ^ε	"become weak"
<i>āñsīŋ</i> ^a	"sister's child"	cf	<i>āñsib</i> ^a	"mother's brother"
<i>yáaŋ</i> ^a	"grandchild"	cf	<i>yáab</i> ^a	"grandparent"
← * <i>yāámgā</i>			← * <i>yāágbā</i>	
<i>vúeŋ</i> ^a	"red kapok"	cf	<i>vúer</i> ^ε	"red kapok fruit"
← * <i>vūémgā</i>			← * <i>vūégrī</i>	
<i>bì'isím</i> ^m	"milk"	cf	<i>bì'isr</i> ^ε	"breast"
<i>yōgúm</i> ^{nε}	"camel"		[ultimately ← Berber * <i>a-ləqəm</i> (Souag)]	
<i>gbīgim</i> ^{nε}	"lion"			
<i>zìlim</i> ^{mε}	"tongue"			
<i>àñrvŋ</i> ^ɔ	"boat"			
<i>nā'am</i> ^m	"chiefship"	cf	<i>nà'ab</i> ^a	"chief"
<i>zōlímís</i> ^ε	"foolishness"	cf	<i>zōlvŋ</i> ^ɔ	"fool"

Abstract **-mís**^ε forms seem always to have H toneme; cf *bùdímís*^ε "confusion", where, however, the **-m-** is part of the verb stem *bùdīm*^m "get confused"; cf also

<i>tādímís</i> ^ε	"weakness"	cf	<i>tādīm</i> ^{m/}	"weak person"
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-m- is seen also in the adjectives

<i>zùlɔŋ</i> ^ɔ	"deep"	<i>ňyālúŋ</i> ^ɔ	"wonderful"
<i>yàlɔŋ</i> ^ɔ	"wide"	<i>nàrɔŋ</i> ^ɔ	"necessary"

Added to existing adjectival stems, *-m-* produces no change of meaning:

<i>ňyèesíŋ</i> ^a	"self-confident"	cf	<i>ňyèes</i> ^a	"be self-confident"
<i>vèñllíŋ</i> ^a	"beautiful"	cf	<i>vèñllɔŋ</i> ^a	"beautiful"
<i>mālsíŋ</i> ^a	"pleasant"	cf	<i>mālsɔŋ</i> ^a	"pleasant"
<i>lāllíŋ</i> ^a	"distant"	cf	<i>lāllúŋ</i> ^ɔ	"distant"

-lum- derives abstract nouns from nouns and adjectives. The *-l-* is perhaps the *ʎ formant of Invariable verbs [11.2](#) and may occur in some primary adjectives like

<i>sābílŋ</i> ^a	"black"	cf	<i>sōb</i> ^ε	"get dark"
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However, there are no adjectives in *-l-* alongside these abstract nouns; this is true even in the case of parallel formations in simple *-l-* rather than *-lum-*, like

<i>dāy</i> ⁺	"man"	→	<i>dàalɔm</i> ^m	"masculinity"
<i>pɔ'ā</i> ^a	"woman"	→	<i>pù'alɔm</i> ^m	"femininity"

versus *dàalɔm*^m "male sex organs", *pù'alɔm*^m "female sex organs", where the concrete meaning is presumably a metaphorical development from an original abstract sense, as with *yām*^{m/} "gall, common sense" → "gall bladder" [9.1](#); cf the abstract sense of the parallel 4-mora stem formation *bìilɔm*^m "childhood"; WK did not accept **bìilɔm*.

-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</i> ^ε	"proud person"	→	<i>tītā'alɔm</i> ^m	"pride"
<i>gīŋ</i> ^a	"short"	→	<i>gīñllɔm</i> ^m	"shortness"
<i>wōk</i> ^{ɔ/}	"long, tall"	→	<i>wā'alɔm</i> ^m	"tallness"
<i>sāan</i> ^{a/}	"guest, stranger"	→	<i>sáannɔm</i> ^m	"strangerhood"
<i>tīrààn</i> ^a	"neighbour"	→	<i>tīràànnɔm</i> ^m	"neighbourliness"
<i>gīŋ</i> ^a	"short"	→	<i>gīŋulɔm</i> ^m	"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 *CVVCm* 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> ^{ya/}	be lying	<i>digin</i> ^ε		<i>dīgi</i> ^{lε/}
	<i>vābi</i> ^{ya/}	be lying prone	<i>vābin</i> ^ε		<i>vābi</i> ^{lε/}
	<i>īgi</i> ^{ya/}	be kneeling	<i>igin</i> ^ε		<i>īgi</i> ^{lε/}
	<i>làbi</i> ^{ya}	be crouching hidden	<i>làbin</i> ^ε		<i>làbi</i> ^{lε}
	<i>zìñ'</i> ^{ya}	be sitting	<i>zìñ'in</i> ^ε		<i>zìñ'il</i> ^ε
	<i>zì'e</i> ^{ya}	be standing	<i>zì'an</i> ^ε		<i>zì'al</i> ^ε
	<i>tī'i</i> ^{ya/}	be leaning (of thing)	<i>tì'in</i> ^ε		<i>tī'il</i> ^{lε/}
WK	<i>gō'e</i> ^{ya/}	be looking up	<i>gò'on</i> ^ε		
	<i>sùr</i> ^a	have bowed head	<i>sùn</i> ^{nε}		<i>sùn</i> ^{nε} [sic]
	-	cover oneself	<i>ligin</i> ^ε		<i>ligi</i> ^{lε}
	-	perch (of bird)	<i>zùon</i> ^ε		<i>zùol</i> ^ε
	-	perch (of bird)	<i>yà'an</i> ^ε		<i>yà'al</i> ^ε

The resultative [19.2.2.1](#) 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> ^{la}	be suspended	<i>gù</i> ^ε	<i>gù</i> ^ε
<i>tàbi</i> ^{ya}	be stuck to	<i>tàb</i> ^ε	<i>tàbi</i> ^{lε}
<i>dē</i> ^{la/}	"be leaning" (person)	<i>dēlum</i> ^m	

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 frequently have no 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^{a/}</i>	"guard"	<i>gū'ul^{ε/}</i>	"put someone on guard"
<i>bāñ⁺</i>	"ride"	<i>bāñ'al^{ε/}</i>	"put someone on a horse/bicycle etc"
<i>zàb^ε</i>	"fight"	<i>zàbl^ε</i>	"cause to fight"
<i>du'à^a</i>	"bear, beget"	<i>dù'al^ε</i>	"make interest (of a loan)"
<i>yè⁺</i>	"dress oneself"	<i>yèl^ε</i>	"dress another person"
<i>pìd^ε</i>	"don hat/shoes/rings"	<i>pìl^ε</i>	"put hat/shoes/rings on another person"

-g- can be a causative or inchoative suffix with roots forming Invariable verbs or intransitive Variable verbs:

<i>dōl^{a/}</i>	"accompany"	<i>dōlg^{ε/}</i>	"make accompany"
<i>gōr^{a/}</i>	"look up" DK	<i>gōdrg^{ε/}</i>	"make look up" DK
<i>zāñl^{a/}</i>	"be holding"	<i>zāñ^ε</i>	"pick up"
<i>tèñr^a</i>	"remember"	<i>tèñ⁺</i>	"bring to mind, remind"
<i>yùul^ε</i>	"swing" intransitive	<i>yùlg^ε</i>	"swing" transitive
<i>kò⁺</i>	"break" intransitive	<i>kò'cg^ε</i>	"break" ambitransitive

-s- is the usual causative suffix for Variable verbs:

<i>kpèñ⁺</i>	"enter"	<i>kpèñ'εs^ε</i>	"make enter"
<i>nie⁺</i>	"appear"	<i>nèεs^ε</i>	"reveal"
<i>yī⁺</i>	"go/come out"	<i>yīs^{ε/}</i> or <i>yīs^ε</i>	"make go/come out"
<i>dì⁺</i>	"eat"	<i>dìs^ε</i>	"feed"
<i>nū⁺</i>	"drink"	<i>nūls^{ε/}</i>	"make drink"; also <i>nūlg^{ε/}</i>
<i>sīg^ε</i>	"go down"	<i>sīgs^{ε/}</i>	"lower"
<i>lèb^ε</i>	"return"	<i>lèbs^ε</i>	"make return; answer"
<i>mu'à^a</i>	"suck" (of a baby)	<i>mù'as^ε</i>	"give to suck"
[Mooré <i>tá</i>	"arrive"]	<i>tā'as^{ε/}</i>	"help to travel, walk"

It is also seen in

<i>zēm^{ma/}</i>	"be equal"	<i>zē'mis^{ε/}</i>	"make equal"
<i>kpiig^ε</i>	"go out (fire)"	<i>kpiis^ε</i>	"quench"

gūr^{a/} "guard" has the causative *gū'ul^{ε/}* (cf *gū'ud^{a/}*, agent noun) but also has the derivative *gū'us^{ε/}* "take care, watch out"

13.2.1.3 Reverse action

-g- attached to dynamic verbal roots implies reversal:

<i>yè⁺</i>	"dress oneself"	<i>yèεg^ε</i>	"undress oneself"
<i>pìd^ε</i>	"put (hat etc) on"	<i>pìdig^ε</i>	"take (hat etc) off"
<i>pìl^ε</i>	"put (hat etc) on s'one"	<i>pìlig^ε</i>	"take (hat etc) off someone"
<i>l̄⁺</i>	"tie up"	<i>l̄dig^{ε/}</i>	"untie"
<i>yò⁺</i>	"close"	<i>yò'ɔg^ε</i>	"open"
<i>èñd^ε</i>	"block up"	<i>èñdig^ε</i>	"unblock"
<i>yà'al^ε</i>	"hang up"	<i>yàk^ε</i>	"unhang"
<i>pà'al^ε</i>	"put on top"	<i>pàk^ε</i>	"take off top"
<i>pìbil^ε</i>	"cover up"	<i>pìbig^ε</i>	"uncover"
<i>tàbi^{ya}</i>	"be stuck to"	<i>tàbig^ε</i>	"unstuck, get unstuck"
<i>là'as^ε</i>	"gather together"	<i>lāk^{ε/}</i>	"open" (eye, book)
		Mooré	<i>lákè</i> "un-stick together"
		Farefare	<i>làkè</i> "enlever, ouvrir"

Reversible **-g-** seems to be a peculiarity of the Western group within Oti-Volta; other Oti-Volta languages show alveolars in suffixes having this meaning: Konkomba *pì:ⁿ* "close" *pì:rì* "open", Moba *lwo* "close" *lwot* "open", Byali *byá* "close" *byērǎ* "open", Nawdm *rów* "has closed" *rɔd* "open." Proto-Bantu probably had both **-ɔ/-** and **-ɔk-**, perhaps respectively transitive and intransitive. If there were two such suffixes in Oti-Volta, it would be natural for the alveolar variant to be disfavoured in Western Oti-Volta because of the adoption in that subgroup of **-da** as the regular dynamic imperfective flexion for almost all verbs capable of aspect flexion.

13.2.1.4 Other deverbal formations

-s- may have a plural action sense:

<i>kò</i> ⁺	"break"	<i>kò'ɔs</i> ^ε	"break several times"
<i>tòñ</i> ⁺	"shoot"	<i>tòñ'ɔs</i> ^ε	"hunt"
<i>pìəb</i> ^ε	"blow (flute etc)"	<i>pèbɪs</i> ^ε	"blow (wind)"
<i>làbɪ</i> ^{ya}	"crouch in hiding"	<i>làbɪs</i> ^ε	"walk stealthily"
<i>vūə</i> ^{a/}	"be alive"	<i>vū'us</i> ^{ε/}	"breathe, rest"
<i>jàñk</i> ^{ε/}	"fly, jump"	<i>jàñ'as</i> ^{ε/}	"leap, jump repeatedly"
<i>yā'e</i> ^{+/}	"open mouth"	<i>yā'as</i> ^{ε/}	"open repeatedly" WK
<i>dī'e</i> ^{+/}	"receive"	<i>dī'əs</i> ^{ε/}	"receive (many things)"

-g- probably occurs with an inchoative meaning in the Base Forms of several irregular verbs [11.1.1](#), and also in

<i>sōñ'e</i> ^{ya/}	"be better than"	<i>sūñ'e</i> ^{+/}	"become better than" WK
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-m- derives some preverbal adverbs from Variable verbs [19.7.2](#):

<i>lèm</i>	"again"	cf	<i>lèb</i> ^ε	"return"
<i>là'am</i>	"together"	cf	<i>là'as</i> ^ε	"gather together"
		also	<i>là'am</i> ^m	"associate with", main verb
<i>dèŋɪm</i>	"first"	cf	<i>dèŋ</i> ^ε	"go first"
<i>màlɪgum</i>	"again"	cf		Toende <i>malig</i> "do again"

-g- and **-m-** occur with no clear meaning in

<i>fāñ</i> ⁺	"rob, snatch"	<i>fāeñ</i> ^{+/}	"save" (? "snatch back")
<i>lìəb</i> ^ε	"become"	<i>lèbɪg</i> ^ε	"turn over"
			Mooré <i>lèbge</i> "become"
<i>sōñ</i> ⁺	"rub"	<i>sūeñ</i> ^{+/}	"anoint"
<i>nōb</i> ^ε	"get fat"	<i>nōbɪg</i> ^{ε/}	"grow" (child, plant)
<i>nā</i> ⁺	"join"	<i>nāe</i> ^{+/}	"finish"; compare Hausa <i>gamàa</i> "join, finish"
<i>kòñs</i> ^ε	"cough"	<i>kòñsɪm</i> ^m	"cough"

-r- appears in

<i>kābur</i> ^{ε/}	"ask for admission"
<i>sūgur</i> ^{ε/}	"forbear, be patient with"

Kābur^{ε/} is probably connected with *kāab*^{ε/} "offer, invite", and Toende Kusaal has *kábis* "frapper à la porte, informer, signaler." There seems to be no root **sūg*-. Both words appear frequently in pan-regional formulaic expressions [31](#) and may well be loanwords. These verbs may be back-formations from the nouns *kābirí*⁺ and *sūgurú*⁺, where *ri/rv* possibly originated in the equivalent of *r^ε|a⁺* 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'ᵛs</i> ^{ε/}	"smoke"	<i>ňyū'e</i> ^{+/}	"set alight"
<i>ňwīg</i> ^{a/}	"rope"	<i>ňwīg</i> ^{ε/}	"make a rope"
<i>tādım</i> ^{m/}	"weak person"	<i>tàdɪg</i> ^ε	"become weak"
<i>kpi'a</i> ⁺	"neighbour"	<i>kpi'e</i> ⁺	"approach"
<i>zūθ</i> ^ε	"hill"	<i>zùe</i> ⁺	"get higher, more"
<i>Ā-Tūl</i> ^{le}	"Breech-Delivered" 32.2	<i>tùlɪg</i> ^ε	"invert"
<i>mā'asír</i> ^ε	"cool, wet"	<i>mā'e</i> ^{+/}	"get cool, wet"
		<i>(mā'al</i> ^{ε/}	"make cool, wet")
<i>bōgusír</i> ^ε	"soft"	<i>būk</i> ^{ε/}	"soften"
<i>tēbısír</i> ^ε	"heavy"	<i>tēbɪg</i> ^{ε/}	"get/make heavy"
<i>gīŋ</i> ^a	"short"	<i>gīŋ</i> ^ε	"scrimp"
<i>kpi'ŋ</i> ^ᵛ	"strong"	<i>kpe'ŋ</i> ^ε	"strengthen"
<i>vūr</i> ^{ε/}	"alive"	<i>vū'vɪg</i> ^{ε/}	"make/come alive"
<i>pò'ᵛdɪg</i> ^a	"few"	<i>pò'ᵛg</i> ^ε	"diminish; denigrate"
<i>pìəɪɪg</i> ^a	"white"	<i>pèlɪg</i> ^ε	"whiten"
<i>sābılıg</i> ^a	"black"	<i>sōbɪg</i> ^{ε/}	"blacken"
<i>nīn-múa</i> ⁺	"concentration"	<i>mù'e</i> ⁺	"redden, become intense"
<i>kōdvɪg</i> ^ᵛ	"old"	<i>kùdɪg</i> ^ε	"shrivel up, dry out, age"
<i>sùŋ</i> ^ᵛ	"good"	<i>sùŋ</i> ^ε	"help"
<i>tūvı́g</i> ^ᵛ	"hot"	<i>tūlɪg</i> ^{ε/}	"heat up"
<i>mì'isvɪg</i> ^ᵛ	"sour"	<i>mì'ıg</i> ^ε	"turn sour"
<i>zùlvɪg</i> ^ᵛ	"deep"	<i>zùlɪg</i> ^ε	"deepen"
<i>lālłıg</i> ^ᵛ	"far"	<i>lālɪg</i> ^{ε/}	"get to be far, make far"
<i>mà'ıg</i> ^ᵛ	"crumpled up"	<i>màk</i> ^ε	"crumple up"
<i>dēɛŋ</i> ^a	"first"	<i>dēŋ</i> ^ε	"precede"
<i>nèɛr</i> ^ε	"clear, empty"	<i>nìe</i> ⁺	"appear"

With the addition of *-m* as a second derivational suffix:

<i>wàɥŋ</i> ^ɔ	"wasted"	<i>wàŋɪm</i> ^m	"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</i> ^{+/}	"get cool"	<i>mā'al</i> ^{ε/}	"make cool"
<i>pūñ'e</i> ^{+/}	"rot"	<i>pōñ'ɔ</i> ^{ε/}	"cause to rot"
<i>nìe</i> ⁺	"appear"	<i>nèε</i> ^ε	"reveal"
<i>wō'vɔ</i> ^{ε/}	"get wet"	<i>wō'vɪ</i> ^{ε/}	"make wet"
<i>ñyá'ɑŋ</i> ^a	"behind"	<i>ñyā'al</i> ^{ε/}	"leave behind"
<i>gēog</i> ^ɔ	"space between legs"	<i>gēε</i> ^{ε/}	"put between legs" Tones <i>sic</i>
<i>līk</i> ^a	"darkness"	<i>līgɪ</i> ^ε	"cover up"

-lum- derives verbs from noun roots, meaning "act as ..." or "make/become ...":

<i>pɥ'ā</i> ^a	"woman"	<i>pù'alɪm</i> ^m	"cook"
<i>pòñ'ɔ</i> ^ε	"cripple"	<i>pòñ'ɔɪm</i> ^m	"cripple, get crippled"
<i>wàbɪ</i> ^ε	"lame"	<i>wàbɪɪm</i> ^m	"make, go lame"
<i>gō'vɪ</i> ^ε	"semi-ripe things"	<i>gù'vɪɪm</i> ^m	"become semi-ripe"
<i>bōgvɔ</i> ^a	"client of diviner"	<i>bògvɪɪm</i> ^m	"cast lots"
		cf <i>bòk</i> ^ε	"cast lots"

-m- appears deriving a verb from a noun root in

<i>nēε</i> ^{ε/}	"millstone"	<i>nēεm</i> ^{m/}	"grind with a millstone"
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-s- has a factitive sense in

<i>zɥà</i> ⁺	"friend"	<i>zùəs</i> ^ε	"befriend"
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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; $i\ u$ become $i\ u$ by ATR harmony before $i\ u$ of an initial root mora, and the i/u distinction itself is predictable 4.4. There is also a complex reduplicated type $CVsin$ or $CVlin$. 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 14.1.4. Other prefixes are related to verbal negative particles 14.1.3. 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 M Raising 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 M Raising 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.

As prefix vowels, i and u are subject to ATR harmony 4.4, which is ignored in writing as it is non-contrastive.

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^{ɛ/}</i>	"voice"
<i>kùkò^{mɛ}</i>	"leper"
<i>kìkàŋ^a</i>	"fig tree"
<i>kìkīrɪg^{a/}</i>	"tutelary spirit"
<i>k[p]ùkɔ̃pàrɪg^a</i>	"palm tree"
<i>kɔ̃kɔ̃pīn^{na/}</i>	"merchant"
<i>kɔ̃pàkūr^{ɛ/}</i>	"tortoise" (anomalous prefix vowel)
<i>tītā'ar^ɛ</i>	"big"
<i>tītōmɪs^ɛ</i>	"sending" (<i>tòm^m</i> "send")
<i>tàtəl^ɛ</i>	"palm of hand"
<i>pīpīrɪg^{a/}</i>	"desert"
<i>fōfōm^{mɛ}</i>	"envy"; "stye" (believed to result from envy)
<i>sìsì'əm^m</i>	"wind"
<i>zà-sìsɔ̃bɪr^{ɛ/}</i>	"evening"
	(<i>zà-</i> cb of <i>zàam^m</i> "evening", <i>sɔ̃b^ɛ</i> "get dark")
<i>lìlāalɪŋ^a</i>	"swallow"
<i>mìmīlím^m</i>	"sweetness"
<i>mìmīlúg^{ɔ̃}</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^{mɛ}</i>	"kapok material" (<i>gùm^{mɛ}</i> "kapok fruit")
<i>dòndùug^{ɔ̃}</i>	"cobra"
<i>dìndēog^{ɔ̃/}</i>	"chameleon"
<i>bìmbìm^{mɛ}</i>	"altar"
<i>bòmbàrɪg^a</i>	"ant"
<i>zùnzòŋ^a</i>	"blind" (<i>zū'əm^{m/}</i> "go/make blind")
<i>zīnzāyɪŋ^{ɔ̃/}</i>	"bat"
<i>kìnkàŋ^a</i>	"fig"
<i>tītōñríg^a</i>	"mole"
<i>pòmpɔ̃g^{ɔ̃}</i>	"housefly" (cf <i>tàmpūa⁺</i> <i>id</i> 9.3.2)
<i>sīnsáañ[̄]</i>	a kind of tiny ant
<i>nɔ̃b-púmpàuyɪŋ^{ɔ̃}</i>	"foot"

An even more complex type follows the reduplicated CV with *-sin* or *-lin*:

<i>kpìsɪnkpì</i> ^{lɛ}	"fist"
<i>tàsɪntà</i> ^{lɛ}	"palm of hand"
<i>sīlɪnsíùŋ</i> ^ɔ	"spider" pl <i>sīlɪnsîŋd</i> ^ɛ
<i>sīlɪnsíùg</i> ^ɔ	"ghost" pl <i>sīlɪnsîs</i> ^ɛ
<i>zīlɪnzíòg</i> ^ɔ	"unknown" cf <i>zī</i> ⁺ "not know"
<i>vòlɪnvùuñ</i> ^{lɛ}	"mason wasp"
<i>wàsɪnwà</i> ^{lɛ}	a parasitic gall on trees, called "mistletoe" in local English
<i>nēsɪnnēog</i> ^ɔ	"envious person" cf <i>nēn</i> ^{na/} "envy" WK others "centipede" = WK <i>nà'-nēsɪnnēog</i> ^ɔ

14.1.2 *Da(n) ba(n) sa(n)*

<i>dàwàlɪg</i> ^a	"hot, humid period just before the rainy season"
<i>dàyūug</i> ^ɔ	"rat"
<i>dàyáam</i> ^{ma}	"woman's parent-in-law"
<i>dàtāa</i> ⁼	"enemy" cf <i>nìn-tāa</i> ⁼ "co-wife", Ghanaian "rival"
<i>dàmà'a</i> ⁼	"liar" cf <i>mà</i> ⁺ "lie"
<i>dàkīg</i> ^a	"sibling-in-law via wife"
<i>dàwān</i> ^{ne/}	"pigeon"
<i>dādúk</i> ^ɔ	a kind of large pot, cf <i>dūk</i> ^ɔ "pot"
<i>dàtìɲ</i> ^ɔ	"right hand"
<i>dàgòbɪg</i> ^a	"left hand"
<i>bānāa</i> ⁼	traditional long-sleeved smock
<i>bàlànɪr</i> ^ɛ	"hat"
<i>bàlàar</i> ^ɛ	"stick, staff"
<i>bālērɪg</i> ^ɔ	"ugly" cf <i>lēr</i> ^ɛ "get ugly"
<i>bàyēog</i> ^ɔ	"betrayal of secrets" cf <i>yēɛs</i> ^{ɛ/} "betray a secret"
<i>sākárùg</i> ^ɔ	"fox"
<i>sàbùa</i> ⁺	"lover, girlfriend" ? <i>bòɔd</i> ^a "want, love"
<i>sāmán</i> ^{ne}	clear space in front of a <i>zàk</i> ^a "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> ^ɔ	"measles"
<i>sāngúnnìr</i> ^ɛ	"millipede"
<i>zànkù'ar</i> ^ɛ	"jackal"
<i>Zàngbèog</i> ^ɔ	"Hausa person"
<i>màngáuvŋ</i> ^ɔ	"crab"
<i>làngáuvŋ</i> ^ɔ	"crab"
<i>nànzù'us</i> ^ɛ	"pepper"

The interesting word *nàyīg*^a "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 ^a|*b*^a Class and the *-g-* belongs to the stem: pl *nàyīg-nàm*^a, though there is an analogical *g*^a|*s*^ɛ pl *nàyīs*^ɛ as well; there is also a derived abstract noun *nàyīgum*^m "thievery." The Farefare cognate of *nàyīg*^a 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> ^ɛ	"barren woman"; cf <i>du'à</i> ^a "bear, beget"
<i>nīn-pū-nān</i> ^{na/}	"disrespectful person"; cf <i>nān</i> ^ɛ "love, respect"
<i>tùb-pū-wúmnìb</i> ^a	"deaf people" (Rom 11:7) cf <i>tùbur</i> ^ɛ "ear", <i>wòm</i> ^m "hear."

However, most cases are not analysable:

<i>kòndùŋ</i> ^a	"jackal"
<i>gūmpūzēr</i> ^{ɛ/}	"duck"
<i>dāmpūsāar</i> ^ɛ	"stick"
<i>bān-kúsé</i> ^{lɛ}	"lizard" ? first element connected with <i>bàŋ</i> ^a "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*^a *nīs*^ε [= Mooré *ninga*] but the word is rare; as a noun prefix cf

nìn-gbīŋ^{ɔ/} "human skin; body"
nìn-tāa⁼ "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^{a/} "son, boy" cf *pāalíg* "new"
dà-kòǎŋ^ε "son, bachelor" cf *àdàkóŋ'* "one"
 compare *pùkòǎŋ*^ε below

pù "woman" cf *pŷ'ā*^a "woman" cb *pŷ'à-*. Identifiable in e.g.

pùkòǎŋ^ε "widow"
 cf Mooré *pùgkōoré* "widow"
 with Mooré *pùgsádà* "young woman"
 = Kusaal *pŷ'à-sādir*^{ε/}

pū- "farm" cf *pōɔg*^{ɔ/} "field, farm", regular cb *pō-*. Tonally, this *pū-* is a M prefix, not a combining form [7.2.4](#).

pūkpaad^{a/} "farmer" (= *kpāad*^{a/} id)

nà' "chief"(?) appears before a number of nouns signifying animals and insects:

nà'-nēsinnēog^{ɔ/} "centipede" WK
 cf *nēsinnēog*^{ɔ/} "envious person" WK; others: "centipede"
nà'-zòm^{mε} "locust"
nà'-dàwān^{nε/} "pigeon" = *dàwān*^{nε/}

The "chief" cb perhaps relates to traditional folklore; cf *à-kōra-díəm*^{ma} "praying mantis" ("hyena's parent-in-law") and animal and bird names which incorporate the Personifier clitic [16.6](#) like *à-dàalúŋ*^ɔ "stork", *à-gáúŋg*^ɔ "pied crow", *à-mús*^ε "cat."

14.2 Adverbs

The manner-adverb prefix *à-* appears before some stems which are also followed by Apocope Blocking [17.4](#):

<i>àmḗǵá</i> ⁺	"truly"
<i>àsī́dà</i> ⁺	"truly"
<i>àníǵà</i> ⁺	"promptly"

The same prefix is also seen in a number of proadverbs and in the locative *àǵó*^{lɛ} "upwards" [17.3](#). Words with this prefix are all Liaison Words. The prefix is followed by L raising, 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 unprefixes forms are not available for comparison, the number prefixes are probably followed by L Raising on 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 ^{rɛ}|*a*⁺ Class singular pronoun *l̀i* 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 ^{rɛ}|*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>bī́sá_ àtáń'</i>	"three children"
child:PL NUM:three	

This same *à-* is also seen in *àlá*⁺ "how many?" contrasting with *àlá*⁺ "thus", which has the manner-adverb *à-*:

<i>Pèédá_ àlá</i>	⁺ ∅?	"How many baskets?"
Basket:PL NUM:how.many	CQ?	

nijl 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 bàyópòḡ "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^m* Class agreement, in the "abstract" sense of *m^m* [9.1.1](#):

ñtáñ' "three" (in counting)
ñnāas "four" (in counting)
ñnū "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^m* Class (Fiedler 2012.)

The number prefix *bù-* appears in various adverbial number words [16.4.2.4](#). It probably represents either an old *b^ɔ* or *m^m* Class agreement.

àbùyí⁺ "twice"
àbùtáñ'⁺ "three times"
àbùnāasí⁺ "four times"
bùpīiga⁺ "ten times"
nōwrím bùtáñ'⁺ "three times"

15 Unanalysable complex stems

Numerous words in Kusaal (including the very name of the language, *Kūsáàl*^ε) 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> ^ε	"Kusaasi"
<i>Ñwāmpūris</i> ^{ε/}	"Mamprussi"
<i>Kùtām</i> ^{ma/}	WK's clan
<i>gbáñyà'a</i> ⁼	"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*⁺ "heaven" and *àrazàk*^a "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> ⁺	"box"	← <i>àdakàa</i> (← Portuguese <i>arca</i>)
<i>gādu</i> ⁺	"bed"	← <i>gadoo</i>
<i>kèékè</i> ⁺	"bicycle"	← <i>kèekè</i>
<i>bákpàè</i> ⁺	"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> ^m	"disturb, trouble"	← <i>dàamaa</i>
<i>bùg</i> ^ε	"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..." 29.4	← <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*⁺ "until", Hausa *har*, Kikara Songhay *hálì id*, possibly from Arabic حتى *ḥatta*: (Heath 2005); *lùmbò*^g "garden", Hausa *làmbuu*, Humburi Senni *làmbò* "enclosed vegetable garden"; *làbi*^{ya} "be crouching, hiding behind something", Hausa *labèe id*, Kikara Songhay *lá:bú* "hide behind or under something." With Kusaal *làbi*^{ya} 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* [2.2.2](#) 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> ⁺	"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> ^a	"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> ⁺	"Tuesday"	Hausa	<i>Tàlaatàa</i>	
		Arabic	الثلاثاء <i>ʔaθ-θala:θa:ʔ(i)</i>	

<i>àrazánà</i> ⁺	"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> ^{+/}	"assent"	Hausa	<i>yàrda</i>	(verb) "consent"
		Gao Songhay	<i>yarda/yadda</i>	<i>id</i>
		Kikara Songhay	<i>yárrè</i>	<i>id</i>
		probably Arabic	يرضى <i>yardʿa</i> : 3sg m ipfv of	
			رضى <i>radʿiy(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*^{a/} "angel" (always *malek* in NT versions prior to 2016) is derived from the Arabic ملاك *malʔak(un)*, itself ultimately from Hebrew. 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 *màlaaʼikàa*, which is from the Arabic plural ملائكة *mala:ʔika(tu)*. A similar case in the realm of religion is *Sūtáanà*⁺ "Satan", matching Mooré *Sutāana* rather than Hausa *shàidʼân*, which is a learned borrowing of the Arabic شيطان *ʔaytʿa:n(u)*.

Loanwords from the **Songhay** languages themselves, probably via Mooré, include *bùrkìn*^a "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 *bàunɔ* is used only in *kpèñ' bàunɔ* "get circumcised" (*kpèñ'*⁺ "enter"), Mooré *kè bāongó id*; cf Kikara Songhay *bàngù* "pool, spring", *à húrò bàngù* "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*^m (WK) *Wínà'am*^m (always *Wina'am* NT/KB) "God." It is common in Christian materials; the Creator of traditional religion often appears simply as *Wīn*^{nɛ/} in proverbs etc. *Wínnà'am* looks analysable as a compound of *wīn*^{nɛ/} "god" and the stem of *nà'ab*^a "chief" or *nā'am*^m "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:g'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^a* of *zī'e^{ya}* "be standing" used by DK KT instead of KED *zī'a⁺* 12.1.1.2.) The expected agent noun from *fāeñ^{+/}* "save" is *fāañd^{a/}*, presumably avoided as identical to the agent noun of *fāñ⁺* "rob, snatch", found in NT/KB as *faand* "robber." WK has the identical agent noun *fāañd^{a/}* 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^a*, *bōū* "goat" = *bōvg^a*), but optional elsewhere, with variation between speakers (Niggli, "La phonologie du kusaal"):

<i>páa</i>	"arriver" (Agolle <i>pāe⁺</i> "reach")
<i>Õ bu paage.</i>	"Il n'est pas arrivé." (Agolle <i>Õ pō pāée.</i>)

Niggli's "Dictionnaire" has both *fāagit* and *fāat* for "sauveur", with *fāat* also glossed as "voleur, brigand."

A more everyday example is WK's *kīibú⁺* cb *kīib-* "soap." Written sources have *kī'ib*, probably *kī'ib^{ɔ/}* = Toende *kí'ip*. 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⁺* or *-u⁺* 9.6 like *kābirí⁺* "permission for entry" and *sūgurú⁺* "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⁺</i>	"banana"	← <i>kwadu</i>
<i>sāafi⁺</i> (?tones)	"lock, key"	← <i>safē</i> "key" (← Portuguese <i>chave</i>)
<i>būriyá⁺</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> ^ε	"aeroplane"	? back-formation from [alɔ̀pɪɾɪn] taken as locative <i>àlɔ̀pìrì-n</i> ^{ε/}
<i>dɔ̀'átà</i> ⁺	"doctor"	(cf Dagbani <i>dɔ̀yɛ́ id</i>)
<i>tɔ̀klàe</i> ⁺	"torch"	← "torchlight"
<i>lór</i> ^ε	"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> ⁺	"court"	Hausa <i>kootù</i>
<i>sɔ̀gjà</i> ^a	"soldier"	Hausa <i>soojà</i>
<i>tɛ́ɛbù</i> ^ε	"table"	Hausa <i>teebùr</i>
<i>wādá</i> ⁺	"law"	Hausa <i>oodà</i> (← English "order") sg <i>wādir</i> ^{ε/} cb <i>wād-</i> created by back-formation

One **French** loan in Agolle Kusaal is *làmp̄* (i.e. *l'impôt*) "tax", as in *làmp̄-dí'às*^a "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 *kàsēt*^{a/} "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 ^{a/}*b*^a 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*^{+/} occurs last in a NP [16.5](#). (For the sole exception, see [20.7](#).)

Dependent Nominal Phrases may precede the head, possibly recursively, as **Pre-determiners**. 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**; pre-determiners of gerunds and similar nouns are subjects; pre-determiners 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 pre-determiner. 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 [16.9.1](#). Adjectives and post-determining pronouns regularly compound with the preceding head; accordingly the combining form is a regular part of the noun paradigm. Combining forms also function as **Pre-modifiers**, particularly before deverbal nouns in the rôle of arguments.

Uncombined NPs of various kinds also appear within NPs as pre-modifiers, and uncombined quantifier and adverbial phrases may follow heads as post-determiners.

Personal pronouns accept only post-determining pronouns as dependents.

16.2 Noun Phrase categories

16.2.1 Number

Number is a category only of nouns and pronouns, along with quantifiers when heading quantifier phrases. Agreement is confined to pronouns. Verbal Predicators show no agreement with any argument (on plural-subject imperatives see [25.2.3](#).) However, in noun + adjective and noun + post-determining pronoun compounds, it is the dependent which inflects to show the number of the head noun cf [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>zɔ̄ɔg</i> ^{ɔ̄}	<i>zɔ̄ɔs</i> ^ɛ		"race"
<i>bū'əsúg</i> ^{ɔ̄}	<i>bū'əsá</i> ⁺	<i>bū'əs-</i>	"question"
<i>zàaṅsúg</i> ^{ɔ̄}	<i>zàaṅsíma</i> ⁺	<i>zàaṅsúg-</i>	"dream"

Some abstract count nouns are formally plural but construed as singular [9.5](#)

<i>dì'əma</i> ⁺	"festival"
<i>pj'àṅ'ad</i> ^ɛ	"word, language"
<i>tēṅ'əsá</i> ⁺	"thought"

Cf *tēṅ'əsá yīnní* "one thought" (Acts 4:32).

Typical underived mass nouns belong to the *b*^{ɔ̄} and *m*^m Noun Classes, which do not have paired sg/pl suffixes [9.1](#), but some are formally plural [9.5](#), and gerunds of 3-mora stem verbs regularly show sg *r*^ɛ or *g*^{ɔ̄} 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*^a [9.4](#), and it affects the meaning of constructions with preceding NPs as dependents [16.10](#).

Mass nouns can be used in count senses [9.4](#) (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 dɔ̄ɔg</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 +∅.

2SG NEG.IND see:DIPF 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 lî nī, lî 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.

Tìig wélà bigisid ón àñ sī'em.

Tree:SG fruit:PL show:DIPF 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.

Tìig 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, ɔn pō áñ nú'ùg lā zúg,

Leg:SG if say-REM that 3AN:NZ NEG.IND COP hand:SG ART upon,

ò k̄ā' nín-gbīŋ níú +∅, līn kú ñyāŋi-n_ ∅

3AN NEG.BE body-skin:SG LOC NEG, DEM.INAN NEG.IRR accomplish-REM CAT

kēε-n kà ò k̄ā' nín-gbīŋ níú +∅.

cause-REM 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 thus appears to be 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 does make 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 2.2.2](#), reflecting the fact that the ^{a|b} 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 *bōn-* (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^{+|}*, are used indifferently for sg or pl, occasionally with *nàm^a* plurals to avoid ambiguity. However, even the 1976 NT always uses the animate plurals *bàmmā^{+|}* *bàn^ε* *sīāba⁺* 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, ɔn 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 bōtɪs "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 *àɛñ*^a "be something":

Li anɛ Zugɔɔb la. "It is the Lord." (Jn 21:7)
Lì à nē Zūg-sób 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 [19.1](#) (with a marginal exception for some speakers with plural commands [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.
Bùŋ 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:DIPF 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 súŋàa +∅?
3PL pay:DIPF 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 [26.5.2](#).

16.3 Pronominals

16.3.1 Pronouns

16.3.1.1 Personal

		<u>Proclitic</u>	<u>Enclitic</u>	<u>Free</u>	<u>Subject+ñ</u>
Sg	1st	<i>m̀</i>	<i>m^a</i>	<i>mān</i> SF <i>mánē</i> LF	<i>mán</i>
	2nd	<i>f̀</i>	<i>f^o</i>	<i>fōn</i> SF <i>fúnē</i> LF	<i>fún</i>
	3rd an	<i>ò¹²</i> [ʊ]	<i>°</i> [ʊ]	<i>ōn^ε</i>	<i>ón</i>
	3rd inan	<i>l̀</i> or <i>d̀</i>	<i>l⁺</i>	<i>līn^ε</i> or <i>dīn^ε</i>	<i>lín</i> or <i>dín</i>
Pl	1st	<i>t̀</i>	<i>t⁺</i>	<i>tīnám^a</i> ¹³	<i>tīnámì_∅</i>
	2nd	<i>ỳ</i>	<i>y^a</i>	<i>yānám^a</i>	<i>yānámì_∅</i>
	3rd	<i>b̀</i>	<i>b^a</i>	<i>bān^ε</i>	<i>bán</i>

"an" = animate, "inan" = inanimate: on gender see [16.2.2](#).

The clitic pronouns are all Liaison Words [8.2 7.4](#). The proclitics are used as non-contrastive subjects and as pre-determiners in NPs and AdvPs, and the enclitics as non-contrastive verb objects. For the realisation of the 3sg animate ^o see [8.2.1.1](#).

My informants all use *l-* forms throughout for 3sg inan; for bound objects, all speakers have only *l-* forms.

The "+n" forms are those used as subjects in *ñ*-clauses [28](#).

The alternate form *mām* also occurs for 1st sg in any rôle.

The 2nd pl subject has an enclitic form ^{y^a} used *after* imperatives addressing more than one person [25.2.3](#) with the allomorph *-ní-* before Liaison [8.2.1.2](#).

Personal pronouns do not take modifiers, but free forms may be used for cbs before relative pronouns [28.2.3](#):

12) Toende Kusaal has *õ*. The original form was probably **ñmv*, with later **ñm̄* → **ñ* before the rounded vowel. Cf also the Dagbani free pronoun *ɲuna* = Kusaal *ōn^ε*.

13) 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 *nām^a* [9.4](#).

Fɔn kanɛ buoli fɔ mɛŋ ... "You who call yourself ... (Rom 2:17)
Fɔn-káni bùɛli fɔ mɛŋ ...
 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](#).

16.3.1.2 Demonstrative

Some forms of the demonstrative pronouns are limited to usage either as NP heads or as post-determiners, while other forms may appear in both uses.

Head or post-determining:

	<u>Animate sg</u>	<u>Inanimate sg</u>		<u>Plural</u>
Long	<i>òŋā^{+/}</i>	<i>lìnā^{+/}</i>	far	<i>bàmmā^{+/}</i>
Short	<i>òn^ɛ</i>	<i>lìn^ɛ</i>	far	<i>bàn^ɛ</i>

Head only:

Long		<i>nē'ŋá⁺</i>	near	
Short		<i>nē'^{+/}</i>	near	<i>nē'-nám^a</i> NT

Post-determining only:

Long	<i>kàŋā^{+/}</i>	<i>kàŋā^{+/}</i>
Short	<i>kàn^ɛ</i>	<i>kàn^ɛ</i>

Note the tone difference in the short series from the free 3rd person pronouns. The post-determining-only series is based on an obsolete *g^a|s^ɛ* Class pronoun *kà*, parallel to *lì*, originally *r^ɛ|a⁺* Class. My informants use these forms for animate reference as well as inanimate, but NT prefers *òŋā^{+/}* *òn^ɛ*.

Post-determining 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 *àdàkɔŋ'*), which lack cbs, *kàn^ɛ* *kàŋā^{+/}* do not occur, but *kàn^ɛ* may follow a free pronoun doing duty for a cb [16.3.1.1](#).

Examples after combining forms:

dɔ'átà lā lór-kàŋā "this car of the doctor's"
bù-kàŋā lā "that goat"

After a quantifier:

bèdɔgū línā "this multitude"

After a free pronoun form used as a cb:

fūn-káni bùèl ... "you who call ..."

Post-determining pronouns follow any adjectives:

nṣ-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; elsewhere "that" can be specified by following the demonstrative with *lā*^{+/} (in other contexts the definite article) and "this" by following *ñwà*⁺ (cf French *ça ci*.) This deictic use of *lā*^{+/} is enabled by the fact that demonstratives automatically make the NP definite [16.5](#).

<i>dàù-kàṅā sáàm</i>	"this/that man's father"
<i>dàù-kàn sáàm</i>	"that (not visible) man's father"
<i>dàù-kàṅā lā sáàm</i>	"that man's father"
<i>dàù-kàṅā ñwá sáàm</i>	"this man's father"
<i>tèṅ-kàn lā ná'àb</i>	"the king of that country" (from a story)
<i>sān-kán lā</i>	"at that time"

16.3.1.3 Indefinite

	<u>Animate sg</u>	<u>Inanimate sg</u>	<u>Plural</u>
	<i>sṣ</i> ⁺	<i>sṣ</i> ^ə ^a	<i>sṣba</i> ⁺
Dependent-only	<i>sṣ</i> ^a ⁺	<i>sṣ</i> ^a ⁺	

The vowel is *not* glottalised in the plural. For NT WK, but not KT, the dependent-only inanimate sg is much commoner than *sṣ*^ə^a used as a dependent. WK feels that for people *sṣ*^a⁺ is pejorative; NT occasionally has *sṣ*⁺ for inanimate: *tèṅ-sṣ*⁺ "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-sṣ⁺ "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 sɔ' pun deŋi sig sa.

kà mán tì yé ò sīg lā,

and **1SG:NZ** afterward say **1SG** descend **ART**,

kà sɔ' pún dèŋi_ø sīg 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)

Mεεri one an Magdalen ne Meeri sɔ'

Meeri ónì àñ Magdalen nē Meeri sɔ'

Mary **REL.AN COP** Magdalen with Mary **INDF.AN**

"Mary who was Magdalen and another Mary" (Mt 28:1)

Winnig mɔr o meŋ venlim, ka nwadig me mɔr venlim si'a.

Winnig mór ò mēŋ véñlìim kà ñwādig mé mɔr 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)

M 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:

Dàŋ-sɔ' 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](#):

Dāŋ dāa bé ...

"Once there was a man ..."

Man:**SG TNS EXIST** ...

Sɔ'/sī'əl mé-kàma means "anyone, anything, everyone, everything":

O niŋid si'el mekama su'vŋa.

Ò niŋid sī'əl mé-kàma súŋā.

3AN do:**DIPF INDF.INAN** also-whatever good:**ADV**.

"He does everything well." (Mk 7:37)

The particle is widespread in West Africa: cf Humburi Senni *-kámâ* "each."
In negative clauses the indefinites mean "(not) ... anything", "(not) ... anybody":

Ka so' kudin ku len nyee li ya'asa.

Kà s̄' k̄ɔɔm kú lēm ñyée_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' k̄ā'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.

16.3.1.4 Interrogative

Animate

àń'òń^ε "who?"

Inanimate

b̄⁺ "what?"

Plurals with *nàm^a* may be used if a specifically plural answer is being sought.
The initial *à-* of *àń'òń^ε* is Fixed-L and behaves like the manner-adverb prefix with regard to Liaison [8.2.2](#):

Nidib ayi' nwa, ya b̄ɔɔd ye m bas an'òń^ε?

Nīdīb áyí ñwà, yà b̄ɔɔd yé m̄ bás àń'òń^ε +∅?

Person:**PL NUM**:two this, **2PL** want that **1SG** release who **CQ?**

"Which of these two people do you want me to release?" (Mt 27:21)

16.3.1.5 Reciprocal

Tāaba⁺ "one another" appears as *tāab* clause-medially for some speakers.

S̄òŋmī_∅ 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 d̄l̄ nē tāaba.

"They went together." (*d̄l̄^{la/}* "accompany")

3PL follow with each.other.

It occurs as an adjective in the meaning "fellow-"

ò tùm-tùm-tāaba

"His fellow-workers."

The stem also occurs as an always-bound *g^a|s^ε* Class noun in the same sense, seen after imperfective gerunds [13.1.1.4](#), and with noun prefixes in *nìn-tāa* = "co-wife" and *dātāa* = "enemy."

16.3.2 Proquantifiers

Quantifiers have corresponding proforms; the *à-* is the *number* prefix, and induces preceding LF-final *-a* not *-i* [8.2.2](#); contrast the Proadverbs [16.3.3](#).

<u>Demonstrative</u>	<u>Indefinite</u>	<u>Interrogative</u>
<i>àlá⁺</i>	<i>sīəm^m</i>	<i>àlá⁺</i>
"so much/many"	"some amount"	"how much/many?"

16.3.3 Proadverbs

Adverbs have corresponding proforms.

	<u>Demonstrative</u>		<u>Indefinite</u>		<u>Interrogative</u>	
Place	<i>kpē⁺</i>	"here"	<i>zīñ'-sīa⁺</i>		<i>yáa ní⁺</i>	"where?"
	<i>kpēlá⁺</i>	"there"		"somewhere"	<i>yáa</i>	"whither /whence?"
	<i>àní⁺</i>	"there"				
	<i>àínā^{+/}</i>	"there"				
Time	<i>nānná⁺</i>	"now"	<i>sān-sía⁺</i>		<i>sān-kán^ε</i>	"when?"
	<i>nānná-nā^{+/}</i>	"now"		"sometime"	<i>būn-dáàr^ε</i>	"which day?"
	<i>sān-kán^ε</i>	"then"			<i>bò-wìn^{nε}</i>	"what time of day?"
Manner	<i>àñwá⁺</i>	"like this"	<i>sīəm^m</i>		<i>wēlá⁺</i>	"how?"
	<i>àwá nā^{+/}</i>	"like this"		"somehow"		
	<i>àlá⁺</i>	"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*, while the *à-* of proquantifiers is the *number* prefix, and induces preceding LF-final *-a* not *-i* [8.2.2](#) [16.3.2](#).

Proforms expressing reason are formed with the postposition *zūg^ɔ* [17.6](#): *àlá zùg^ɔ* "because of that", *bōzúgò?* "why?" (cf *bō zúgō* "because" [24.1.3](#).)

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> ^{+/}	"a lot"	<i>pāmm</i> SF	"a lot" (LF <i>pāmné</i> 6.4)
<i>fīñ</i> ⁼	"a little (liquid)"	<i>bī'əlá</i> ⁺	"a little"
<i>wūv</i> ⁼	"all"	<i>wōsa</i> ⁺	"all"

Count quantifiers include the number words, and also

<i>bábɪgā</i> ^{+/}	"many"	<i>kàɪgā</i> ^{+/}	"few"
<i>fāañ</i> ⁼	"every"	<i>zāñ'a</i> ⁼	"every"
<i>kàm</i> ^a	"every"		

Kàm^a "every" occurs by itself as a quantifier and also before others:

sāŋá kám = sāŋá kám zāñ'a "all the time"

Quantifiers appear typically as post-determiners 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."

Quantifiers as heads pluralise with *nàm*^a:

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 have post-determining 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 post-determining 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*⁺, but may be singular with units of measure:

yōlvǔgá àtáñ'

"¢600 [cedis]"

(*yōlvǔg*^{ɔ/} "sack" for £100/¢200; Hausa *jàkaa*.)

	<i>kūg-yínnì</i> ⁺	"one stone" (M Raising 8.4)
cf	<i>kūgvr yīnní</i> ⁺	"one stone" (no M Raising)

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>hýúèb</i>
2	<i>hýí</i>	7	<i>hɔ̀ɛ</i> [tone sic]
3	<i>hétáñ'</i>	8	<i>hñíí</i>
4	<i>hñāas</i>	9	<i>hñwāɛ</i>
5	<i>hñū</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⁺∅. "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

hñ 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."

16.4.2.3 Adjectives and ordinal constructions

yīmmír^ε *yīmmá*⁺ *yīm-* "single, alone"

e.g. *bì-yīmmír* "only child"
wāb-yīmmìr "solitary elephant"

There are two words meaning "one of a pair": *ñyàuk*^ɔ pl *ñyà'ad*^ε is only used for eyes, while *yīuη*^ɔ/ pl *yīnà*⁺ is used for other normally paired body parts:

nīf-ñyáuk "one eye"
bà-nīf-ñyáuk "one-eyed dog"
tùb-yīuη "one ear"
bì-tùb-yīnà "one-eared children"

The only single-word ordinal is

dēēη^a *dēēñs*^ε *dèēη-* "first"
 or *dēēmɪs*^ε
 or *dēēna*⁺

as in *sōb-déēη* "first census" (Lk 2:2, 1976.)

The concept "first" can also be expressed by using *yīgá*⁺ "firstly" as a pre-determiner:

yīgá kùm-vō'ugír "first resurrection" NT.

For other ordinals two constructions occur.

One is to use a periphrasis with *pàas*^ε or *pè'εs*^ε "add up to":

dàu-kànɪ pè'εsa_ àyí lā
 man-REL.SG add.up.to NUM:two ART
 "the second man" ("man who has added up to two")

lìnɪ pàasa_ àtán' lā
 REL.INAN add.up.to NUM:three ART
 "the third one"

Another is to use numbers as pre-dependents before *dāan*^a "owner of ..."; such phrases are then themselves used either as NP heads or as post-determiners:

<i>àyí dāan lā</i>	"the second one"
<i>bōvgá àtáñ' dāan lā</i>	"the third goat"

Yīigá dāan may be used for "first."

In a story in "*Kusaal Solima ne Siillima*" ordinal forms used in counting "first, second, third ..." appear without Apocope Blocking:

kɔñ' daan, ayi daan, atañ' daan, anaas daan, anu daan, ayuəb daan, apɔɛ daan, anii daan, awaɛ daan, piig daan

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⁺</i>	"straight away, at once"
<i>àbùyí⁺</i>	"twice"
<i>àbùtáñ'⁺</i>	"three times"
<i>àbùnāasí⁺</i>	"four times"

and so on, with the same stems after the prefixes as for the quantifiers, up to

<i>bùpīiga⁺</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 *nɔɔrǎ àlǎ* "how many times?" have forms of the pattern

<i>nɔɔr yīnní⁺</i>	"once"
<i>nɔɔrǎ àtáñ'⁺</i>	"three times"
or <i>nɔɔrím b̀táñ'⁺</i>	"three times" NT

This *nɔɔr* is not "mouth" (= Mooré *nóorè*) but corresponds to Mooré *náooré* "times", homophonous with Mooré *náooré* "leg"; cf Toende Kusaal *nɔ'ɔt* = Agolle *nɔ̀b̀ìr* "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 Dictionnaire gives Toende *nɔ'ɔt* (tone *sic*) in the sense "*fois*" and even has *nɔ̀ba ayi* beside *nɔ'ɔt ayi* "*deux fois*." Agolle *nɔɔr* "times" does not have a glottalised vowel, however.

Distributives ("two by two" etc) are reduplicated forms without Apocope Blocking; there is no M Raising of the second part except with 10, 100, 1000:

1	<i>yīn yīn</i>	10	<i>pīi pīg</i>	100	<i>kòbɪg kóbìg</i>
2	<i>àyí yí</i>	20	<i>pīsí pīsí</i>	200	<i>kòbɪsí kóbɪsí</i> or <i>kòbɪs yí yí</i>
3	<i>àtán' tán'</i>	30	<i>pīs tán' tán'</i>	300	<i>kòbɪs 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>tūsɪr túsìr</i>
6	<i>àyúèb yúèb</i>	60	<i>pīs yúèb yúèb</i>		
7	<i>àyóṗṗè ṗṗè</i>	70	<i>pīs yóṗṗè ṗṗè</i>		
8	<i>àníí níí</i>	80	<i>pīs níí níí</i>		
9	<i>àwāṗ wāṗ</i>	90	<i>pīs wāṗ wāṗ</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 àyóṗṗè ṗṗè "weekly" ("by sevens of days")

16.5 The article *lā*^{+/}

The two words *lā*^{+/} and *ñwà*⁺ presumably originated as corresponding deictics "that" and "this." Although *ñwà* retains this sense, *lā*^{+/} in the great majority of its occurrences is a definite article. It retains a deictic sense, in opposition to *ñwà*⁺, in the non-verbal predicators *n lā*, *n ñwà* [22](#) and after demonstratives [16.3.1.2](#).

Unlike *lā*^{+/}, *ñwà*⁺ can stand alone as a NP:

Ñwà á nē bīg. "This is a child." WK; tones *sic*.

This **COP FOC** child:SG.

Both *lā*^{+/} and *ñwà*⁺ always stand finally in the NP (though this entire phrase may be a pre-determiner 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*^{+/} corresponds in many cases to English "the", marking referents as specific and already established. However, unlike "the", *lā*^{+/} 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 pre-modifiers [16.10.2.2](#)):

Nɔŋilim pu naada. "Love does not come to an end." (1 Cor 13:8)
Nòŋulím pū nāadá +∅.
Love NEG.IND finish:DIPF NEG.

Lā^{+/} is not used in vocatives:

Bīiga +∅! "Child!"
Child:SG VOC!

This contrasts with *ñwà⁺*, which is common in vocatives [25.2.4](#):

Bīs ñwá! "Children!" [bi:sa]

There is no indefinite article: a NP with no *lā^{+/}* is indefinite if it could have taken *lā^{+/}* 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

Ì bīig kā'e +∅. "I've no child" WK
1SG child:SG NEG.BE NEG.

and with the complement of *àeñ^a* "be something" when used ascriptively [21.2](#):

Ò à nē bīig. "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 bɛ̀ ø m̄rɪ̀ 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 nyɛ 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:DIPF 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*^{+/} is not used with generic reference:

Tumtum pu gat o zugdaana.

Tùm-tùm pū gát ò zūg-dáanā +ø.

Work-worker:SG NEG.IND pass:DIPF 3AN head-owner:SG NEG.

"The servant does not surpass his master." (Jn 15:20)

Tiig walaa bigisid lin an tisi'a.

Tìig wélàà ø bìgɪsɪd 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)

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*^{+/} in its aspectual sense [30.1.2.1.2](#).

A possessive pre-determining NP ending in *lā*^{+/} makes the following head definite, and the head does not itself take the article:

dy'átà lā bìg

"the doctor's child"

not **dy'átà lā bìg lā*

Pronouns and personal names as possessive pre-determiners do *not* have this effect; only pre-determiners *with the article*, and demonstrative pronouns [16.3.1.2](#), automatically make their NPs definite:

Wínà'am máljāk "an angel of God"
Wínà'am máljāk lā "the angel of God"

m̄ bīig "my child" (at first mention)
m̄ bīig lā "my child" (previously mentioned)

In the passage

*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-s̄' dá bɛ̄_ø mɔr ò bī-púŋ kà kíkírɪg
 Woman-INDF.AN TNS EXIST CAT have 3AN child-girl:SG and fairy:SG

d̄s̄ll-ó_ø. Kà ò wúm Yesu yélà, kà kēŋ_ø ígìn

follow 3AN.OB. And 3AN hear Jesus about, and go CAT kneel.down

ò tùən. Kà sɔs Yesu yé ò kàdım kíkírɪg lā_ø yís

3AN in.front. And beg Jesus that 3AN drive.out:IMP fairy:SG ART CAT expel

ò bīig lā ní.

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 bīig lā* "her child" after the reference is established.

Compare

M̄ bīig kā'e +ø. "I've no child" WK
 1SG child:SG NEG.BE NEG.

M̄ bīig lā kā'e +ø. "My child's not there" WK
 1SG child:SG ART NEG.BE NEG.

Note also the characteristic idiom at first introduction of a new possessed referent seen in two of the examples above:

Pu'a sɔ' da be mɔr o bipuŋ

Pu'à-s̄' dá bɛ̄_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 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

further demonstrating that pronoun possessors do not automatically entail definiteness of the head.

Compare the use of *yēlá*⁺ "about" of as a pre-modifier in NPs even when it has a definite pre-determiner itself [16.10.2.3](#), and the fact that postpositions (including the null allomorph of the locative marker [17.3](#)) may function for focus purposes as pragmatically non-recoverable despite following a definite pre-determiner [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*^{ma} "father."

An opposition between forms with and without the article, rather than definite versus indefinite, is seen in the distribution of the empty particle *nē* which follows complements of comparisons [18.1](#) when they lack the article, even if they are proper names or other NPs which do not normally appear with *lā*^{+/-}.

For an unambiguously indefinite specific meaning like "some, another" the indefinite pronouns are used [16.3.1.3](#).

Nā'-síabà ŋ̀b̀ìd nē mōɔd.

Cow INDF.PL chew:DIPF FOC grass:PL.

"Some cows are eating grass."

An indefinite pronoun is necessary to make the head indefinite after a pre-determiner with the article:

du'átà lā bí-sā'

"a child of the doctor's"

doctor:SG ART child INDF.AN

The number *yīnní*⁺ "one" is sometimes used to introduce a new referent:

Farisee dim nid yinne da be

Farisee dím ǹìd yīnní dà bē ...

Pharisee individual.PL person:SG one TNS EXIST ...

"There was one man of the Pharisees ..." (Jn 3:1)

However, *yīnní* here is not bleached to the simple sense of an indefinite article; rather, the construction is parallel to e.g.

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-/M-*; *À-* is the default, with *Ñ-/M-* appearing before adjective stems. *M-* is found before labial consonants. These are all Liaison Words. This *À-*, like the manner-adverb prefix *à-*, is preceded by word-final *-l*, not *-a* as with the number prefix.

Personal names do not take the article or modifiers, but may take pre- or post-determiners. *À-*, but not *Ñ-/M-*, are deleted after a pre-determiner.

Personal names can pluralise with *nàm*^a; such plurals can certainly mean e.g. "more than one (person called) Awini"; I do not know if they can also bear the *cum suis* meaning "Awini and his companions (etc.)"

<i>À-Wīn</i>	"Awini"
<i>tì Wīn</i>	"our Awini"
<i>M̄ Wīn</i>	"my Awini"
<i>À-Wīn-káŋā</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*^ɔ "stork" *à-gáùŋg*^ɔ "pied crow" *à-kōra-díəm*^{ma} "praying mantis" and the loanword *à-mús*^ε "cat."

Examples:

<i>à-dàalúŋ</i>	"a stork"
<i>m̄/mān dáalúŋ</i> 1SG/1SG.CNTR stork:SG	"my stork"
<i>dāy lā dáalúŋ</i> man:SG ART stork:SG	"the man's stork"
<i>Lì à né à-dàalúŋ.</i> 3INAN COP FOC PERS-stork:SG.	"It's a stork"
<i>M̄ ñyé à-dàalúŋ.</i> 1SG see PERS-stork:SG.	"I've seen a stork."

The *à-* clitic is not simply elided after a pre-determiner but is completely *replaced*, as is apparent from the L Raising affecting the stem. The clitic *à-* thus behaves in its formal syntax like a pre-determining personal pronoun, and when nominalising a whole phrase or clause, it is analogous to a non-contrastive subject pronoun [16.6.1](#). *À-* is also *phonologically* similar to the clitic pronouns [16.3.1.1](#) [7.4](#) [8.2.2](#). All this may reflect a historical origin as an indefinite third-person pronoun "someone", perhaps related to the Mooré 3rd person singular pronoun *yě~a*.

16.6.1 With VPs and clauses

Verb Phrases can be nominalised by the personifier clitic *À-* [16.6](#), which takes the place of a subject pronoun, in the sense "someone who ...":

<i>Atum sɔ'</i>	"Siloam" 20.1 (Jn 9:7)
<i>À-tùm sɔ'</i> PERS-send INDF.AN	("Someone sent someone")

<i>Apv-kpen'-banv dim</i>	
<i>À-pō kpéñ' bàvŋv díŋ</i> PERS-NEG.IND enter circumcision individual:PL	
"the Uncircumcised" 15.1 (Eph 2:11)	

This is common in proverbs and similar set expressions:

À-dāa yél kā' tīmm +∅.

PERS-TNS say **NEG.HAVE** medicine **NEG.**

"Did-say has no remedy." (No use crying over spilt milk.)

À-ñyē nē nīf sǎñ'ɔ̄ À-wòm tùba.

PERS-see with eye:**SG** be.better.than **PERS-hear** ear:**PL**

"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

"Doesn't-fear-trouble", character in KSS p35.

À-Pū-zót-yēl

PERS-NEG.IND-run:DIPF-thing:SG

The expected final LF in this expression, induced by the Negative Clitic paired with *pū*, is seen only when the name is clause-final:

Apozotyel da ane o saam biig ma'aa.

À-Pū-zót-yēl dá à né ò sàam bìg mà'aa.

PERS-NEG.IND-run:DIPF-thing:SG TNS COP FOC 3AN father:**SG** child:**SG** only

"Fears-nothing was his father's only child." KSS p35

In some cases, *À-* appears before the subject of an entire clause, as a pre-determiner with the meaning "someone whose ...":

Bà kèn né À-nà kúv_ n̄ nūa yír, kà bà pū kén

3PL go:**DIPF** **FOC** **PERS-IRR** kill **1SG** chicken:**SG** house:**SG** and **3PL** **NEG.IND** go:**DIPF**

À-n̄ɔ̄s 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 *N̄ɔ̄s bé*. "There are chickens, chickens exist."]

À-Tim 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*^a:

À-zī' _— ∅ *kpí nàm kpîd né kà téñbìd.*

PERS -NEG.KNOW CAT die PL die:DIPF FOC and tremble:DIPF.

"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 coordinating particles for "or" are *bēε* or the Hausa loanword *kūv*. Here the two words 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:

Bīig 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 *bēε* and *kūv* can be used in a parallel way. *Nē* links nominal words and phrases, but no clauses other than (previously nominalised) *ñ*-clauses.

Consistent with this analysis of *nē* "and", 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 né À-Bōgυr né À-Nà'ab "Awini, Abugri and Anaba"

dυ'átà nē ná'àb "a doctor and a chief" (necessarily two people)

Coordinated dependents are not permitted within compounds:

*[*bēñíd nē kī*] *kúès*

not possible for "seller of *bēñíd nē kī*"

(beanleaf-and-millet, a conceptual unity like

"fish and chips", "lox and bagels")

They are permitted when not compounded:

o nya'andɔlib pii ne yi "his twelve disciples" (Mt 26:20)
ò ñyà'an-dòllɔb pīi nē yí
 3AN after-follower:PL ten with two

dɔ'átà nē ná'àb lā lóyà "Doctor's and the chief's cars"
 doctor:SG with chief:SG ART car:PL

sāluma nē ānzúrɪfà lá'àd "gold and silver goods"
 gold with silver item:PL

The latter two cases are ambiguous, as in English: this is because of an alternative interpretation as ellipsis of the first of two repeated heads within a coordination of two parallel dependent + head NPs (cf [24.1.5.1](#)):

<i>[dɔ'átà nē ná'àb lā] lóyà</i>	"the cars of [Doctor-and-the-chief]"
<i>[dɔ'átà lóyà] nē [ná'àb lā lóyà]</i>	"[Doctor's cars] and [the chief's cars]"
<i>[sāluma nē ānzúrɪfà] lá'àd</i>	"[gold-and-silver] goods"
<i>[sāluma lá'àd] nē [ānzúrɪfà lá'àd]</i>	"[gold goods] and [silver goods]"

Not all such cases involve ellipsis, however; apart from the possibility of two distinct meanings in the examples above, one of which excludes ellipsis, this is also clear from cases like

ānzúrɪfà nē sāluma lá'-māan "silver- and goldsmith"
 silver with gold item-maker:SG

This cannot be a case of ellipsis, because it is not possible to coordinate dependent combining forms, and *nē* cannot join two NPs with the same reference.

**ānzúrɪfà lá'- nē sāluma lá'-māan*
 (impossible)
ānzúrɪfà lá'-māan nē sāluma lá'-māan
 (necessarily two different people)

Coordinated heads may not share articles, determiners or cb pre-modifiers. Both articles are necessary in:

py'ā lā nē dāy lā "the woman and the man"
 woman:SG ART with man:SG ART

Both instances of *m̄* "my" are needed in

m ba'abiis nɛ m saamnama

m̄ bā'-bīis nɛ m̄ sàam-nàmā +∅

1SG father-child:**PL** with **1SG** father-**PL** **VOC**

"my siblings and [my] fathers!" (Acts 7:2)

Yīigá⁺ "firstly" [16.10.3](#) is an exception:

yiiga sangbauŋ nɛ tɛŋbauŋ nɛ atɛuk

yīigá sàŋ-gbàŋ nɛ tɛŋ-gbàŋ nɛ àtìuk

firstly heaven-skin:**SG** with earth-skin:**SG** with sea:**SG**

"the first heaven and earth and sea" (Rev 21:1)

Coordinated heads may share any modifiers except cb pre-modifiers; even coordination of cb heads before an adjective is possible:

Ka m nye sangbauŋ nɛ tɛŋbauŋ paal.

Kà m̄ ñyē sàŋ-gbàŋ- nɛ tɛŋ-gbàŋ-páal

And **1SG** see heaven-skin- with earth-skin-new:**SG**.

"And I saw a new heaven and a new earth." (Rev 21:1)

Kūsáàl sólímà nɛ sílímà

"Kusaasi stories and proverbs"

Kusaal story:**PL** with proverb:**PL**

Kūsáàs kùèb nɛ yīr

"Kusaasi agriculture and housing"

Kusaasi:**PL** hoeing with house:**SG**

sāluma bûtɪs nɛ díɪsímà

"gold cups and spoons"

gold cup:**PL** with spoon:**PL**

("all of them gold", KT)

However, KT WK both agreed that

sāluma lá'àd nɛ bûtɪs

must mean "gold goods and [not gold] cups", WK offering the correction

sāluma lá'àd nɛ ò bûtɪs

"gold goods and (gold) cups" WK

gold item:**PL** with **3AN** cup:**PL**

where *ò* refers to *sāluma*. (See [16.2.2](#) on the unexpected gender of the pronoun.) The difference from *sāluma bûtɪs nɛ díɪsímà* (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 *sālīma bútīls nē* [*sālīma*] *dīlīsīmà* "gold cups and [gold] spoons" (I am grateful to Tony Naden for this suggestion.)

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'-bīg pɥ'á Herodiasε +∅.

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.

... ∅ lēbīs yē, Ēēñ, ò zɥà À-Sībīgı̣ n kābıríd.

...CAT reply that, Yes, **3AN** friend:**SG** **PERS**-termite:**SG** **CAT** ask.admission:**DIPF**.

"...replying that, Yes, it was his friend Termite asking for admission." KSS p12

It is unclear whether the second element is subject to M Raising. However, 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'usidi ya.* "I, Paul ... greet you." (2 Thess 3:17)

Mān Paul [...] *pú'usidī yá.*

1SG Paul greet:**DIPF** **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](#) [16.3.1.2](#). 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>lànnɨg-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 *Sìŋg-sùŋ* (or *Sìŋg-sùŋ* with L Raising) or *Sì-sùŋ*, not **Sìŋg-sùŋ*.

SB showed a much greater tendency to produce segmental sg forms before post-determining 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 pre-modifier. Compounding is the standard construction for head nouns with following dependent adjectives and determiners [16.11.1](#) [16.11.2.1](#):

<i>bōvg^a</i>	"goat"
<i>bù-pìəlɨg^a</i>	"white goat"
<i>bù-kàŋā^{+/}</i>	"this goat"
<i>bù-pìəl-kàŋā^{+/}</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.

16.9.1 Complex compounds

Compounds may have compounds as components, most commonly as a result of the addition of an adjective or post-determining pronoun to an existing compound, in which case the binding to the new element is weaker than that within the existing compound:

<i>[bù-pìəl-]kàṅā</i>	"this [white goat]"
<i>[nīn-wók-]pìəlɪg</i>	"white [tall person]"
<i>[zà'-nō-]pìəlìg</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-]kàṅā</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-ñyáyuk</i>	"one eye"
<i>bù-[nīf-ñyáyuk]</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 *àḗñ*^a "be something":

Kùg-kàṅā á nē nōb-wók.
 Chair-DEM.DEI.SG COP FOC leg-long:SG.
 "This chair is long-legged." WK

Adjectival combining forms can only be used before another adjective or before a post-determining 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 pre-modifiers within other NPs [16.10.2.2](#):

<i>sālima bítìŋ</i>	"gold cup"
<i>ānzúrìfà nē sālima 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>[ānzúrìfà lá'-]māan</i>	"silversmith" ("[silver goods]-maker")
<i>[ānzúrìfà nē sālima lá'-]māan</i>	"silver- and goldsmith"

cf *[fū-zéñdà] kùēs* "[dyed cloth]-seller"
with an adjective post-modifier (see above)

If the cb is itself a pre-modifier, the the construction is nested, with the cb binding to the following head and the preceding unbound pre-modifier applying to the whole resulting compound:

<i>sālima [zá'-nōr]</i>	"golden gate" ("golden [compound-mouth]")
<i>zūgú-n [níf-gbáŋ]</i>	"upper eyelid" ("upper [eye-skin]")

Determiners, whether preceding or following the head, and whether compounded or uncompounded, have the loosest binding:

<i>[sālima bítìŋ-]kàṅā</i>	"this [gold cup]"
<i>[[sālima lá'-]māan-]kàṅā</i>	"this [[gold-item]-maker]"
<i>ò [[sālima lá'-]māan]</i>	"her [[gold-item]-maker]"

16.10 Dependents preceding the head

The head of a NP may be preceded by dependents, which may be noun combining forms, thus creating compounds, or may be free NPs or AdvPs. Only one preceding dependent is permitted, but the resulting NP may itself recursively serve as the head of a NP with yet another preceding dependent. Combining forms come last in such a sequence, and pre-determiners precede pre-modifiers:

Wínà'am [pú'vsùg [fúùg dǒǒg]]
"tabernacle" (God's [worship [cloth hut]])

The structure reflects the nature of the preceding dependent: all generic count nouns appear as combining forms, and generic mass nouns also do but only as arguments to deverbal nouns; all other pre-dependents appear uncompounded. With most head nouns, a preceding dependent NP with definite and/or count reference is a possessor, while AdvPs or indefinite mass NP are pre-modifiers expressing either qualities or the material of which the head consists. AdvPs of various kinds also occur as pre-modifiers, and one quantifier as a pre-determiner. With certain types of head the pre-determiner + head construction has specialised meanings [16.10.3](#).

Preceding uncompounded dependents induce M Raising in the following word if they are followed by L Raising; if M Raising is absent, it demonstrates that the construction is in fact head + dependent not dependent + head. Combining Forms in all rôles are followed by M Raising if they end in M toneme [8.4](#).

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^ε</i>	"beer-drinking"
<i>gēl-kùès^a</i>	"egg-seller"

With agent nouns of transitive verbs the cb almost always represents an object. Agent nouns from intransitives may have an AdvP or indirect object cb argument:

<i>bùl-sīgud^{a/}</i>	"well-diver" (<i>bùlɪg^a</i> "well")
<i>tùən-gāt^a</i>	"leader" (<i>Ò gād túèn</i> "He's gone ahead")
<i>ñyà'an-dòl^{la}</i>	"disciple" (<i>ñyá'aj^a</i> "behind") (<i>dɔ̃l^{la/}</i> "accompany")
<i>pɥ'à-lā'ad^a</i>	"laugher at women" WK (<i>Ò là'ad pū'ab</i> "He laughs at women")

These compounds can be freely coined, and their meanings are generally transparent:

<i>nīn-kúùd^a</i>	"murderer"
<i>bù-kūvd^{a/}</i>	"goat-killer"
<i>nɔ̃-kúùd^a</i>	"hen-killer"
<i>pɥ'à-kūvd^{a/}</i>	"woman-killer"
<i>nɔ̃-záñl^ε</i>	"holder of hens"
<i>wìd-kùès^a</i>	"horse-seller"

<i>bù-kùəs</i> ^a	"goat-seller"
<i>sàlm-kùəs</i> ^a	"gold-seller"
<i>dā-núúd</i> ^a	"beer-drinker"

However, there are many idiomatic or set expressions. Further examples:

<i>zīm-gbáñ'àd</i> ^a	"fisherman" ("fish-catcher")
<i>nō-dí'əs</i> ^a	"chief's spokesman" ("command-receiver")
	Ghanaian English "linguist"
<i>tàn-mēəd</i> ^a	"builder" (<i>tān</i> ^{nε} "earth")
<i>làmpō-dí'əs</i> ^a	"tax collector" (French <i>l'impôt</i>)
<i>gbàn-mī'id</i> ^{a/}	"scribe" NT ("book-knower")
<i>py'à-sāñ'am</i> ^{ma}	"adulterer" ("woman-spoiler")
<i>zà'-nō-gúr</i> ^a	"gate-keeper" (<i>zà'-nōɔr</i> ^{ε/} "gate")
<i>dà-kīəd</i> ^a	"wood-cutter"
<i>kòñb-kīm</i> ^{na}	"herdsman"
	(<i>kòñb-</i> as cb of <i>būn-kóñbùg</i> ^ɔ "tame animal")

My informants freely create and cite agent nouns in isolation, but it is unusual in practice for agent nouns to appear without a pre-dependent cb; in my materials only *bāñid*^a "wise man", *sīākíd*^a "believer", *sūñid*^a "helper" (of the Holy Spirit, NT), *fāañd*^{a/} "robber" "Saviour" occur often. With monosyllabic agent nouns there is often a preceding cognate stem as cb. This is perhaps a cognate object in:

<i>màal-māan</i> ^{na}	"sacrificer"
<i>zī-zīd</i> ^a	"carrier-on-head"

but generally it seems to be simply a reduplication of the agent noun stem:

<i>tù'as-tù'as</i> ^a	"talker"
<i>zàb-zàb</i> ^a	"warrior" (tone <i>sic</i>)
<i>zòt-zòt</i> ^a	"racer, athlete"
<i>tùm-tūm</i> ^{na}	"worker"
<i>lēm-lēm</i> ^{ma}	"taster, sipper"
<i>zàm-zām</i> ^{ma}	"cheat"
<i>dàm-dām</i> ^{ma}	"shaker"
<i>tàm-tām</i> ^{ma}	"forgetful person"

Cb pre-dependents occur with deverbal instrument nouns, in object or adverbial senses:

<i>sjà-l̥ɔ̀d̥l̥ɔ̀</i> ^a	"belt" (waist-tying thing)
<i>n̥n̥-gót̥l̥ɔ̀</i> ^a	"mirror" (eye-looking thing)
<i>n̥n̥-gót̥l̥s̥</i> ^ε	"spectacles"

If the head is a gerund, a cb pre-dependent may represent a subject or complement. For the *-r̥*^ε (not *-b̥*^{ɔ̥}) 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>p̥ɥ'à-d̥l̥r̥</i> ^ε	"marriage" (<i>Ò d̥i p̥ɥ'ā</i> "He's married a wife")
<i>n̥n̥-kúùr̥</i> ^ε	"murder"
<i>d̥ā-núùr̥</i> ^ε	"beer-drinking"
<i>Sāmán-p̥íər̥</i> ^ε	Traditional New Year ("Courtyard Cleaning")
<i>bùgúm-t̥ɔ̀ǎr̥</i> ^ε	Fire Festival ("Fire Throwing")
<i>n̥ɔ̀-l̥ɔ̀r̥</i> ^ε	"fasting" ("mouth-tying")
<i>n̥ɔ̀-p̥ɔ̀r̥</i> ^ε	"oath" (<i>p̥ɔ̀</i> ⁺ "swear")
<i>n̥ɔ̀-n̥áàr̥</i> ^ε	"covenant" (<i>n̥á</i> ⁺ "join")
<i>n̥n̥-báàl̥-z̥ɔ̀r̥</i> ^ε	"pity" (<i>Ò z̥òt̥-ò n̥n̥-báal̥ig</i> . "He has pity on him")

It may represent an AdvP:

<i>m̥ɔ̀-p̥il̥</i> ^{l̥ε}	"grass roof" ("covering with grass")
<i>kùm-v̥ò'v̥gír̥</i> ^ε	"resurrection" (<i>Ò v̥ò'v̥g k̥ūm̥in</i> . "He came alive from death.")

Although many of these are set forms, free creation of nonce-forms is possible:

<i>f̥ū-y̥éèr̥</i> ^ε	"shirt-wearing" WK
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Cbs as subjects are thus confined to verbs which can be used intransitively:

<i>n̥ɔ̀b-k̥ɔ̀r̥</i> ^ε	"breaking a leg" (<i>k̥ɔ̀</i> ⁺ is intransitive)
<i>n̥ū'-m̥ɔ̀d̥l̥r̥</i> ^ε	"swelling of the hand"
<i>w̥ìn-l̥iir̥</i> ^ε	"sunset" (<i>Winn̥ig lí yā</i> . "The sun has set/fallen.")
<i>s̥ũñ-sáñ'ùr̥</i> ^{ɔ̥}	"sorrow" (<i>Ì s̥ũñf sáñ'àm n̥ē</i> . "My heart is spoilt" = "I'm sad.")
<i>s̥ũñ-p̥éèr̥</i> ^{n̥ε}	"anger" (<i>Ì s̥ũñf p̥éll̥ig n̥ē</i> . "My heart is white.")

16.10.2 Modifiers

Nominal pre-modifiers cannot be specific. They vary in form depending on the nature of the dependent. AdvP pre-modifiers 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 pre-modifier must appear as a Combining Form.

Compounds with a count noun pre-modifier are freely created, but resemble the compounds seen in other languages more closely than the type with Combining Form heads preceding adjectives and post-determining pronouns [16.11](#). 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, naturally, never with post-determining pronouns.

Note the contrast between a generic pre-modifier and a pre-determiner in e.g.

<i>bīig fúùg</i>	"a child's shirt" (belonging to some child)
<i>bì-fūug</i>	"a children's shirt" (perhaps a small woman's)
<i>nà'ab lā wíèf zōvr</i>	"the chief's horse's tail" (the chief has a horse)
<i>nà'ab lā wíd-zōvr</i>	"the chief's horse-tail" (the chief may not own a complete horse at all)

Cb pre-modifiers have a very general quasi-adjectival sense. The resulting compounds are very liable to develop specialised lexical meanings:

<i>wāb-mócgū-n</i> WK	"in elephant-bush, where there are elephants"
<i>zà'-nōvr</i>	"gate" ("compound-mouth")
<i>mà-bīig</i>	"sibling" ("child by [same] mother")
<i>bā'-bīig</i>	"half-sibling" ("child by [same] father")
<i>tèŋ-bīig</i>	"native" ("child of a country")
<i>nàsàa-sìlvug</i>	"aeroplane" (European hawk) ILK

WK has the exceptional forms

<i>náaf-bì'isím</i>	"cow's milk"
<i>bōvg-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 L Raising after *náaf*.)

A cb pre-modifier of a deadjectival abstract noun may have a sense much like a generic argument:

<i>sōñ-kpí'òŋ</i> ³	"boldness" ("heart-strength")
<i>sōñ-má'asìm</i> ^m	"joy" ("heart-coolness") (<i>M sōñf má'e yā</i> . "I'm joyful.")
<i>nìn-tōllím</i> ^m	"fever" ("body-heat")
<i>wīn-tóŋg</i> ³	"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>pò-piəlím</i> ^m	"holiness" ("inside-whiteness")
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16.10.2.2 Generic non-count NPs

Pre-modifiers 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>pò'usug dóŋg</i>	"temple" ("worship house")
<i>tōlígír bún</i>	"heater" ("heating thing" = <i>bōn-tōlígír</i> ^ε)
<i>dōgub dút</i>	"cooking pots"
<i>līgidi túbà</i>	"expensive work" (<i>līgidi</i> ⁺ "money")

Language names may appear as abstract nouns describing an ethnic group:

<i>Kūsáàl yír nē kūeb</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 pre-modifier 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 dóŋg</i>	"tent" (cloth hut)
<i>dàad bún-nám</i>	"wooden things" (<i>dàug</i> ³ "piece of wood")

NPs formed by coordination may occur in this use:

sālima nē ānzúrfà lá'àd "gold and silver goods"

Such pre-modifiers are referential, and can be the antecedents of pronouns:

sālima lá'àd né ò bûtus "gold goods and [gold] cups" WK [16.7](#)

Contrast the non-referential use of mass nouns as generic arguments:

sàlim-kùēs "gold-seller"
dā-núùd "beer-drinker"

Cb forms of abstract non-count nouns do sometimes occur as pre-modifiers:

	<i>tāñp-sōb^a</i>	"warrior"	(<i>tāñp^ɔ</i> "war")
	<i>pù-pìəl-nīd^{a/}</i>	"holy person"	(Rom 5:7, 1996)
	<i>pù-pìəl-sōb^a</i>	"holy person"	(Rom 3:10, 1996)
but	<i>pù-pìəlīm sōb^a</i>	"holy person"	(Mt 10:41, 1996) etc
	<i>pù-pìəl-tūuma⁺</i>	"holy actions"	(Rom 6:13, 1996)
but	<i>pù-pìəlīm tūumà⁺</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 pre-modifiers may be limited to the specific sense "made of ..."

16.10.2.3 Adverbial Phrases

Like indefinite mass nouns, AdvPs as pre-dependents are pre-modifiers (contrast the determiner sense of AdvPs *following* the head [16.11.2.3](#).)

AdvPs as pre-modifiers may not be proadverbs. I do not have any examples of time AdvPs used as NP pre-modifiers.

Examples of AdvP pre-modifiers:

<i>bōgusígā dāàn</i>	"softly-softly sort of person"
<i>dūnyā ní nìn-gbīj</i>	"earthly body"
<i>kù'əmī-n búñ</i>	"water creature"
<i>kù'əmī-n dín</i>	"aquatic one"
<i>kōlugu-n nó-dáùg</i>	"crayfish" ("in-the-river cock")

Although the AdvPs in cases like

<i>dàtìɔŋ níf</i>	"right eye"
<i>dàgòbɔg níf</i>	"left eye"
<i>zūgú-n níf-gbáɔŋ</i>	"upper eyelid"
<i>tēŋɪ-n níf-gbáɔŋ</i>	"lower eyelid"

seem to answer "which?" rather than "what kind of?", the possibility of indefinite plurals like *dàtìɔŋ níni* "right eyes" or *tēŋɪ-n níf-gbánà* "lower eyelids" shows that the construction is actually modifying, not determining.

Postpositional phrases with *yēlá*⁺ "about" [17.6](#) appears as pre-modifiers, not pre-determiners. Adverbs, including postpositions, behave as generic non-count NPs syntactically; they are not made specific by a definite pre-determiner:

<i>Kūsáàs kùèb nē yīr yéla gbàɔŋ</i>	"A book about Kusaasi houses and agriculture"
<i>dàɔ-kàŋā lā yéla gbàɔŋ</i>	"a book about that man" WK

In the same way, locative AdvPs, including Kusaal place names with no locative particle [17.3](#), may occur as un-compounded pre-modifiers:

<i>Bòk díŋ</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 pre-determiner. See also on locative complements and their focus behaviour [30.1.2.2](#).

16.10.3 Determiners

The **quantifier** *yīgá*⁺ "firstly" appears as a pre-determiner "first", e.g.

<i>yīgá sāa zúg nē tēŋ</i>	"the first heaven and earth"
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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-síəbà</i>	"certain people"	<i>síəbà</i>	dependent
<i>yà sō'</i>	"some one among you"	<i>sō'</i>	head
<i>nīdɪb lā síəbà</i>	"certain of the people"	<i>síəbà</i>	head
<i>nīdɪb síəbà</i>	"certain ones among people"	<i>síəbà</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'alimī 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 pre-determiners 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 niŋir Wina'am ni

nīn-sáalìb yáddā-níŋìr 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-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)

Ninsaal Biig la lɛbug la na

Nīn-sáàl Bîg lā lɛbùg 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-pūvdír 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 *mēŋ*^{a/} "self", *dāan*^a "owner", *sōb*^a "individual" and *būn*^{nɛ/} "thing" as heads have specialised senses with pre-determiners [16.10.3.1](#).

In all other cases, pre-determiners express **possessors**.

m̄ bīg

"my child"

dāy lā bīg

"the man's child"

dāy lā bíèr bīg náàf zōv

"the man's elder brother's child's cow's tail"

Kūsáàs wádà

"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*^{a/} *dāan*^a *sōb*^a *būn*^{nɛ/}

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^{a/} "self" is used indifferently for sg/pl, always with a pre-determiner:

m̄ mēŋ

"myself"

yà mēŋ

"yourselves"

nà'ab lā mēŋ

"the chief himself"

chief:**SG ART** self

Bà ñyέε_ bà mēη. "They've seen for themselves."
3PL see **3PL** self.

"Self" forms must be used for verb arguments referring back to the clause subject :

M̄ ñwέ'ε_ m mēη. "I hit myself."
1SG hit **1SG** self.

not **M̄ ñwέ'ε m* or **M̄ ñwέ' 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 pō pīəsídí_ bà nú'ùs wōv lín nār sī'am lá
3PL NEG.IND clean:**DIPF** **3PL** hand:**PL** like **3INAN:NZ** be.proper **INDF.ADV ART**
kà dítā +∅.
 and eat:**DIPF NEG.**

"They don't wash their hands properly before they eat." (Mt 15:1)

Where ordinary pronouns would be permissible, using *mēη* implies contrast:

M̄ píə_ m̄ mēη nú'ùs. "I washed my own hands."
1SG wash **1SG** self hand:**PL**.

Fò mēη kōv bí-liaa +∅? "Yourself or the baby?"
2SG self or child-baby:**SG CQ?** ("Which of you needs the doctor?")

See also [16.11.2.3](#) on *amēηá*⁺ "really, truly" as a post-determiner "genuine, real"; cf the adjective *mēηír*^ε seen in *yēl-mēηìr*^ε "truth" ("genuine matter.")

Dāan^a "owner of ...", *nām*^a pl, always has a preceding dependent NP or AdvP. In a few set forms this is a generic count noun cb:

yī-dāan^a "householder" = *yī-sób*^a Hausa *mài gidaa*
tēη-dāan^a literally "land-owner": traditional earth-priest

Normally, the possession is expressed by a free NP, definite or indefinite:

lór dāan^a "car owner"
bōvg dāan^a "goat owner"

<i>kù'em dáàn^a</i>	"water owner"
<i>tìəŋ dáàn^a</i>	"bearded man" Hausa <i>màì geemùu</i>
<i>dāam dáàn^a</i>	"beer owner"
<i>pōɔg lā dáàn^a</i>	"the owner of the field" (Mt 21:40)

Zu-wok daan po gangid bugum.

Zù-wōk dáàn pō gánìd búgúmm +∅.

Tail-long:SG owner:SG NEG.IND step.over:DIPF 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-pìəlim dáàn^a "holy person"

Manner-adverbs can appear in the same sense as abstracts before *dāan^a*:

bōgusígā dáàn^a "softly-softly sort of person" WK

See [16.4.2.3](#) on the use of *dāan^a* with numbers to make ordinal expressions.

S5b^a "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>s5b^a</i>
Animate	pl	<i>dìm^a</i>
Inanimate	sg/pl	<i>dìn^{nɛ}</i>

With noun or pronoun pre-determiners [16.10.3](#) the meaning is possessive:

<i>mān dín^{nɛ}</i>	"my one, mine"
<i>À-Wīn díḿ</i>	"Awini's family"

Fōn pìáñ'àd nē tīnám dín.

2SG.CNTR speak:DIPF FOC 1PL.CNTR individual.INAN.

("We can't speak your language but ...") "You're speaking ours."

Abstract NPs and AdvPs [16.10.2.2](#) [16.10.2.3](#) preceding *s5b^a* are pre-modifiers:

pù-pìəlim s5b^a
 pl *pù-pìəlim díḿ^a* "holy person" (*pù-pìəlim^m* "holiness")

dūnɪya ní dìn^{nɛ} "earthly one" (1 Cor 15:44)
Bòk díɪm "Bawku people"

The quantifier *yīgá*⁺ "first" is a pre-determiner, as always [16.10.3](#):

yīgá sōb^a "first (person)" beside *yīg-sōb*^a *id*

Specialised senses may be found with cb pre-modifiers:

yī-sōb^a "householder" (*yīr*^{ɛ/} "house")
 pl *yī-sōb-nàm*^a
yī-díɪm^a "members of the household"
nīf-sōb^a "miser" (*nīf*^{p/} "eye")
tāñp-sōb^a "warrior" (*tāñp*^ɔ "war")
zūg-sōb^a "boss" NT "Lord" (*zūg*^{ɔ/} "head")
 pl *zūg-sōb-nàm*^a

The expression *ɔn sōb*^a means "the person we were just talking about."

Būn^{nɛ/} "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*^{ɛ/}*a*⁺ Class plural *būná*⁺, but in placeholder use it is found indifferently as sg and pl, or pluralises with *nàm*^a like inanimate pronouns:

Būn-námá _{àlá} *kà fù ñyētá* ^{+∅?}
 Thing-PL NUM:how.many and 2SG see:DIPF 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 *àeñ*^a "be" [21.2](#).

Dītb á nē būn-súŋ. "Food is good." ("Food is a good thing.")
 Food COP FOC thing-good:SG.

WK requires adjectives to have the suffix *m*^m in abstract meanings [16.11.1.1](#). Some adjectives cannot be used as NP heads at all; *būn*- is necessary in:

būn-vúr^ɛ "living thing"

No adjective cb may be a head, so *būn*- is also necessary in:

bōn-píàl-kàṅā^{+/} "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^ε "thing to do with killing"
but *kúvdír^ε* "killer"

Note the idioms

bōn-gíṅ^a "short chap" (informal, humorous)
bōn-kúdòḡ^ɔ "old man" (the normal expression)
(but *py'á-ńyá'aṅ^a* "old woman")

Bōn also occurs with abstract [16.10.2.2](#) and AdvP pre-modifiers:

tólgír bún^{nε} "heating thing, heater" = *bōn-tólgír^ε*
kù'əmīn bún^{nε} "water creature"

Bōn is a "thing", tangible or abstract, while *dín* is purely a semantically empty head, with only number and gender specified:

kù'əmīn dín^{nε} "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, determining pronoun or AdvP, Article.

It is characteristic of Kusaal and of other Oti-Volta languages that the normal construction with both adjectives [16.11.1](#) and post-determining 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 post-determiner-only forms *kàn^ε kàṅā^{+/}* of the demonstrative pronouns [16.3.1.2](#) (cf on apposition [16.8](#).) For quantifiers as post-determiners 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>bōvg^a</i>	"goat"
<i>bò-pìəliɡ^a</i>	"white goat"
<i>bò-kàŋā^{+/}</i>	"this goat"
<i>bò-pìəl-kàŋā^{+/}</i>	"this white goat"

Compounds with post-determining pronouns naturally cannot be lexicalised; compounds with adjectives do occasionally develop specialised individual lexical meanings, though much less often than modifier-first compounds.

For my informants WK and DK, a noun preceding a post-determining 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> 16.10.2.1
<i>?nāaf-káŋā</i>		

but *nā'-káŋā* "this cow" WK DK SB

16.11.1 Adjectives

Adjectives as modifiers always follow the head. They do not appear without a preceding noun head, except to a very limited extent as complements to *àɛŋ^a* "be something/somehow" [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>bōvg^a</i>	"goat"	<i>bōvs^ε</i>	"goats"
<i>bò-pìəliɡ^a</i>	"white goat"	<i>bò-pìəliε^ε</i>	"white goats"
<i>bò-sùŋ^ɔ</i>	"good goat"	<i>bò-sùma⁺</i>	"good goats"
<i>nūa^{+/}</i>	"hen"	<i>nōvs^{ε/}</i>	"hens"
<i>nō-pìəliɡ^a</i>	"white hen"	<i>nō-pìəliε^ε</i>	"white hens"
<i>nō-súŋ^ɔ</i>	"good hen"	<i>nō-súma⁺</i>	"good hens"

A second adjective or a post-determining pronoun can follow a first adjective, which thus itself appears as a cb:

<i>nīn-wók-pìəlīg^a</i>	"white tall person"
<i>nṵ-píəl-kàṅā^{+/}</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 kùēs^a</i>	"seller of red (i.e. dyed) cloth"
not <i>*fū-zéñ'-kùēs^a</i>	

i.e. adjective cbs may only precede other adjectives or post-determining pronouns.

Compounds with adjectives occasionally develop specialised lexical meanings:

<i>nū'-bí^a</i>	"finger" ("small hand")
<i>tì-sābulím^m</i>	a traditional remedy ("black medicine")

Several names of plant and tree species are formed in this way:

<i>gèñ'-sābulíg^a</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'-bīəlí^p</i>	NT	"small coin" (<i>lā'af^p</i> "cowrie")
cf	<i>bī'əlā⁺</i>		"a little"
	<i>dà-sī'ər^ε</i>		"some day; perhaps" (<i>dāar^ε</i> "day")
cf	<i>sī'a⁺</i>		"some"
	<i>dàbɪs-sī'ər^ε</i>		"some day" (<i>dàbɪsɪr^ε</i> "day")
cf	<i>sī'a⁺</i>		"some"
	<i>pɥ'ā-pāal^{a/}</i>		"bride" (<i>pɥ'ā^a</i> "wife")
cf	<i>pāalíg^a</i>		"new"
	<i>dà-pāal^{a/}</i>		"young man, son" (<i>dāɥ⁺</i> "man")
cf	<i>pāalíg^a</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*^m Class agreement in adjectives modifying *m*^m Class mass nouns, and also after *būn* "thing" when it has abstract rather than concrete sense:

	<i>dā-páalim</i> ^m	"new millet beer" WK does not accept * <i>dā-páàl</i> , * <i>dā-páalìg</i> .
	<i>tì-sābulim</i> ^m	"black medicine", a specific traditional remedy
	<i>tì-vōnnim</i> ^m	"oral medication" ("swallowing medicine")
	<i>tì-kōvdim</i> ^m	"poison" ("killing medicine")
	<i>kpāñ-sóǎndim</i> ^m	"anointing oil" (<i>kpāañm</i> ^m "oil, grease")
	<i>būn-bóǎdim</i> ^m	"desirable thing" (1 Cor 14:1: <i>nòǎlím</i> ^m "love")
but	<i>būn-bóǎdir</i> ^ε	"desirable thing" (BNY p17: a sheep)
	<i>būn-ñyétim</i> ^m	"the visible world"
but	<i>būn-ñyétir</i> ^ε	"a visible object"

The exceptional character of the *m*^m 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-píalìgā.</i>	"It's a whitish shirt."
<i>Lì à nē fū-píalìgā lā.</i>	"It's the whitish shirt."
<i>Lì à nē wíùg.</i>	"It's red."
<i>Lì à nē wíùgō.</i>	"It's reddish."
<i>fū-wíùgō 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 píalìg 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-píalìg 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 píəlìg fáss fáss.</i>	"It's very white."
<i>Lì à nē sābílíg zím zím.</i>	"It's deep black."
<i>Lì à nē zíñ'a wím wím.</i>	"It's deep red."

Ideophones are not limited to use with adjectives as complements of àḡñ^a "be something/somehow" but occur with adjectives in their normal modifier rôle:

<i>Lì à nē fū-zíñ'a wím wím.</i>	"It's a deep red shirt."	WK
<i>M̄ ñyé fū-zíñ'a wím wím.</i>	"I've seen a deep red shirt."	WK
<i>Fū-zíñ'a wím wím bé.</i>	"There's a deep red shirt."	WK
<i>M̄ bódòd fū-zíñ'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 gīḡ 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 súḡā 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." 18.1
<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:

Ò zòt nē tólìb tólìb. "He [a rabbit] is running lollop-lollop." WK

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:

Lì à nē nū'-kpíílúŋ. "It's a dead hand."
Bīig lā á nē nū'-kpíílúŋ. "The child is dead-handed."
Ò à nē bí-[nū'-kpíílúŋ]. "He's a dead-handed child."

In constructions like *bì-nū'-kpíílúŋ*³ "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*^m, and in such constructions the adjective may even be plural despite singular reference of the whole noun + adjective compound:

bì-tùb-kpīda⁺ "deaf child" (*tùbur*^ε "ear", *kpī*⁺ "die")
 plural *bì-tùb-kpīda nám*^a
 or *bì-tùb-kpīdis*^ε

bì-tùb-līd^ε "child/children with blocked ears"
 (*lī*⁺ "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:

*kùg-nōb-wák*³ "long-legged stool"
kùg-nōb-wá'àd^ε "long-legged stools"

	<i>zūg-máuk</i> ^ɔ	
plural	<i>zūg-má'ad</i> ^ɛ	"crushed-headed"
	<i>zù-wōk</i> ^ɔ	"long-tailed"
	<i>nōb-gíŋ</i> ^a	"short-legged"
	<i>zū-péelòg</i> ^ɔ	
plural	<i>zū-péelà</i> ⁺	"bald; grey haired"; etymologically "white headed" with <i>péelug</i> ^ɔ for <i>piəliŋ</i> ^a
	<i>lām-fòòg</i> ^ɔ	
plural	<i>lām-fòòd</i> ^ɛ	"toothless" (<i>lām</i> ^{mɛ} / "gum" <i>fùe</i> + "draw out") (Plural analogical from sg, which shows the regular change * <i>uəgu</i> → <i>ɔɔgu</i>)

The two adjectives "one of a pair" [16.4.2.3](#) are often used in bahuvrihis:
ñyàuk^ɔ pl *ñyà'ad*^ɛ for eyes:

	<i>nīf-ñyáuk</i> ^ɔ	"one eye"
	<i>bà-nīf-ñyáuk</i> ^ɔ	"one-eyed dog"

yīuŋ^ɔ pl *yīná*⁺ of other paired body parts:

	<i>tùb-yīuŋ</i> ^ɔ	"one ear"
	<i>bì-tùb-yīná</i> ⁺	"one-eared children"
	<i>nōb-yíuŋ</i> ^ɔ	"one-legged"
	<i>nū'-yíuŋ</i> ^ɔ	"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 ^a|*b*^a Class words:

	<i>bì-sāan</i> ^{a/} or <i>bì-sáaŋ</i> ^a	"stranger-child"
only	<i>bò-sáaŋ</i> ^a	"stranger goat"

	<i>bì-kpī'im</i> ^{m/}	
or	<i>bì-kpīilúŋ</i> ^ɔ	"dead child"
only	<i>bò-kpīilúŋ</i> ^ɔ	"dead goat"

	<i>bì-dāu</i> ⁺	
or	<i>bì-dāug</i> ^ɔ	"male child"
only	<i>bò-dāug</i> ^ɔ	"male goat"

bì-py'ā^a or *bì-pyāk^a* "female child"

bì-zū'əm^{m/}
or *bì-zùnzòŋ^a* "blind child"

The same behaviour is also seen with some agent nouns:

py'à-zàaŋs^a "dreamy woman" KT
nīn-nén^{na} "envious person"
bì-sīn^{na/} or *bì-sīnníg^a* "silent child"
only *bù-sīnníg^a* or *bù-sīnnúg^ɔ* "silent goat"

However, WK usually reports a contrast between agent nouns/deverbal adjectives with head-second compounds in ^a|*b^a* Class and head-first compounds in *g^a*|*s^ε* or *r^ε*|*a⁺* Class:

py'à-kūvdíg^a "murderous woman, murderess"
py'à-kūvd^{a/} only "killer of women"

This is true also of forms derived from verbs which are usually intransitive:

py'à-lā'adíg^a "woman given to laughing"
py'à-lā'ad^a "laugher at women"

Nouns (of any Class) expressing bodily defects can be used adjectivally:

bì-zùnzòŋ^a "blind child"
bì-gìk^a "dumb child"
bì-wàbır^ε "lame child"
bì-bālērvug^ɔ "ugly child"
bì-pòŋ'ɔr^ε "crippled child"

Other examples include:

nàsàa-bīig^a "European child"
yàmmug-bī-púŋ^a "girl slave"
(written *yamug bipuŋ* Acts 16:16, 1976 [9.2.2](#))
yàm-bī-púŋ^a "girl slave" (WK's preferred form)
cf *yàmmug bí-púŋ^a* "slave's girl"
bī-púŋ-yàmmug^a "slave girl"

<i>nà'-bīig^a</i>	"prince" ("royal child" not "boy king")
<i>bì-nà'ab^a</i>	<i>id</i>
<i>dà̀y-bīig^a</i>	"male child"
cf <i>bì-dā̀y⁺</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^m* Class like adjective stems [12.2](#).

16.11.2 Determiners

16.11.2.1 Pronouns

Demonstrative, indefinite and interrogative pronouns may follow a NP head as post-determiners; the head then normally appears as a combining form.

Pronouns naturally also occur as NP heads. Some pronouns have forms used only as heads or only as post-determiners [16.3.1.2](#) [16.3.1.3](#).

16.11.2.2 Quantifiers

Quantifiers as NP dependents follow the head, except for *yīigá⁺* "firstly" [16.10.3](#). The head only appears as a cb, optionally, in a few cases with *yīnní⁺* "one" and in a few fixed expressions [16.4.2.1](#). Uncompounded post-dependents are not subject to M Raising [16.4.2.1](#):

<i>kūgvr yīnní⁺</i>	"one stone"
but <i>kūg-yínní⁺</i>	"one stone"

I do not have any examples of co-occurrence with adjectives; when quantifiers precede post-determining pronouns the construction is probably always to be taken as a quantifier head with a pre-determiner, not a post-determining quantifier.

<i>nīdɪb bédugū</i>	"a lot of people"
<i>nīdɪb bédugū lā</i>	"the lot of people, the crowd"
<i>nīdɪbá àyí</i>	"two people"
<i>nīdɪbá àyí lā</i>	"the two people"

The head + post-dependent quantifier construction contrasts in meaning with the *partitive* sense of a pre-determiner + quantifier phrase head [16.10.3](#).

Quantifiers as post-dependents 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 ne yi

ò ñyà'an-dòllɔb 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 post-determiners. Proadverbs do not occur in this use. There is no compounding or M Raising.

Contrast the pre-modifying use with the post-determining in

mɔɔgu-n wábùg lā

"the wild elephant" ("What kind of elephant?")

but *wābug mɔɔgu-n lā*

"the elephant in the bush" ("Which elephant?")

I do not have any unequivocal examples of time adverbs in this position; in

ñwāɔɔlɔs yúùm lā púvɔgū-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":

Ŋn sɔb á nē dɔy'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 àntɔy'á-mɔrím kótò 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

Adverbial Phrases characteristically appear as adjuncts within clauses and VPs. To a more limited extent they may appear as arguments of verbs [17.5](#), or (with the exception of proadverbs) within NPs as determiners or modifiers [16.10.2.3](#) [16.11.2.3](#). AdvPs expressing time, circumstance or reason usually appear as clause adjuncts [25.1.1](#) before the clause subject, or as VP adjuncts [20.6](#), while AdvPs expressing place or manner may appear as VP adjuncts but not as clause adjuncts; they may only precede the clause subject by preposing with *kà* [30.2](#).

By default, the term "adverb" is used to refer to *nominal* adverbs [2.1](#); these are distinct from Preverbal Adverbs [19.7.2](#), which are VPred particles of verbal origin.

Most adverbs can be categorised as adverbs of time, place or manner.

Many adverbs are formally identical to nouns. Unequivocally distinctive adverbs include the proadverbs listed in [16.3.3](#), along with 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. Adverbs with a preceding NP determiner are limited to specialised postpositions [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 *nē*.

17.2 Time and circumstance

Adverbial Phrases expressing **time** may be instantiated by proadverbs [16.3.3](#) or by distinctive time adverbs which do not have the structure of nouns, such as

<i>zīná</i> ⁺	"today"
<i>sù'es</i> ^a	"yesterday"
<i>dūnná</i> ⁺	"this year"

Various time words which resemble nouns in form are distinguishable morphologically from nouns by the fact that they lack cb or pl forms, and syntactically in that they cannot be referred to by pronouns, and cannot occur with dependents; an example is

<i>bēog</i> ^ɔ	"tomorrow"
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The word

dāar^ε

"day after tomorrow/day before yesterday"

behaves similarly in this sense, but is homophonous with the noun *dāar*^ε "day."

However, many time adverbs are simply NPs with temporal meanings, and no special marking. Such NPs may consist of single nouns, but the possibility of adding dependents distinguishes such cases from those involving specialised time adverbs. For examples see [32.9](#) and e.g.

yú'vŋ^ɔ

"night"

nīntāŋ^{a/}

"heat of the day, early afternoon"

úun^{nε}

"dry season"

No formal distinction is made between a point in time and a period over which a state of affairs persists:

*Fù ná kūl bēog.***2SG IRR** return.home tomorrow.

"You'll go home tomorrow."

*Tì kpélìm ànínā dábɪsà bí'ə̀là.***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."

Adverbial Phrases expressing **circumstances** are typically Absolute clauses; such clauses are also frequently used to express time [28.1.1](#).

17.3 Place

Locative adverbs comprise proforms along with Kusaasi place names; other locative AdvPs use the locative particle *nī*^{+/~} *n*^ε. It is not possible to use a noun other than a place name by itself as a place adverb, except for a limited set of nouns which are also used as postpositions [17.6](#), most notably *zūg*^{ɔ/} "head" in the sense "on, onto, owing to." Although the origin of such postpositions is transparent, synchronically the postpositions are separate lexical items from the homophonous nouns, and the process of zero-derivation that created them is no longer active.

The core adverb of place is thus the Locative particle, which has two allomorphs. Strictly speaking, the head of locative AdvPs is the Locative particle itself, with a third **zero allomorph** accompanying the "intrinsically locative" forms discussed below; like other postpositions, this is never itself referential even though it has a pre-determiner. This analysis is supported by the use of locatives as NP pre-modifiers [16.10.2.3](#) and by the behaviour of focus marking with locative complements in the verb phrase [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^{ϵ} is used elsewhere:

<i>mù'arī-n</i>	"in a lake"
<i>yōdá nī</i>	"among names"
<i>m̄n nī</i>	"in me"
<i>mān nī</i>	"in me"

la'asug dɔɔdin nɛ suoya ni
là'asug dɔɔdī-n nē suēyá nī
 assembly:SG house:PL-LOC with road:PL LOC
 "in the synagogues and in the streets" (Mt 6:2)

$Yīr^{\epsilon/}$ "house" has the exceptional sg and pl locative forms $yín^{n\epsilon}$ $yáa-n^{\epsilon}$ which have the particular nuance "home", as in the parting formula [31](#):

Pù'usim yín. "Greet (those) at home." i.e. "Goodbye."

Note also the locative adverb $yìŋ^a$ "outside."

The article $lā^{+/}$ may precede or follow the locative particle:

mù'arī-n lā
 or *mù'ar lā nī* "in the lake"

Quantifiers may also follow the locative particle:

m gbana ni wusa "in all my letters" (2 Thess 3:17, 1996)
m̄n gbàna ní wūsa
 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 búlvgū-ni_∅ píā_ 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 Sontaana kpen' Judas [...] sunfon.

Kà Sōtāanà 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 lémm yī nīdībī-n lā nā yá'āsī_∅ 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 bē dá'a-n.

"He's at market."

Ò bē sjá'arī-n.

"He's at the bush."

Ò bē pōwógú-n.

"He's at the farm."

Ò bē yín.

"He's at home."

Ò bē sākulí-n.

"He's at school."

Ò bē mōwogū-n.

"He's in the grasslands."

Ò bē kōlīgī-n

"He's at the stream."

Ò bē tūvmī-n.

"He's at work."

More precise locative meanings are expressed with postpositions, many of which themselves include the locative particle [17.6](#).

Ò dīgūl gbáwŋ lā téebòl lā zúg.

3AN lay.down book:SG ART table:SG ART upon.

"She's put the book on the table."

Dāw lā bé nē dō-kàŋā lā púvgū-n.

Man:SG ART EXIST FOC hut-DEM.DEI.SG ART inside:SG-LOC.

"The man is inside that hut."

My informants tend to use postpositions in cases where the NT versions have the locative particle alone.

Kusaasi place names, many postpositions, and a number of other adverbs and proadverbs [16.3.3](#) are "intrinsically locative." Syntactic considerations [16.10.2.3](#)

[30.1.2.2](#) suggest such words should in fact be regarded as accompanied by a zero allomorph of the locative particle:

<i>Ò bɛ̀ Bók.</i>	"He's at Bawku." ILK
<i>Ò bɛ̀ Tɛ́mpáan.</i>	"He's at Tempane." ILK
<i>Ò kɛ̀ŋ Bók.</i>	"He's gone to Bawku."
<i>Ò dìgɪ gbáɥŋ lā tɛ́ɛ̀b̀l̩ lā zúg.</i>	"She's put the book on the table." (above)
<i>dàtìɥŋ^{ɔ̄} or dítúŋ^{ɔ̄}</i>	"righthand"
<i>dàg̀ò̀bɪg^a</i>	"lefthand"
<i>àg̀ó̄^{lɛ} or àg̀ó̄lā⁺</i>	"upwards"
<i>lālíl⁺</i>	"far off" (? <i>lāl níl⁺</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 kɛ̀ŋ Bók.</i>	"I'm going to Bawku."
<i>F̀ù yúùg Bók kp̄ɛ̀lāa?</i>	"Have you been long in Bawku (here)?"
<i>F̀ù yúùg 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^{+/}* or paraphrases like

Jerusalem tɛ̀ŋī-n "in Jerusalem-land"

For examples of Kusaasi place names see [32.3](#).

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 s̄i'el la

bīg lā ñ bɛ̀ s̄i'əl lā

child:SG ART NZ EXIST INDF.INAN ART

"the place where the child was" (Mt 2:9, 1976)

ka m̄ɔ̄ri f̄u kɛ̀ŋ zín'ikanɛ ka f̄u p̄u b̄ɔ̄ɔ̄da.

kà m̄ɔ̄rí_ f̀ù_ ø kɛ̀ŋ zín'-kànɪ kà f̀ù p̄u b̄ɔ̄ɔ̄dā^{+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^ɛ* always, whether used as locatives or not:

	<i>tèŋ-pōugv-n^{ε/}</i>	"village"
pl	<i>tèŋ-pōudi-n^{ε/}</i>	

Note also the *time* expressions:

	<i>bēog^ɔ</i>	"tomorrow"
	<i>bēogv-n^{ε/}</i>	"morning"
	<i>sān-síā-n lā</i>	"at one time, once..." 24.1.3
	<i>yīigí-n^ε</i>	"at first"

Locative forms with or without the locative particle may appear as modifiers or determiners within a NP [16.10.2.3](#) [16.11.2.3](#).

Locative AdvPs can be coordinated:

Nyalima na be winnigin ne nwadigin ne nwadbibisin.

Ñyālmá nà bē wínnìgī-n nē ñwādigí-n nē ñwād-bíbīsī-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^ɔ</i>	"therefore"	<i>bō zúg^ɔ</i>	"why?"
<i>dìn zúg^ɔ</i>	"therefore"		

17.4 Manner

Adverbial Phrases expressing manner may again be instantiated by proforms; there are also morphologically distinctive manner-adverb formations. Although various NP types can be used as manner AdvPs, as with 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^m* or *-ga⁺* [12.3](#). Others include

<i>pāalú⁺</i>	"openly"
<i>ñyāe^{ne/}</i>	"brightly, clearly"

Even prior to 2016, the NT always writes the SF of *ñyāe^{ne/}* as *nyain*. This is probably simply a traditional orthographic anomaly; not only my informants but also

the [audio version of the NT](#) always have [jãĩ]; cf Toende *yǎí id*. The LF *ňyāené* is an instance of the addition of *-ne* to make secondary LFs, as in words with Apocope Blocking which do not end in short vowels [6.4](#).

The word shows the characteristic distribution of a manner-adverb rather than a noun, appearing as complement of *àḡñ^a* "be something" and as an adjunct:

Wina'am a su'um nyain. "God is light." (1 Jn 1:5, 1996)
Wínà'am áñ súm ñyāe.
 God COP good:ABSTR brightly.; for examples see [32.9](#).

... kε ka ti lieb nyain. "... make us light." (1 Jn 1:7)
... ké kà tì líàb ñyāe.
 ... cause and 1PL become brightly.

... na nye lini nie nyain pamm
... nà ñyē línì niè ñyāe pāmm
 ... IRR see REL.INAN 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**.

nà'anā^{+/} "easily"
tò'ɔtō^{+/} "straight away" (Mooré *taotao id*)
kōñ'ɔkō⁺ "solely, by oneself"

Reduplication of nouns forms a number of **distributive** Manner AdvPs:

dàbısır dábısır "day by day"
zĩñ'ig zĩñ'ig "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"

Ḡ wúm Kūsáàl bĩ'əlá. "I know Kusaal a little."
 1SG hear:DIPF Kusaal slightly,

Ḡ wúm bĩ'əl bĩ'əl. "I understand a very little."
 1SG hear:DIPF little little.

A very common form of manner-AdvP is a Relative clause using the proform *sīəm*^m "somehow" as head: see [28.2.2](#).

Manner-adverbs resemble generic mass nouns in their syntactic behaviour in several respects. On a syntactic level, even count nouns used in generic senses may be encountered as AdvPs:

M̄ kēj nōbá.

1SG go leg:**PL**.

"I went on foot." SB; WK corrected this to *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 sǎñ'w̄ À-wòm tǔba.

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 tùm bédugō.

"She's worked a lot."

Ò tùm pāmm.

"She's worked a lot."

Wōsa "all" readily switches from quantifying an object to adverbial use:

Bà gòsī tī wōsa.

3PL look.at **1PL.OB** all.

"They've looked at us all." WK (for: *Bà gòsī tì wōsa*. **3PL** look.at **1PL** all.)

This is not a universal property of quantifiers:

Bà gòsī tī bédugō.

"They've looked at us a lot." WK

Bà gòsī tì 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 tī bábīgā.

"They've looked at us many times." WK

Bà gòsī tì bábīgā.

"They've looked at many of us." WK

Manner AdvPs can be coordinated: so for example with *sīəm* 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 dúè wēlá ^{+∅?} 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*^a "be something /somehow" [21.2](#). Adjectival verbs may also have an AdvP subject, and there are a few examples with other verbs:

Yìŋ venl, ka poogin ka'a su'um.
Yìŋ véñl kà pūvuv-n kā' súmm ^{+∅.}
 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 kp̄ii ti yēla la ke ka ti baŋ nòŋilim an si'em.
Kristo _̄ *dà kp̄ii* _̄ *tì yēlá lā ké kà ti bāŋ nòŋilim* _̄ *∅ àñ sī'em.*
 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 *Sùŋā bē.* "OK it is." WK
 Good:**ADV EXIST.**

sùŋā is however used metalinguistically, meaning "the word *sùŋā*."

The verb *àñ*^a 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:

Ò nìŋí _̄ *àlá.* "She did that." ("thus")
3AN do **ADV:thus.**

Relative clauses with the proform *sī'em*^m "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](#):

Fv wum ban yet si'em laa?

Fù wúm bán yèt sī'əm láa +∅?

2SG hear:**DIPF** **3PL:NZ** say:**DIPF** **INDF.ADV** **ART** **PQ?**

"Do you hear what they are saying?" (Mt 21:16)

Tiig wela bigisid on a si'em.

Tiig wélà bìgısid ón àñ sī'əm.

Tree:**SG** fruit:**PL** show:**DIPF** **3AN:NZ** **COP** **INDF.ADV**.

"The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

Verbs with appropriate meanings frequently take locative AdvPs as complements, rather than as adjuncts [20.3](#). Differing sandhi behaviour of *kā'e* "not be" with respect to losing the final *e* may reflect whether a following locative AdvP is a VP complement or an adjunct [8.5.3](#).

17.6 Postpositions

Postpositions are adverbs with a pre-determiner [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* [18.1](#). Regardless of the definiteness of their pre-determiners, 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 pre-determiners may:

tinam ne fun svugine? "between us and you?" (Mt 8:29)

tīnám nē fūn súvgū-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^ɔ "onto" (*zūg^ɔ* "head")

téebùl lā zúg "onto the table"

Zūg^ɔ is frequently used metaphorically to express a **reason** "because of ..."

dāy lā zúg "on account of the man"

bō-zúg^ɔ? "why?" (cf *bō zúg^ɔ* "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* [30.2](#), they may occur as clause-level presubject adjuncts [25.1.1](#):

Pian'akanε ka m pian' tisi ya la zug, ya anε nyain.

Pìāñ'-kànı kà m pìāñ'_∅ 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*³ 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^ε

"on"

téebùl lā zúgū-n

"on the table"

tējír^ε

"under" (*tēj^a* "ground")

téebùl lā tējír

"under the table"

As a locative adverb without a pre-determiner:

Gòsim tējír!

"Look down!", more commonly *Gòsim tējír-n!*

pūvgv-n^{ε/}

"inside" (*pūvg^a* "belly, inside")

dōk lā pūvgū-n

"in the pot"

ñwādis yùòm lā pūvgū-n

"months in the year" (metaphorical locative)

bābá⁺

"beside" (pl of *bābír^{ε/}* "sphere of activity")

m̄ nōbá bàba

"beside my feet"

sìsùvǔ-n^{ɛ/}"between" (replaced by *sùvǔ-n^{ɛ/}* in KB)*tīnám nē fūn sí-sùvǔ-n*

"between us and you"

tùen^{nɛ}

"in front of"

dāká lā túen

"in front of the box"

cf *Gòsim túen!*

"Look to the front", without a pre-determiner

gbìn^{nɛ}"at the bottom of" (*gbìn^{nɛ}* "buttock")*zūer lā gbín*

"at the foot of the mountain"

ňyá'an^a"behind; after (time)" (*ňyá'an^a* "back")*lì ñyá'an^a*"afterwards" as a presubject adjunct [25.1.1](#)*Nē'ŋá ñyá'àŋ kà ò kūl.***DEM.DEI.INAN** after and **3AN** return.home.

"After this she went home."

sā'an^{ɛ/}

"into/in the presence of", "in the opinion of"

Wínà'am sá'àn

"in the sight of God"

*Fù ná dīe tīm pŷ'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⁺"about, concerning" (pl of *yēl^{ɛ/}* "matter, affair")*Bà yēl-ō_ ∅ mān yēlá wōsa.***3PL** say **3AN.OB 1SG.CNTR** about all

"They told him all about me."

kōñ'ɔkōcf *àdàkóñ'* "one" [16.4.2.2](#)*m̄ kōñ'ɔkō*

"by myself"

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^a</i>	<i>ní tī^{+/}</i>
<i>ní P</i>	<i>ní yā^{+/}</i>
<i>n-ó^o [nǒ(:)]</i>	<i>ní bā^{+/}</i>
<i>ní lī^{+/}</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*^{na/} "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*^{na/}, is followed by an empty particle *nē* after any object which does not already have the article *lā*^{+/}, 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)

Alazugō mōri ya'am wōv wiigi ne...

Àlá zùgō, mōrī 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:**DIPF** like donkey:**SG** **NZ** run:**DIPF** **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 ^ε			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:**DIPF**.

"Like a donkey, he runs."

but **Né m nú'ùg kà m 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.

M pɔ́ǎn'adī_ø tísìdī_ yá wōv yà á né m bīs nē.

1SG speak:**DIPF** **CAT** give:**DIPF** **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[≠] 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[≠] also occurs commonly as a Conjunction [24.1.3](#).

hālí⁺ 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-kúùd 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⁺ 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" [30.6](#) 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 wōu*** *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 díɲ lá_ ∅

NEG.IMP tie 2PL eye-face:PL **NEG**, resemble with puff:GER individual.PL **ART NZ**

niɲid sī'əm lā.

do:DIPF **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 *ñ*-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'əm lā

even with **1SG:NZ TNS** write **CAT** give **2PL.OB INDF.ADV ART**

m̃ 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 are also phonologically dependent on the VPred; as they may intervene between the verb and the VPred category particles, they are also described in this section [19.7](#), although they are not part of the VPred syntactically. They comprise preverbal adverbs, 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 [19.6.1.1](#), but there are associated segmental features: the particle $yā^+$ after phrase-final perfective forms [19.6.2.1](#) 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 along with positive polarity and Independency [19.6.2.2 11.1](#).

The VPred shows no agreement. Apparent number agreement in imperatives is 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	PreAdv		LE1	LE2
$l̥̥ε$	$d̥̥a$	$n̥̥am$	$∅ \leftrightarrow p̥̥ū$	$p̥̥ùn$	VERB	$n̥̥^ε$	$m̥̥^a$
	$s̥̥a$		$∅ \leftrightarrow d̥̥ā$	$l̥̥əm$		ya	$f̥̥$
	$∅$		$n̥̥à \leftrightarrow k̥̥ù$	$t̥̥ì$			o
	$p̥̥à'$			$k̥̥p̥̥èl̥̥m$			$l̥̥^+$
	$s̥̥à$			$l̥̥à'am$			$t̥̥^+$
	$d̥̥āa$			$d̥̥èŋ̥̥m$			ya^+
	$d̥̥à$			$ñy̥̥ε̥̥(t̥̥)$			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. PreAdv preverbal adverbs [19.7.2](#); LE1, LE2 are Liaison Enclitic slots [19.7.3](#). For *lèè* "but" see [19.7.1](#); for *nàm* "still" see [19.3](#).

Aspect-focussing $n\bar{e}^{+/-}$ is formally a Verb Phrase particle which immediately follows the VPred [30.1.2.1.1](#).

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 Base Form is perfective or (resultative) stative, the form marked with the suffix **-da* is *dynamic* (not stative) imperfective, and the form with **-ma* is used for imperative when the verb word itself has the Independency tone overlay [11.1 19.6.1.1](#). Invariable verbs have a single form which is either dynamic imperfective or (descriptive) stative by default.

Directly following a verb with stative or dynamic imperfective aspect, with no words other than Liaison Enclitics intervening, the **VP focus particle** $n\bar{e}^{+/-}$ [30.1.2](#) applies to the *aspect*, limiting its time reference or marking a contrast with another time at which the state of affairs expressed by the verb did not obtain; the meaning might be paraphrased "at the time referred to in particular." With dynamic imperfective forms this marks a distinction which is analogous to the difference between English "progressive" (with $n\bar{e}^{+/-}$) and "habitual" (without $n\bar{e}^{+/-}$) aspects; for stative imperfectives see [19.2.2.1](#).

This aspectual use of $n\bar{e}^{+/-}$ is possible only with positive polarity and indicative mood; in other cases although the corresponding meaning differences may occur, they are unmarked. In passive constructions the actual meanings signalled by the aspectual use of $n\bar{e}^{+/-}$ may not occur [30.1.2.1.2](#).

The focus particle $n\bar{e}^{+/-}$ is not permitted at all in certain syntactic contexts, and may not appear a second time in aspectual sense if it is already present focussing a constituent; again the corresponding aspectual distinctions are unmarked [30.1.2.1.1](#).

19.2.1 Perfective

The unmarked Base Form of Variable verbs has perfective aspect by default. With Variable verbs which express a change of state in subject or object *only*, the Base Form may have resultative stative aspect [19.2.2.1](#).

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. It 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 [19.3.3](#). 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.
3AN die PFV. "She's died."

Sāa dāa ní.
Rain TNS rain. "It rained." (before yesterday.)

Sāa pá' nì yā.
Rain TNS rain PFV. "It rained." (earlier today.)

but Sāa ní yā.
Rain rain PFV. "It has rained."
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 ...
3AN say that ... "He says ..." (translating for the foreign doctor)

Performatives naturally fall into this category:

M̀ pú'ùs yā. "Thankyou", "I thank you."
1SG greet **PFV**. (cf Hausa *Naa goodèe*, also perfective)

M̀ sják yā. "I agree."
1SG agree **PFV**.

Verbs of perception and cognition (often corresponding to English "stative" verbs that do not use the progressive present) frequently appear as present perfectives, once again corresponding to English simple present:

M̀ ñyé nū'-bíbı́sá_ àtáń'.
1SG see hand-small:**PL NUM**:three.
 "I can see three fingers."

M̀ téń'ès kà ... "I think that ..."
1SG think and ...

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 fupielā zi'e ba san'an.
Kà dāpá_ àyí yé fū-píəlā_ ∅ 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:

Ñwādı́sá_ àtáń' 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 Stative

Stative aspect in Kusaal divides into **descriptive** and **resultative** aspects.

The single imperfective finite form of an **Invariable verb** may have descriptive aspect as a lexical matter [11.2](#).

Ò *gìm*. "She's short."
3AN be.short.

Lì *zùlm*. "It's deep."
3INAN be.deep.

Ì *mór pu'ā*. "I have a wife."
1SG have wife:SG.

Ì *bócdī 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 Descriptive verbs similarly do not usually appear with the particle *nē^{+/}* in its aspectual sense:

Ì *mór lór*. "I have a car."
1SG have car:SG.
not *Ì *mór nē lór*.

However, this is not a dynamic/stative distinction in Kusaal, but a distinction between processes *and* states which are presented as temporary/contingent or as abiding/intrinsic. Descriptive verbs express abiding/intrinsic relationships or predicative adjectival senses, and by default if the particle *nē^{+/}* follows such a verb it is interpreted as *focussing* either a VP constituent or the VP as a whole; *nē^{+/}* can only be aspectual 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^{+/}* [30.1.2.1.3](#).

With **Variable verbs** which express a change of state in the subject the unmarked Base Form may have either a perfective or a resultative stative meaning:

Lì *bòdīg yā*. "It's got lost."
3INAN lose PFV.

Lì b̀̀d̀d̀ıg n̄. "It's lost."
3INAN lose **FOC.**

Resultative statives, as expressing contingent or temporary states, are typically followed by the particle *n̄[±]* in its aspectual sense:

Ò kp̀̀ n̄. "He's dead."
3AN die **FOC.** (Not temporary, but still contingent.)

Lì sàñ'am n̄. "It's spoilt."
3INAN spoil **FOC.**

Ì gẽñ n̄. "I'm tired."
1SG get.tired **FOC.**

Ì gẽñ' n̄. "I'm angry."
1SG get.angry **FOC.**

Bà k̀̀d̀ıg n̄. "They're old."
3PL grow.old **FOC.**

Lì b̀̀d̀d̀ıg n̄. "It's lost."
3INAN lose **FOC.**

Ò wàbilım n̄. "She's lame."
3AN lame **FOC.**

Ò gèẽñm n̄. "She's mad."
3AN madden **FOC.**

Lì p̀̀è'el n̄. "It's full."
3INAN fill **FOC.**

Lì ỳ̀ n̄. "It's closed."
3INAN close **FOC.**

Ì búg n̄. "I'm drunk."
1SG get.drunk **FOC.** [calque/borrowing of Hausa *b̀̀gu*]

The resultative stative meaning arises from the nature of the verb rather than being imposed by the particle, which has its normal sense "at the time referred to in

particular." However, aspectual $n\bar{e}^{+/}$ is not compatible with the perfective aspect, so a Variable verb Base Form followed by aspectual $n\bar{e}^{+/}$ must be taken as resultative.

It is not always clear that there is an implied contrast with a time at which the state of affairs expressed was not in force, e.g.

Ò lèr nē. "He's ugly."
3AN get.ugly **FOC**.

Lì pèlɪg nē. "It's white."
3INAN whiten **FOC**.

Lì sòbɪg nē. "It's black."
3INAN blacken **FOC**.

Lì mù'ə nē. "It's red."
3INAN redden **FOC**.

The translations as supplied by WK above do not seem to imply a change from any previous state; the matter needs further investigation.

Most verbs expressing a change of state in the subject are intransitives like kpi^{+} "die" or patientive ambitransitives [20.1](#) like $b\grave{o}dɪg^{\epsilon}$ "lose, get lost." The only other transitive verbs I have found in this category express putting on clothing:

Ḃ yé fūug. "I've put a shirt on."
1SG put.on shirt:**SG**.

Ḃ yé nē fūug. "I'm wearing a shirt."
1SG put.on **FOC** shirt:**SG**.

Only Variable verbs expressing a change of state in the subject can have resultative aspect, with the sole exception of the irregular verb $n\grave{o}ŋ^{\epsilon}$ "love", which has a Base Form with descriptive aspect [11.1.1](#). After all other Variable verb Base Forms, $n\bar{e}^{+/}$ cannot be aspectual and must be interpreted as focussing either a VP constituent or the entire VP [30.1.2.1.2](#).

19.2.2.2 Dynamic

The dynamic imperfective is marked morphologically in Variable verbs with the flexion **-da* [11.1](#). The single imperfective finite form of Invariable verbs may be Dynamic, as a lexical matter [11.2](#).

Like the stative, the dynamic imperfective can be followed by the particle *nē^{+/}* in its aspectual sense "at the time referred to in particular."

Without *nē^{+/}*, 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:**DIPF**.

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

Nīgí òñbɪd mɔɔd. "Cows eat grass."
 Cow:**PL** chew:**DIPF** grass:**PL**.

Nīgí òñbɪd nē mɔɔd. "Cows eat *grass*." ("What do cows eat?")
 Cow:**PL** chew:**DIPF** **FOC** grass:**PL**. Aspectual *nē^{+/}* is not possible with a generic subject: Constituent focus [30.1.2.2](#).

Nīgí lā òñbɪd mɔɔd. "The cows eat grass."
 Cow:**PL** **ART** chew:**DIPF** grass:**PL**.

Nīgí lā òñbɪd mɔɔd lā.
 Cow:**PL** **ART** chew:**DIPF** grass:**PL** **ART**.
 "The cows eat the grass."

Nā'-sɪəbà òñbɪd mɔɔd. "Some cows eat grass."
 Cow-**INDF.PL** chew:**IPF** grass:**PL**.

Nā'-sɪəbà òñbɪd mɔɔd lā.
 Cow-**INDF.PL** chew:**DIPF** grass:**PL** **ART**.
 "Some cows eat the grass."

M zín'i. "I sit."
1SG be.sitting.

M̄ záñl dāká lā. "I carry the box in my hands."
1SG carry.in.hands box:**SG ART**.

With *nē^{+/}*, the dynamic imperfective typically has a meaning analogous to the English "progressive" or "continuous."

Ò òñbɪd nē. "He's chewing."
3AN chew:**DIPF FOC**.

M̄ zín'i nē. "I'm sitting."
1SG be.sitting **FOC**.

M̄ 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 *lā* [16.5](#) contributes to making this the natural interpretation in

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

19.3 Tense

19.3.1 Tense particles

Tense particles come first in the VPred, preceded only by *lèɛ* "but." They are mutually exclusive. The markers are

<i>dàa</i>	"day after tomorrow"
<i>sàa</i>	"tomorrow"
\emptyset	present, or unmarked 19.3.3
<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⁺∅? "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 ellipited 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*. However when both markers occur, *dà* always expresses a time prior to *dāa*; this is one way the language can express a "pluperfect." (Others are the preservation of original tense markers in indirect speech [26.5.2](#), relative tense marking in *ñ*-clauses within Sequential clauses [25.3.2](#) and the use of the preverbal adverb *tì* [19.7.2](#).)

The auxiliary tense particle *nām* 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_∅ nām pō pñ'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 Other constructions for tense

My informants use the Remoteness marker *n^ε* [27.1.1](#) to make an earlier-today past with indicative meaning:

M šñbidī-n sūmma. "I was eating groundnuts."
1SG chew:DIPF-REM groundnut:PL.

This implies "and now I'm not"; a sort of anti-current-relevance which may be the link with the typical hypothetical use. No examples seem to occur in the NT.

Kusaal does not use tense-unmarked indicative imperfectives for immediate future (like English "I'm going home.") The common expression at leave-taking

M̄ 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) *bòɔd*^a "want" + gerund. The subject need not be animate.

Tìɔg lā bòɔd līg. "The tree is about to fall."
 Tree:**SG** **ART** want fall:**GER**.

Yú'ɔŋ bɔɔd gaadɔg, ka bɛog bɔɔd nier.

Yú'ɔŋ bòɔd gáadùg kà bēog bòɔd 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 [26.5](#).) This construction does require an animate subject.

M̄ yé m̄ kɔ̄ā sūmma. "I'm going to hoe groundnuts."
1SG say **1SG** hoe groundnut:**PL**.

M̄ yé m̄ kɔ̄á nīm. "I'm going to cut meat"
1SG say **1SG** cut meat:**SG**.

19.3.3 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:

<i>Nīdɪb kpîd nē.</i> Person:PL die:DIPF FOC.	"People are dying."
<i>Nīdɪb kpîd.</i> Person:PL die:DIPF.	"People die."
<i>Ṁ zín'i nē.</i> 1SG be.sitting FOC.	"I'm sitting down."
<i>Ò gìm.</i> 3AN be.short.	"She's short."
<i>Ṁ mór pɔ̄'ā.</i> 1SG have wife:SG.	"I have a wife."
<i>Ò kpì nē.</i> 3AN die FOC.	"She's dead."

In isolation, it is not possible to construe expressions like these as e.g. "People were dying." With perfective aspect, similarly, the sense without an explicit context must be perfective-present or instantaneous present [19.2.1](#):

<i>Ò kpì yā.</i> 3AN die PFV.	"She's died."
<i>Ò yèl yē ...</i> 3AN say that ...	"He says" (translating for the foreign doctor)
<i>Ṁ pú'ùs yā.</i> 1SG greet PFV.	"(I) thank you." cf Hausa <i>Naa goodèe</i> .
<i>Ṁ sjàk yā.</i> 1SG agree PFV.	"I agree."
<i>Ṁ ñyé nū'-bíbisá_ àtán'.</i> 1SG see hand-small:PL NUM:three.	"I can see three fingers."
<i>Ṁ téñ'ès kà ...</i> 1SG think and ...	"I think that ..."

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 the Remoteness marker:

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:**DIPF-REM** groundnut:**PL**.

and *M̐ óñbídī-n sūmma.*

1SG chew:**DIPF-REM** groundnut:**PL**.

"I was eating groundnuts earlier today."

(today-past sense of the Remoteness marker)

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. For the Remoteness marker *n^ε* see [27.1.1](#).

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 the periphrastic constructions described under Tense [19.3.2](#). 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^{+/-}* in aspectual meaning.

Imperative mood is negated by *dā*. In Variable verbs with tone overlay due to Independency marking it shows a special inflection *-m^a* [19.6.2.2](#) [11.1](#) but otherwise the verb word coincides in form with the indicative.

Ò vùl tìlm 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 tìlm 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 [24.1.2](#). The *-m^a* imperative of Variable verbs is perfective by default:

Kòñsım!

"Cough!"

Imperatives without tone overlay from Independency marking make perfective/dynamic 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:**DIPF** **NEG!**

(Explaining before the operation what to avoid throughout)

Whether or not it carries the distinctive flexion *-m^a*, imperative mood is followed by the enclitic 2pl subject pronoun ^ya in direct commands to several people [25.2.3](#).

The particle *nē^{+/-}* cannot appear in its aspectual 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-* [dímíla] [dímala]

Dìmī-ní_ àlá! "Keep ye on eating!" [dímíníla] [dímínala]
 Eat:IMP-2PL.SUB ADV:thus!

Kùəsimī-ní_ àlá kī n tísídī_ bá.
 Sell:IMP-2PL.SUB ADV:thus millet CAT give:DIPF 3PL.OB.
 "Keep ye on selling millet to them."

Invariable verbs used as imperatives frequently add *àlá*:

Dìgí àlá! "Keep on lying down!" [dígíla] [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." [dígíníla] [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_ø! "Look ye!"
 Look:IMP 2PL.SUB!

Dā gōsɛ +ø! "Don't look!"
 NEG.IMP look NEG!

Kèl kà ò gōs! "Let her look!"
 Cause:IMP and 3AN look!

Kèm nā n gōs! "Come and look!"
Come:IMP hither CAT look!

Dò! "Follow!"
Follow!

Dòllī_ ∅! "Follow ye!"
Follow 2PL.SUB!

Dòllī_ m! "Follow me!"
Follow 1SG.OB!

Dòllī-ní_ m! "Follow ye me!"
Follow-2PL.SUB 1SG.OB!

Mòr nīn-báalìg! "Have pity!"
Have eye-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 *nē⁺* cannot occur in aspect marking function. 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 preverbal adverbs. 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](#).

Aspectual use of *nē⁺* is not possible with negative polarity [30.1.2.1.2](#).

Indicative mood is negated by *p̄* (for some speakers *b̄*, as in Toende Kusaal.) Imperative mood is negated by *d̄*; conversely, forms which are negated by *d̄* are imperative. Irrealis mood is negated by *k̄*, which *replaces* the positive irrealis marker *n̄*. Younger speakers sometimes use *k̄* for *p̄*, but none of my informants accepts this.

Ò zàb ná'àb lā. "He's fought the chief."
3AN fight chief:**SG ART**.

Ò p̄ záb nà'ab lāa +∅.
3AN NEG.IND fight chief:**SG ART NEG**.
 "He hasn't fought the chief."

Zàm ná'àb lā! "Fight the chief!"
Fight:IMP chief:**SG ART!**

D̄ záb nà'ab lāa +∅! "Don't fight the chief!"
NEG.IMP fight chief:**SG ART NEG!**

Ò nà zāb ná'àb lā. "He'll fight the chief."
3AN IRR fight chief:**SG ART**.

Ò k̄ zāb ná'àb lāa +∅.
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](#) *m̄* "see that it doesn't happen that...", *z̄*⁺ "not know", *k̄*⁺ "not be, not have", and *k̄*⁺*as̄ḡ* (LF only) "not exist."

19.6 Independency marking

The VPred of a main clause [25.1](#) or Content clause [26.5](#) 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 *k̄* other than Content clauses, regardless of whether they are subordinate or in subordinate [24.2](#) [25.3.2](#). The marker is primarily a tonal overlay, but has associated segmental manifestations.

19.6.1 Tonal Features

19.6.1.1 Tone overlay

The tone overlay of Independency marking 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 *lèɛ* "but" [19.7.1](#), next any preverbal adverb, then the verb itself. Preverbal particles which have intrinsic M tonemes (past tense marker *dāa*, preverbal adverb *ñyēɛ*) 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 L Raising, 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*^ɛ "fight" *gōs*^ɛ "look at" *nà'ab*^a "chief"):

<i>Kà m̄ 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 m̄ 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'ɛ*⁺ "not be, not have" and *zī*⁺ "not know":

Dāy lā kā' ná'abā ^{+∅}. "The man isn't a chief."
 Man:SG ART NEG.BE chief:SG NEG.

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)

Bà kùvdī *bá*. "They kill them."
3PL kill:**DIPF** **3PL.OB**.

with *Bà kùvdí* *bà bōvs*. "They kill their goats."
3PL kill:**DIPF** **3PL** goat:**PL**.

and *Bà gòs·ō* *ø*. "They looked at her."
3PL look.at **3AN.OB**.

with *Bà gòsú* *ò bīig*. "They looked at her child."
3PL look.at **3AN** child:**SG**.

with ML necessarily changed to HL before the Fixed-L proclitic pronouns.

19.6.1.2 Absent L Raising after subject pronouns

Bound pronoun subjects are normally followed by L Raising despite their own fixed L tonemes [8.3 8.3.1](#).

However, the *third* persons *ò lì bà* are never followed by L Raising when the following VPred has Independency marking.

Examples with *zàb*^ε "fight" *gōs*^ε "look at" *nà'ab*^a "chief":

Without Independency marking (Sequential clause [25.3.2](#)):

<i>Kà m záb</i> <i>nà'ab lā</i> .	"And I've fought the chief."
<i>Kà ò záb</i> <i>nà'ab lā</i> .	"And he's fought the chief."
<i>Kà m gōs</i> <i>ná'àb lā</i> .	"And I've looked at the chief."
<i>Kà ò gōs</i> <i>ná'àb lā</i> .	"And he's looked at the chief."

With Independency marking:

<i>M záb</i> <i>ná'àb lā</i> .	"I've fought the chief."
<i>Ò zàb</i> <i>ná'àb lā</i> .	"He's fought the chief."
<i>M gōs</i> <i>ná'àb lā</i> .	"I've looked at the chief."
<i>Ò gòs</i> <i>ná'àb lā</i> .	"He's looked at the chief."

The first and second person bound subject pronouns *are* followed by L Raising before a VPred with Independency marking, *unless* they are immediately preceded by *yē* "that" (here introducing a Content clause [26.5](#)):

Ò tɛ̃'ɛs kà ò zàb ná'àb lā.

3AN think and **3AN** fight chief:**SG ART**.

"He thinks he's fought the chief." WK

Ò tɛ̃'ɛs 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 L Raising 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 lɛɛ dāa záb 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."

19.6.2 Segmental features

There are two segmental features of Independency marking. They occur when and only when the verb word itself has undergone *tonal* overlay, and are therefore absent whenever the verb is preceded by the particle *lɛɛ* "but", a preverbal adverb, or any VPred particle with M toneme. Similarly, they are absent when the predicator has irrealis mood or negative polarity. Verbs which have intrinsic L tonemes have unchanged stem tonemes after overlay, but these segmental features and the following L Raising show its presence.

19.6.2.1 Perfective *yā*⁺

Any perfective verb form affected by the tone overlay of Independency marking which would otherwise be phrase-final (without even an enclitic following) is followed by the enclitic particle *yā*⁺.

This particle is tonally unique among enclitic particles bearing M toneme as being Pattern O: when the LF occurs in questions, the toneme is L not H [7.4](#).

Lì b̀̀d̀̀t̀̀g yā. "It's got lost."
3INAN get.lost **PFV**.

Lì b̀̀d̀̀t̀̀g yàa⁺∅? "Has it got lost?"
3INAN get.lost **PFV PQ?**

The phrase-final constraint on the appearance of *yā*⁺ may reveal that a final element is a clause adjunct rather than a VP complement [30.3](#):

Ya yidigya b̀̀d̀̀degũ. "You are very much mistaken." (Mk 12:27)
Yà yid̀̀g yā b̀̀d̀̀degũ.
2PL go.astray **PFV** much.

M̀̀ p̀̀ú'̀̀s yā b̀̀d̀̀degũ. "Thank you very much."
1SG greet **PFV** much.

NT usually writes this particle as *-eya*, but informants show no trace of Liaison, and KB writes *ya* solid with a preceding normal Base Form. Further examples:

Sāa ní yā. "It has rained."
Rain:SG rain **PFV**.

Ò zàb yā. "She's fought."
3AN fight **PFV**.

Ò g̀̀s yā. "She's looked."
3AN look **PFV**.

Ò sà zàb yā. "She fought (yesterday)."
3AN TNS fight **PFV**.

M̄ tēñ'ès kà lì lù yā. "I think it's fallen down." (content clause)
1SG think and **3INAN** fall **PFV**.

Non-final:

Ò zàbī m. "He's fought me."
3AN fight **1SG.OB**.

Ò gòsī m. "He's looked at me."
3AN look.at **1SG.OB**.

When the tone overlay of Independency marking is absent, so is the particle:

Sāa dāa ní. "It rained." (M preverbal particle)
 Rain:**SG TNS** rain.

Ò nà zāb. "She'll fight." (irrealis mood)
3AN IRR fight.

Ò dāa záb. "He fought." (M preverbal particle)
3AN TNS fight.

Kà ò záb. "And he fought." (no Independency marking)
 And **3AN** fight.

Kà ò gōs. "And he looked." (no Independency marking)
 And **3AN** look.

Ò pū zábē +∅. "He's not fought." (negative polarity)
3AN NEG.IND fight **NEG**.

Ò pū gōsε +∅. "He's not looked." (negative polarity)
3AN NEG.IND look **NEG**.

Descriptive stative, not perfective:

Ò gīm. "She's short."

Ò mī'. "She knows."

Ò nòŋ. "She loves him." [11.1.1](#)

19.6.2.2 Imperative -m^a

Imperatives of Variable verbs which are affected by the tone overlay of Independency marking adopt the flexion -m^a [11.1](#).

<i>Gòsım!</i>	"Look!"
<i>Gòsımī m!</i> Look:IMP 1SG.OB!	"Look at me!"
<i>Gòsīm.</i>	"Look at me!" vowel absorbed 3
<i>Gòsımí fù nú'ùg!</i> Look:IMP 2SG hand:SG!	"Look at your hand!"
<i>Gòsım fù nú'ùg!</i>	<i>id</i> with <i>ı</i> -vowel absorbed 3

Without tone overlay on the verb word:

<i>Dā gōsɛ +ø!</i> NEG.IMP look NEG!	"Don't look!" (negative polarity)
<i>Kèl kà ò gōs!</i> Cause:IMP and 3AN look!	"Let her look!" (No Independency marking: subordinate)
<i>Kèm nā n gōs!</i> Come:IMP hither CAT look!	"Come and look!" (No Independency marking after CAT)

With overlay, but not a Variable verb:

<i>Dòllī m!</i> Follow 1SG.OB!	"Follow me!"
<i>Dòllī-ní m!</i> Follow-2PL.SUB 1SG.OB!	"Follow ye me!" (-ní- for -ya *ɲa before Liaison 8.2.1.2)
<i>Dì'am!</i>	"Receive!"
<i>Dì'amī ø!</i> Receive:IMP 2PL.SUB!	"Receive ye!"

Dì'əmī-ní *bā!* "Receive ye them!"
 Receive:IMP-2PL.SUB 3PL.OB!

Dì'əmī-n-ó *ø!* "Receive ye her!"
 Receive:IMP-2PL.SUB 3AN.OB!

Dì'əmī-ní *àlá!* "Keep ye on receiving!" [19.4](#)
 Receive:IMP-2PL.SUB ADV:thus!

19.7 Clitics bound to the predicator

Clitic subject pronouns [16.3.1.1](#) are bound to the predicator, and linked with it to the extent that they are involved in the tonal manifestations of Independency marking [19.6.1.2](#). Post-subject particles [24.1.4](#) capable of following clitic subject pronouns are phonologically bound to the predicator.

In this section I will treat *lèε* "but", along with preverbal adverbs, on the grounds that they intervene between tense/aspect markers and the verb, and Liaison Enclitics, which precede the focus particle *nē^{+/}* when it is an enclitic aspect marker.

19.7.1 *Lèε* "but"

lèε "but", like a preverbal adverb, prevents the tone overlay of Independency marking from falling on the verb, and is then itself followed by L Raising. *Lèε* precedes even tense particles.

Kà ò léε 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 m̄ pjàñ'ad lā léε kù gāade^{+ø}.
 And 1SG speech ART but NEG.IRR pass NEG.
 "But my words will not pass away. (Mt 24:35, 1996)

Bà lèε zāb nà'ab lā. "But they've fought the chief." WK
 3PL but fight chief:SG ART.

Kà bà léε zāb nà'ab lā. "But they've fought the chief." WK
 And 3PL but fight chief:SG ART.

Lèε zāb nà'ab lā! "But fight the chief!" WK
 But fight chief:SG ART!

NT has the *-m^a*-imperative, suggesting tone overlay on the verb, in

Lee iemini o na'am so'olim la...

Lèè 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 corrected e.g.

**Lèè gósìm ná'àb lā!* attempted: "But look at the chief!"

But look.at:**IMP** chief:**SG ART!**

to *Lèè gōs ná'àb lā.*

But look.at chief:**SG ART.**

19.7.2 Preverbal adverbs

Preverbal adverbs form a different word class from nominal adverbs. All carry the Independency marking tone overlay in place of the following main verb (cf *lèè* "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^ε* "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 pū lém zàb nà'ab láa +∅.

3AN NEG.IND again fight chief:**SG ART NEG**.

"He hasn't fought the chief again."

Ò nà lēm záb nà'ab lā. "He'll fight the chief again."

3AN IRR again fight chief:**SG ART**.

Ì nīf lém zábìd 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 ñyéε_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'om.

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.

ṁ bīg Josef nán kpèn vūε.

1SG child:SG Joseph still still be.alive.

"My child Joseph is still alive." (Genesis 45:28)

là'am "together" (cf *là'as*^ε "gather"); as a main verb *là'am*^m is "associate with."

ka nidib wusa da la'am kpi ne o.

kà nīdɪb 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*^ε "go, do first": *ṁ déŋī f* "I've got there before you.")

Dèŋ^ε 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 dèŋjum ñyē bōn-sómà 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)

màlgum "again" (cf Toende Kusaal *malig* "do again")

Amaa man pian'ad la kv maligim gaade.

Àmáa m̀ pìàñ'ad lā kú mālǵum 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 and displays no tone overlay from Independency marking.

Ò ñyēε zàbìd ná'àb lā.

3AN usually fight:DIPF chief:SG ART.

"He's accustomed to fight the chief." WK

Ò ñyēε gōsìd ná'àb lā.

3AN usually look.at:DIPF chief:SG ART.

"He's accustomed to look at the chief." WK

Ò dāa ñyēε zàbìd ná'àb lā.

3AN TNS usually fight:DIPF chief:SG ART.

"He was accustomed to fight the chief." WK

Ò ēēñ tí zàbìd nē ná'àb lā.

3AN usually fight:DIPF FOC chief:SG ART.

"He's accustomed to fight the chief." KT

Ò ēēñ tí zìñ'i kpēlá. "She's accustomed to sit there." KT

3AN usually be.sitting there.

Ò ēēñ tí dīgì kpēlá. "She's accustomed to lie there." KT

3AN usually be.lying there.

tì "afterwards" conveys accomplishment or completion; the main verb is perfective. It occurs often in VP Chaining; for *hālì 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_ ∅ tí ñyē du'átà.

Go:IMP CAT afterwards see doctor:SG.

"Go to see the doctor." SB

Noraug kv ti kaas zina nwaa, ka fu na ki'isim nɔɔra atan'.

Nō-dáùg kú tī kāas zīnā ñwāa +∅

Hen-male:SG NEG.IRR afterwards cry.out today this NEG

kà fù ná kī'isí_m nōɔrá_ 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^{+/}* 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 ^{ya} "2pl subject of direct command" or *n^ε* the Remoteness marker [27.1.1](#); there are no circumstances in which they might occur together, as the Remoteness marker is only found with indicative and irrealis moods. For my informants, the 2pl subject enclitic is an allomorph of the normal proclitic subject pronoun *yà*, but for some speakers it has become a plural imperative marker [25.2.3](#).

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^ε* "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 [20.1](#).

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:

da ku nidaa, da zuuda
dā kō nīdā +∅, dā zūudā +∅...
NEG.IMP kill person:**SG NEG**, **NEG.IMP** steal:**DIPF 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 zám̄m +∅. "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^a "be something/somehow":

Māni _┘ ∅ *áñ dɥ'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."

Māni _┘ ∅ *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 [26.4](#).

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 gbāuŋ láa* ^{+∅?} "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* ^{+∅?} "Do you love her?"
2SG want-3AN.OB PQ?

A. *Áyì, m pū bódā* ^{+∅}. "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 _┘ ∅ *gbāñ'ad*
REL.PL steal:DIPF person:PL CAT seize:DIPF
 "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:DIPF

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 bɔ-tùuma +ø? "What (work) are you doing?"
2SG work:DIPF what-work CQ?

Ka ya ninkuda zaansim zaansima.

Kà yà nīn-kúdà zàañsum záañsímà.

And 2PL person-old:PL dream:DIPF 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> ⁺	"close"	<i>nāe</i> ^{+/}	"finish"
<i>zà'mis</i> ^ε	"learn/teach"	<i>nā'mis</i> ^{ε/}	"suffer/make suffer"
<i>bòdig</i> ^ε	"lose, get lost"	<i>bàs</i> ^ε	"go/send away"
<i>dūe</i> ^{+/}	"raise/rise"	<i>mā'e</i> ^{+/}	"get cool"

Many, though not all, patientive ambitransitive verbs express a change of state and can use the base stem form as a resultative stative [19.2.2.1](#):

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*⁺ "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*^E "give" is the prototypical example, along with causatives from transitive verbs like *dìs*^E "feed" *nūlvs*^{E/} "give to drink."

M̄ tís ná'àb lā dāká. "I've given the chief a box."
1SG give chief:SG ART box:SG.

M̄ tís ná'àb lā. "I've given it to the chief."
1SG give chief:SG ART.

**M̄ tís dāká.* impossible as "I've given him a box", which is
M̄ 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.

M̄ 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", *m̄r* X *nīn-báalìg* or *zò* X *nīn-báalìg* "have pity on X", *nìŋ* X *yàddā* "believe X, believe in X", *zò* X *dābìəm* "fear X" [11.2.2.1](#), *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-těñ'-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 ^{+∅}, *sjàkımī-ní* _~ *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 _~ *∅ nīn-báalìg.*

3AN feel.emotion:DIPF 3AN.OB eye-pity.

"She has pity on him."

Bà zòt-ō _~ *∅ dābìəm.*

3PL feel.emotion:DIPF 3AN.OB fear.

"They are afraid of him."

Bà nìŋ-ō _~ *∅ 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*⁺ "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.

Among Invariable verbs, only the dynamic group may be used as passives.

Passives are limited aspectually to expressing punctual events

30.1.2.1.2.

The verb *sōb*^ε "write" is a specialised usage of *sōb*^ε "make/go dark", and is patientive ambitransitive despite the English translation. It can form a resultative:

Gbàṣṣṣ lā sōb yā. "The letter has been written."
 Letter:SG ART write PFV.

Gbàṣṣ lā sōb nē. "The letter is written."
 Letter:SG ART write FOC.

The dynamic imperfective *sōbid*^{a/} seems to accept intransitive use only when some adverbial modification is present:

Gbàna sōbid zīnā. "Letters get written today." WK
 Letter:PL write:DIPF today.

Gbàṣṣ lā sōbid sūṣā. "The letter is writing well (i.e. easily.)" WK
 Letter:SG ART write:DIPF 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:

Lìḡnīm_ fù nīf né fù nú'ùḡ.
 Cover:IMP 2SG eye:SG with 2SG hand:SG.
 "Cover your eye with your hand."

Thus *Dìḡnīm_ fù nú'ùḡ.* "Put your hand down."
 Lie.down:IMP 2SG hand:SG.

is commoner than

Dìḡlīm_ fù nú'ùḡ. "Put your hand down."
 Lay.down:IMP 2SG hand:SG.

Similarly *nìe*⁺ "appear" is usually intransitive, corresponding to transitive *nèɛl*^ɛ "reveal", but *nìe*⁺ is much more frequent than *nèɛl*^ɛ before *ò mēŋ*^{a/} "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*^ɛ

M á né fù tùm-tùm. "I am your servant."; stative *àɛñ*^a

1SG COP FOC 2SG work-worker:SG.

Àɛñ^a "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*^ɛ "name, dub" has as first object a NP with the head *yō'or*^{ɛ/} "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*^ε "call, call out, summon" can be used in the dynamic 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:**DIPF** that Peter **ART**

"who was called Peter" (Mt 10:2)

The verb is often used passively [20.1.1](#) with *yù'ur*^{ε/} "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:**DIPF** John.

"a man [habitually [30.1.2.1.2](#)] called John." (Jn 1:6)

The verb *màal*^ε "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'osí_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:**DIPF** dumb:**PL** and **3PL** hear:**DIPF** and speak:**DIPF**.

"...and even makes the dumb hear and speak." (Mk 7:37, 1976)

With a Result clause [26.2](#) after its object, *ñyē*⁺ "see, find" can have the sense "see as", resulting in a predicative sense:

M̃ 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."

M̃ 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 proadverbs of manner [16.3.3](#) 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:**DIPF** **3PL:NZ** say:**DIPF** **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:**DIPF** **3AN:NZ** **COP** **INDF.ADV**.

"The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

The indefinite proadverb *sīəm*^m 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*^a "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*^{ε/} "go, walk" *dìgɪn*^ε "lie down" *dīgɪ*^{ε/} "lay down":

...ka pu tun'e kenna..

...kà pō tūñ'e_ ∅ kēnná +∅.

3AN NEG.IND be.able **CAT** go:**DIPF** **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*⁺ [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*⁺ 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^{na/} "resemble" usually takes a phrase introduced by *nē* or *wōv* [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*^{+/} [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:**DIPF 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 *dṡ*^{la/} "accompany a person in subordinate rôle", which with *nē* means rather "be in accordance with":

Li dṡIne lin sob Wina'am gbaunḡun si'em la ye ...

*Lì dṡl nē lín sṡb Wínà'am gbáunḡ-*n* sī'am 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*⁺ "let", *mìt* "let not", *nār*^{a/} "be obliged to." Of these, *kē*⁺ does not appear at all without a following *kà*-clause, while if *nār*^{a/} appears without there is a necessarily anaphoric sense; *mìt* appears with a NP object in the sense "beware of..." [29.1.1](#).

The verb *bṡṡṡ*^a "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*^{a/} "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"; both in this case and elsewhere the "purpose" sense is reduced to mere expectation.

Verbs of cognition, reporting, and perception have as complement a Content clause, a Relative clause with *sī'am*, or a postpositional AdvP with *yēlá* "about." Most such verbs have an anaphoric sense without such an object.

The verb *àḡñ*^a "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](#).

Adnominal *kà*-clauses [26.4](#) may appear as predicative clausal complements.

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:DIPF 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 [26.5](#) 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*⁺ "come" is invariably used with *nā*; the imperative SF *kèm*, which coincides for *kēñ*⁺ "come" and *kēṅ*^{ε/} "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 ńá +∅? "Shall I bring water?" SB
1SG have water hither PQ?

b̀gúm lā yít yáa ní ná +∅?
Fire ART emerge:DIPF 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-kúùd 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-**REM** hither **CAT** talk-**REM** **3PL.OB...**

"If I had not come to talk to them ..." (Jn 15:22)

Nā^{+/} and *sà*⁺ often follow any article *lā*^{+/} 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:**DIPF** 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:DIPF hither ART
 "next month" SB

dunia kanε ken la na
dūnyá-kàni kēn lā nā
 world-REL.SG come:DIPF 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*⁺ "be somewhere, exist"

Bè⁺ is followed by L Raising even when not subjected to tone overlay by Independency marking; it is formally as well as semantically imperfective.

With no associated locative *bè*⁺ 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*⁺ 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 púvgū-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 púvgū-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⁺ is common in Presentational Constructions [30.4](#).

For the corresponding negative *kā'e*⁺ see [29.1.1](#). **pū bé* is not used.

Bè⁺ plays a rôle analogous to a "passive" to *m̄r*^{a/} "have" in constructions like:

M̄ bīg b́é. "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⁺ can be used in direct commands:

B́éé_ ànínā. "Be (i.e. stay) there!" SB
EXIST ADV:there.

B́ēe-ní_ àlá ànínā. "Be ye there!" [bɛ:nala anina]
EXIST-2PL.SUB ADV:thus ADV:there.

21.2 Àḡṅ^a "be something/somewhat"

The ɛ of the SF of àḡṅ^a 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 *Māni_ ∅ áñ dɔ'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'ɛ⁺* "not be":

M̄ k̄ā' dɔ'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^a 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 Huddleston and Pullum p266.) If it is **ascriptive**, the complement is non-referring, and normally focussed with *nē*^{+/} [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 yela.

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^a* is definite, the construction is usually specifying, with the subject in focus:

M̄ á nē dṽ'átà.

1SG COP FOC doctor:**SG**.

"I'm a doctor." ("What do you do?")

Ascriptive.

but *Māni_ ∅ áñ dṽ'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^a 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 pūvgv-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 bédvgū.

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^a is remarkable in being able to take a complement consisting of an adjective without any noun head. The article *lā^{+l}* is permitted, but no other dependents apart from ideophones [16.11.1.3](#).

Lì à nē píəlìg.

"It's white, a white one."

Lì à nē píəlìg fáss.

"It's very white."

Bà à nē píəlà.

"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 post-determining pronoun; thus only

Lì à nē būn-píàl-kàŋā. "It is this white one."

Àeñ^a often takes a manner-adverb or deadjectival abstract noun as complement [20.2.1](#). Such constructions are ascriptive, using *nē^{+/}* 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^a* also include circumstance-AdvPs [28.1](#) and even Content clauses:

M diib ane ye m tum one tumi m la na bōcdim naae.

M̄ dīlb á nē yé m̄ túm ònı̀ tùmı̀ m̄ lā nā bōcdım̄_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* [8.2.2.1.2](#) 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:

Kòlɔ̀_ ∅ 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?

B̄̄_ ∅ 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 [26.4](#) 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 túbòm-bē'edi_∅ básɪdà +∅?

Who **CAT** this **CAT** expel:**DIPF** person:**PL** deed-bad:**PL** **CAT** throw.out:**DIPF** **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:**DIPF**.

"This is he whom you saw." WK

Ànɔ'ɔni_∅ ñwá kà tì ñyētá +∅?

Who **CAT** this and **1PL** see:**DIPF** **CQ?**

"Who is this that we can see?"

Bɔɔ_∅ lá kà m̀ ñyētá +∅?

What **CAT** that and **1SG** see:**DIPF** **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 [8.2.2.1.2](#). 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 dǒ̀g

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 dàɔ-sō' dūe n zí'e lá'asùg lā nīdɪb sí̀sùvǔ-n, n áñ

And man-INDF.AN rise CAT stand assembly:SG ART person:PL among-LOC, CAT COP

Parisee níd kà ò yū'ur búèn Gamaliel, n áñ ònì pà'an

Pharisee person:SG and 3AN name:SG call:DIPF Gamaliel, CAT COP REL.AN teach:DIPF

Wínà'am wádà lā yélà, kà lé̀m àñ yū'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 Huddleston and Pullum's 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 avoiding 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 M Raising 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 the Remoteness marker *n^ε*, 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 preverbal adverb *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 [26.4](#)):

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:DIPF 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:DIPF mouth:SG and NEG.IND drink:DIPF 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 +∅, àséé bà nà tí

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 +∅?

Who **CAT** this **CAT** expel:**DIPF** person:**PL** deed-bad:**PL** **CAT** throw.out:**DIPF** **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:**DIPF** hither **CAT** eat:**DIPF** and drink:**DIPF**...

"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 zì'e ba san'an.

Kà dāpá_à́yí yé fū-píələ̀_∅ 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 preverbal adverb *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 tú'asī-ní_ bā...

1SG.CNTR if **NEG.IND** come-REM hither **CAT** talk-REM **3PL.OB...**

"If I had not come to talk to them ..." (Jn 15:22) Note **REM** on both verbs.

K̄em_ø tí ñyē d̄y'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", *k̄ūv* "or"; *b̄ēē* and *k̄ūv* 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:DIPF and praise:DIPF **CAT** elevate:DIPF

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:DIPF and pay:DIPF **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⁺ "exist, be somewhere" + **àínā** "there" + imperfective "be in the process of ..."

Ò bè àínā n ñwé'èd bīg lā.

3AN EXIST ADV: there **CAT** beat:**DIPF** child:**SG ART**.

"He's currently beating the child."

àēñ^a "be something/somehow." This construction is parallel to the Adnominal *kà*-clause type [26.4](#) 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 sīdi_ ∅ sú'v_īl.

3INAN COP FOC 3AN husband:**SG CAT** own **3INAN.OB**.

"It's her husband who owns it." (1 Cor 7:4)

mī⁺ "know", **zī**⁺ "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 bànı būudi pāadí_ yā lā nám mī_ ∅ pāe sīēba mén.

Testing **REL.PL** sort reach:**DIPF 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)

Ì nám zī_ ∅ ñyē gbīgımne⁺∅.

1SG still **NEG.KNOW CAT** see lion:**SG NEG**.

"I've never seen a lion." SB

zàñ^ε and **nōk**^{ε/} "pick up, take" with object "using" (of a literal object as instrument)

Ì nók sú'ugò_ ∅ kǐá nīm lā.

1SG pick.up knife:**SG CAT** cut meat:**SG ART**.

"I cut the meat with a knife."

Ì zánjí_ ò nú'ugò_ ∅ sī'ıs dāká lā.

1SG pick.up **1SG** hand:**SG CAT** touch box:**SG ART**.

"I touched the box with my hand."

(**Ì zánjí ò nú'ug kà sī'ıs dāká lā* "I picked up my hand and touched the box.")

m̄r^a "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^a "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 d̄ḡḡ_∅_ ∅ t̄s-ò_∅_ lór.

1PL precede CAT give 3AN.OB car.

"We previously gave him a car." (*d̄ḡḡ^ε* "do/go first")

Ka dau s̄' duoe zi'en la'asvḡ la svvḡin ...

Kà dàv-s̄' d̄ūe_∅_ z̄'èḡ là'asvḡ lā súvḡō-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:

M̄ k̄ḡḡ_∅_ p̄ā nú'ùs. "I went and washed my hands."

1SG go CAT wash hand:PL.

s̄v̄'ā^a "conceal" is used in this construction for "secretly":

Ka Na'ab Herod su'a buol baḡidib la ...

Kà Nà'ab Herod s̄v̄'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^{ε/} 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**^{ε/} 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 vūb-n
 law-**REL.INAN** prevail:**DIPF-REM CAT** cause:**DIPF-REM** and person:**PL** be.alive-**REM**.
 "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 bà 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 dynamic imperfective forms in *-d^a* and **tūñ'e** occurs before both perfective and imperfective main verbs. The verb is thus Invariable. Unlike **ňyāŋ**^{ε/}, **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_ ∅ sy'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:**DIPF 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:**DIPF** **NEG.**

"He could not speak." (Lk 1:22)

Tūñ'e occurs as auxiliary to *ñyāŋ*^{ε/} 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^ε "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^E "pass, surpass" can be used in comparisons:

Isaac kárìm_ ∅ gát John.

Isaac read:**DIPF** **CAT** pass:**DIPF** John.

"Isaac reads better than John." SB

À-Wīn gím_ ∅ gát À-Būgv̄r.

PERS-Awini be.short **CAT** pass:**DIPF** **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:**DIPF** **DEM.DEI.PL** **PQ?**

"Do you really love me more than these?" (Jn 21:15)

gális^E "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_ ∅ gálisìdā +∅.

NEG.IMP read:**DIPF** book:**PL** **CAT** exceed:**DIPF** **NEG**.

"Don't read books too much."

bàs^E "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.

An̄v̄'òn̄ n̄wāa yìsid n̄idib tvumb̄e'edi basida?

Àn̄v̄'òn̄_ ∅ ñwāa_ ∅ yìsid n̄idib túùm-bē'edi_ ∅ básìdā +∅?

Who **CAT** this **CAT** expel:**DIPF** person:**PL** deed-bad:**PL** **CAT** throw.out:**DIPF** **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:DIPF fairy-bad-PL CAT expel:DIPF 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:DIPF donkey:SG CAT enter:DIPF 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⁺ "reach")

wēn^{na/} "be like" is very common in VP Chaining. **Wēn^{na/}** + 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^{na/} takes a prepositional phrase with **wōv** "like" or **nē** "with" as complement [18.1](#). Any object without the article **lā⁺**, even a pronoun or proper name, must be followed by a meaningless **nē**. Before numbers and measurements **wēn^{na/}** means "about, approximately"; numbers when appearing alone are not followed by **nē**:

Li anε wuv maila ayi' nε.
 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 wuu kɔbiga ne pisi.*

kà bà kāl áñ wūw kóbigā nē pīsí.

and **3PL** number:**SG COP** like hundred with twenty

"and their number was about 120." (Acts 1:15)

là'am^m "together" is also found as a preverbal adverb [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 pō lá'amìd tāabaa +∅.

3PL NEG.IND associate:**DIPF** each.other **NEG.**

"They don't associate together."

yà'as^ε or **yà'as^a** "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⁺** preceding Catenator-*n*

Hālí⁺ [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 24.1.1 clauses require a subject NP.

Clause-level particles appear in various positions within the clause structure: clause-linker particles 24.1.2, post-subject particles 24.1.4 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 24.2.

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⁺* 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 yēlt-ní_ yā yē ...
 If **NEG.BE-REM** **ADV:thus**, **1SG** then **NEG.IRR** say-**REM** **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 18.1
<i>àsέε</i>	"unless" (cf Hausa <i>sai</i>); preposition 18.1

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_ ∅ kpí⁺∅, 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* 26.5.3):

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⁺∅,

God TNS NEG.IND choose 1PL.OB that 1PL work dirt work NEG,

à m á a y é t i b é ñ y ā e .

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⁺* "now" and *lin a si'em la lín à sī'əm lā* "as things stand":

	<u>X alone</u>	<u>kà X</u>	<u>X kà</u>
<i>nānná-nā⁺</i>	33	28	4
<i>lín à sī'əm 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 ká' 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*^{+/} "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 [26.5](#), 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 wūv 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 wūv yà á né m bīs nē.

1SG speak:DIPF CAT give:DIPF 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, Huddleston and Pullum (pp1011ff) classify 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) [16.7](#).

24.1.4 Post-subject particles

Two particles marking nominalised subordinate clause types follow the subject: *yà* "if" [27.1](#) and Nominaliser-*ñ* [28](#); *sādigím* "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) seems only to be found with negatives:

Ka so' kudin ku len nyee li ya'asa.

Kà sō' kōdum kú lēm ñyée_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 táñs nē kúkō-títā'ar kà ñyāan kpi.

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 bū'osí_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 ane Zugsɔb maliak.

Manoa yū'un dá bàn yé ò à nē Zūg-sób 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 *kúv* or *bée* [25.2.2](#); indirect commands [26.2](#) [26.5.1](#); ellipsis of complements of verbs [20.1](#); *kà*-preposing and *n*-focus [30.1.1](#) [30.2](#); *hālí* as

intensifier [18.1](#); ambiguity with coordinated modifiers and determiners in the NP and cases where a pre-modifier applies to a coordinated head [16.7](#); and omission of aspect-marking *nē* in replies to questions [30.1.2.1.2](#). Implicit tense marking [19.3.3](#) 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" [26.5.3](#), in which case it precedes the *kà*. Thus, with *kà yē*, a clause must have been ellipted between the two clause linker particles:

M̀ pō t̀sì_f gbáyŋ lā yé f̀ù kúəsì_lí +∅,
1SG NEG.IND give **2SG.OB** book:SG ART that **2SG** sell **3INAN.OB NEG,**
kà yé f̀ù 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

Lì tòl.

"It (weather) is hot."

Lì à súnā.

"It's good."

Lì nàr kà f̀ù kũl.

"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 L Raising that would follow the pronoun remains [8.3](#). Pronouns after *kà* introducing a Content clause are not subject to this [26.5](#), and Adnominal *kà*-clauses [26.4](#) 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 wēlá kà ...?*" [26.2](#).

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 [16.3.1.1](#) this can mean any antecedent of the same number, and can trump semantic appropriateness, e.g. (all WK):

Pṽ'ā lā dá' dāká kà kēŋ 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 kēŋ 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 kēŋ 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 kēŋ 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 ñyē dāy ...

3PL:NZ TNS emerge:**DIPF ART**, and see man:**SG**...

"As they were going together, (they) saw a man ..." (Mt 27:32)

Ban wum nē'εŋa la ka sīn.

Bán wùm nē'ŋá 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 19.6	Not Independency-Marked
Main or Insubordinate	Main clauses 25	<i>kà</i> Sequential clauses 25.3.2 <i>kà</i> Coordinated Main 25.3.1
Subordinate	<i>yē</i> Content clauses 26.5 <i>kà</i> Content clauses 26.5	<i>yē</i> Purpose clauses 26.1 <i>kà</i> Result clauses 26.2 <i>kà</i> Adnominal clauses 26.4
Nominalised Subordinate		<i>ñ</i> Absolute/Relative clauses 28 <i>yà'</i> Conditional clauses 27.1

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*^{+/} 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 quite different groups. **Purpose** clauses [26.1](#) always have main VPs with imperative mood, and lack Independency marking:

M̄ pū bɔ̀ɔ̀d yé fù kēŋ Bókō +∅.
1SG NEG.IND want that **2SG** go Bawku **NEG.**
 "I don't want you to go to Bawku."

Purpose clauses show tense marking only if the main clause is ellipted [19.3.1](#).

On the other hand, **Content** clauses [26.5](#) are downranked Main clauses, showing both Independency marking and the full range of possible Main clause structures. Content clauses 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 téŋ'ès kà nīgí lā ɔ̀ŋ̀bìd nē.
1SG think and cow:PL **ART** chew:DIPF **FOC.**
 "I think the cows are eating." WK; Content clause [26.5](#) showing focus marking

All other subordinate clauses introduced by *kà* lack Independency marking, as expected:

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 [26.2](#)

Like Purpose clauses, Result clauses cannot have focus marking, or tense marking (unless the main clause is ellipted): KT rejected

**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.**

**M̄ dāa pō ñyē dāy lá kà ò á nē ná'abā* +∅.

1SG TNS NEG.IND see man:SG **ART** and **3AN COP FOC** chief:SG **NEG**.

In coordinating function, *kà* is never followed by Independency marking. This use of *kà* to coordinate semantically and structurally independent clauses is especially characteristic of narrative [25.3.2](#), 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 búø̀lì 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 yuugε ka o pu'a mε 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*⁺ "cause" [26.2](#), unexpectedly placed after the phrase-final perfective marker *yā* [19.6.2.1](#) in

Amaa Wina'am keya ka ya an nōɔr yinne nε 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/bēε* "or", not *nē* like *ñ*-clauses:

M̄ bódòd yē dāy lā kēη 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 [26.5](#). 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*^{+/} 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, *sādīgím*-clauses [28.1.1](#), AdvPs like *àlá zùg*, *dìn zùg* "therefore"; *lì ñyá'an*^a "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*^a 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 L Raising [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 for *lìā* [22](#)) contain an interrogative pronoun or determiner; the final word of the question appears as a LF with a tone perturbation due to the final Interrogative 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 *b̄* in the sense "why?" (compare the parallel construction with a demonstrative pronoun expressing a reason in *Dìn kà Kūsáàs yē ...* "That is why the Kusaasi say ..." KSS p16.)

Ánó'ónì_ø ñyē bígà +ø?

Who CAT see child:SG CQ?

"Who has seen a child?"

Fù b̄óòd b̄ +ø?

2SG want what CQ?

"What do you want?"

B̄ kà fù kúmmà +ø?

What and 2SG weep:DIPF CQ?

"Why are you crying?"

For "which?" the short demonstratives are used:

Lìnɛ?

"Which one?"

Nīf-kánè?

"Which eye?"

Nīn-kánè?

"Which person?"

Fù b̄óòd 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, *bō*⁺ is a determiner: "what?":

<i>nā'-bó</i>	"what cow?" WK DK (not <i>náaf bó</i> , only possible in the sense "What, of a cow's?")
<i>bò-bō</i>	"what goat?"
<i>dā-bó</i>	"what beer?"

Bò- can be used as a pre-modifier, querying a description: "what sort of ...?"

Fò túm bó-tùuma +ø?
2SG work:DIPF what-work CQ?
"What kind of work do you do?"

Bo yir ka ya na me' n tis mane?
Bò-yír kà yà ná mē n tís mánè +ø?
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 *bò-būudi*⁺ "what kind of?" can be used as a post-determiner:

<i>nā'-bó-būudi</i>	"what kind of cow?"
<i>dā-bó-būudi</i>	"what kind of beer?"

Note the idiom:

Fò á nē bó- būudi +ø? "What tribe do you belong to?"
2SG COP FOC what sort CQ?

The focus particle *nē*^{+/} may not be used in content questions; this applies also to aspect-focus *nē*^{+/}.

Dāy lā ñyé bíig. "The man has seen a child."
Man:SG ART see child:SG.

Ánó'ɔ̀nì_ø ñyē bíigà +ø? "Who has seen a child?"
Who CAT see child:SG CQ?

Dāy lā ñyé ànó'ònè +∅? "Whom did the man see?"
 Man:SG ART see who CQ?

or *Ànó'òn 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:DIPF FOC goat:PL.

Ànó'ònì_∅ kùvd bōvsè +∅?
 Who CAT kill:DIPF goat:PL CQ?
 "Who is killing goats?" Progressive sense without *nē*.

Ànó'òn bīgi_∅ ñwá +∅? "Whose child is this?"
 Who child:SG CAT this CQ?

Bó kà fù kúesìda +∅? "What are you selling?"
 What and 2SG sell:DIPF 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:DIPF 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 Interrogative 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:DIPF FOC goat:PL PQ?

Ṁ á nē dávu +∅? "Am I a man?"
 1SG COP FOC man:SG PQ?

Fò p̄ wúmmàa +∅ +∅? "Don't you understand?"
 2SG NEG.IND hear:DIPF NEG PQ? (expects *ēēñ*, here "no")

Note that the Negative Prosodic Clitic **NEG** is effectively lost before the Interrogative Prosodic Clitic **CQ** or **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 [26.2](#) [26.5.1](#).

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 ^{ya}; for the realisation of ^{ya} see [8.2.1](#) and [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, fūn dā m̄ɔɔd yé fù bás-ō-o +∅.

2SG if have wife:**SG**, **2SG NEG.IMP** struggle:**DIPF** 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 [26.5.1](#), 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!"

However, some speakers do still keep the enclitic ^{ya} after the verb even when there is a pronoun subject before it:

Ò yèl yé bà gòsɪm̄_ ∅ tēŋɪ-n.

3AN say that **3PL** look:**IMP** **2PL.SUB** ground:**SG-LOC**.

"He said to them: Look down!" WK

Similarly in VP Chaining, where WK treats ^{ya} as a pronoun and, consistently with this, does not repeat it:

Kèṁṁ_ ∅ nā n gōs!

Come:**IMP** **2PL.SUB** hither **CAT** look!

"Come (ye) and look!"

such speakers have

Kèṁṁ_ ∅ nā n gōsṁ_∅!

Come:**IMP** **2PL.SUB** hither **CAT** look **2PL.SUB!**

"Come (ye) and look!"

For these speakers ^{ya} is no longer a pronoun but an imperative plural marker.

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>T̀.</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> 3INAN finish FOC PQ?	"Is it finished?"
<i>Ēēñ.</i>	"Yes."
<i>Áyì.</i>	"No"
<i>Lì p̄ nāée +∅ +∅?</i> 3INAN NEG.IND finish NEG PQ?	"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>M̄ bīga +∅!</i> 1SG child:SG VOC!	"My child!"
<i>M̄ bīse +∅!</i> 1SG child:PL VOC!	"My children!"

M̃ pɥ'ā né m̃ bīise +∅!
1SG wife:**SG** with **1SG** child:**PL** **VOC!**
 "My wife and my children!"

M̃ dīammā +∅, bó kà fù kúesida +∅?
1SG parent.in.law:**SG** **VOC**, what and **2SG** sell:**DIPF** **CQ?**
 "Madam [32.1](#), what are you selling?"

Vocative phrases often end in *ñwà* "this":

<i>Bīs ñwá!</i>	[bi:sa]	"Children!"	8.5.1 .
<i>Pɥ'ā ñwá!</i>	[pʰɥ̄wã]	"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 wuv 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 ten'es ye o dɔlne 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 wūv bān ɛɛñ tí niŋid sī'əm lā. Kà málùŋ lā dábisà_ø

ART like **3PL:NZ** usually do:DIPF **INDF.ADV ART**. And sacrifice:SG **ART** day:PL **NZ**

nāe lā, kà bà léɓidi_ø kūn. Kà Yesu kpelim Jerusalem

finish **ART**, and **3PL** return:DIPF **CAT** go.home:DIPF. And Jesus remain Jerusalem

téŋī-n kà ò bā' né ò mà pū bāŋ yé ò kpelim

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-dim 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 da 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, the dynamic imperfective appears without aspectual *nē^{+/}* in Sequential clauses to express several instances of an event:

Ka on kpen' 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:DIPF 3AN.OB.

"After he came in, he said to them [...]. But they **laughed** at him." (Mk 5:39-40)

N̄-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:DIPF good:ADV 3AN:NZ TNS COP child-baby:SG ART PQ?

"Did he see well when he was a baby?"

but *Ka Pita yu'un tien Yesu n sa yel si'el la ye ...*

Kà Pita yū'un tíeñ 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 [19.3.3](#). This phenomenon also explains the apparent appearance of aspectual *nē*^{+/-} in 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:DIPF 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 nōbɪgɪd.

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 bīga +∅, 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 kùdig 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 [26.5.3](#), 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:DIPF 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 conjunctions, pre-subject adjuncts and constituent-focussing *nē*^{+/} 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 aspect interpretation of a verb Base Form followed by the particle *nē*^{+/} when presented in an isolated *kà*-clause without tense marking. Such clauses were always interpreted as expressing events, with the particle *nē*^{+/} necessarily marking constituent focus, not aspect:

26 Subordinate clauses after *kà* and *yē*

26.1 Purpose clauses

Purpose clauses are introduced by *yē* and have imperative mood. There is no Independency marking and hence no special *-m^a* flexion of Variable verbs, but the mood is apparent in the use of *dā*, not *pō* or *kù*, as the negation particle.

Purpose clauses may appear as main clause adjuncts:

Bà tìs-ō_∅ kú'è m yé ò nū.

3PL give **3AN.OB** water that **3AN** drink.

"They gave him water to drink. ("So that he might drink it.")

M 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."

Purpose clauses appear as complements of particular verbs, e.g. *bòd^a* "want":

M bòd yé ò kūl.

1SG want that **3AN** return.home.

"I want her to go home."

M pō bòd yé m kūl +∅.

1SG NEG.IND want that **1SG** return.home **NEG.**

"I don't want [me] to go home."

Negative raising [29.2](#) occurs with *bòd^a*, as above, but not with e.g. *yél^ε* "tell":

cf *M yélī_f yé fù dā kūl +∅.*

1SG tell **2SG.OB** that **2SG NEG.IMP** return.home **NEG.**

"I told you not to go home."

The "purpose" sense is sometimes very attenuated:

Ka ba gban'e ba kpen'es sanrega ni ye beog nie.

Kà bà gbán'a_bā_∅ kpéñ'ès sārīgá nī yē bēog níe.

And **3PL** seize **3PL.OB CAT** put.in prison:**SG LOC** that morning appear.

"They seized them and put them in prison until tomorrow should come."

(Acts 4:3)

The verb *gūr*^{a/} "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, again with this attenuated sense:

Nidib la daa gur Zakaria yiib na.

Nīdīb lā dāa gūr Zakaria yīīb nā.

Person:PL ART TNS watch Zechariah emerge:GER hither.

The people were watching for Zechariah's coming out. (Lk 1:21)

dap banε gur ye ba zugdaan naan pu'adiir di'ema zin'igin kul na

dàp-bànι gūr yé bà zūg-dààn nāan pu'á-dīir dí'ēmà

man-REL.PL wait that 3PL head-owner:SG be.there wife-taking:SG feast:PL

zīñ'igī-n_ ø 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)

... gur ye pu'a la du'a ka o ɔnb biig la.

... gūr yē pu'ā lā dū'á kà ò ɔñb bīig lā.

watch that woman:SG ART bear and 3AN eat child:SG ART.

"...waiting for the woman to give birth so that he could devour her child."

(Rev 12:4)

Purpose can also be expressed by VP Chaining [23](#), often including the preverbal adverb *tì* [19.7.2](#).

26.2 Result clauses

Clauses introduced by *kà* may express **result**. Such clauses differ from Sequential clauses and Main clauses coordinated by *kà* in being subordinate, but the distinction between Result clauses and Sequential clauses is only clear-cut when Sequential clauses show features such as adjuncts preceding the subject, focus with *nē*^{+/}, or clefting with *kà* demonstrating unequivocal insubordination [24.2](#). There is no formal criterion to distinguish a case like

Ò vùl tìim kà ò nóbùr pō zábē +ø.

3AN swallow medicine and 3AN leg:SG NEG.IND fight NEG.

"She drank medicine and her leg didn't hurt." (*pō* negative indicative)

from a mini-narrative where the second clause is simply Sequential. Nevertheless, clearly subordinate Result clauses frequently appear as complements of particular

verbs and in various constructions expressing permission, necessity, or ability. Such constructions always induce negative raising [29.2](#).

KĒ⁺ "let, leave off" is used with a Result clause in the sense "let, cause that":

Tì kĕ kà bà lébìsì tī. "We made them reply to us."

1PL cause and **3PL** reply **1PL.OB**.

Ò kè kà bà pō kūlɛ +∅.

3AN cause and **3PL NEG.IND** return.home **NEG**.

"He caused them not to go home." (indicative)

The irregular imperative *kĕl*^a, followed by a *kà*-clause with imperative mood, creates a way of expressing indirect commands, including first and third persons:

Kĕl kà ò gōs tēŋɪ-n.

Cause:**IMP** and **3AN** look ground:**SG-LOC**.

"Let him look down."

Dā kĕ kà dābìàm bĕɛ +∅!

NEG.IMP cause and fear **EXIST NEG**.

"Don't be afraid." ("Let fear not exist.")

Kĕl [or *Kĕlĭ* ∅] *kà tì pú'ùs Wínà'am.*

Cause:**IMP** cause:**IMP 2PL.SUB** and **1PL** greet God.

"Let us praise God."

In informal speech *kĕl 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 tēŋɪ-n.

3AN look ground:**SG-LOC**.

"Let her look down."

(No Independency marking, so no tone overlay on *gōs*.)

Tì pú'ùs Wínà'am.

1PL greet God.

"Let us praise God."

(homophonous with "We thank God.")

Ì gōs nīf lā.

1SG look.at eye:**SG ART**.

"Let me look at the eye."

(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 dígìnèè +∅? "Am I to lie down?"
1SG lie.down **PQ?** (No Independency marking: no imp *-m^a*)

Tì záb ná'àb lā. "We've fought the chief."
1PL fight chief:**SG ART.** (Independency: Tone overlay on *záb* seen in the following L raising [19.6.1.1](#))

Tì záb nà'ab lā. "We should fight the chief."
1PL fight chief:**SG ART.** (No Independency: No tone overlay on *záb*.)

Another tonal minimal pair with and without Independency marking:

Ò zàb ná'àb lā. "He's fought the chief."
3AN fight chief:**SG ART.**

but *Ò záb nà'ab lā.* "He should fight the chief."
3AN fight chief:**SG ART.** (No Independency: No tone overlay on *záb*.)

Absence of Independency marking here forces interpretation as a subordinate clause, with an ellipited main clause *M̄ bódòd yē ...* "I want that ..." or *Kèl kà... .*

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 Result 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 tùm-sùma nīdib túòn yé bà gōs.
NEG.LET.IMP and **2PL** make **2PL** deed-good:**PL** person:**PL** front that **3PL** look.at.
 "See that you don't do your good deeds in front of people so they'll look."
 (Mt 6:1)

The idiom "X *nìṅ wēlá kà ...?*" means "how can X ...?" with ellipse of the repeated subject after *kà* introducing a Result clause:

M na niṅ wala ka nyε faangirε?
M̄ ná nīṅ wēlá kà ñyē fāaṅgírè +∅?
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 Result clause:

Li niŋ wala ka o an David yaaŋa?

Lì niŋ wēlá kà ò áñ David yáàŋa +∅?

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*⁺ "see" it is possible to make a construction meaning "see *as*" (all KT's translations):

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 p̄ 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 did not accept the readings "I saw the man, who was a chief" or "I didn't see the man, who was a chief" with the *kà*-clause interpreted as adnominal.

26.3 Necessity and permission

Expressions of necessity or permission may be followed by a clause introduced by either *yē* or *kà*. The constructions induce negative raising [29.2](#), so the mood of the subordinate clause is not formally determinable. Thus *nār*^{a/} "be obliged to" (negated "be obliged not to"); *mōr sūər* "be allowed to"; *lì à [nē] tīlās* "it is necessary":

F̄ ò p̄ nār yé f̄ níŋ àláa +∅.

2SG NEG.IND must that **2SG** do **ADV:thus NEG**.

"You're not allowed to do that."

Yà mōr sūər yé yà k̄l.

2PL have way:**SG** that **2PL** return.home.

"You may go home."

Lì nār yé/kà f̄ k̄l.

3INAN must that/and **2SG** return.home.

"You must go home."

Lì p̄ nār yé fù k̄le +∅.

3INAN NEG.IND must that **2SG** return.home **NEG.**

or *Lì p̄ nár kà fù k̄le* +∅.

3INAN NEG.IND must and **2SG** return.home **NEG.**

"You must not go home."

Sūer bé yé/kà tì k̄l.

Way:**SG EXIST** that/and **1PL** return.home.

"We may go home." (" There's a way that ...")

Li a tilas ye m keḡ Jerusalem.

Lì àñ t̄lās yé m̄ kēḡ Jerusalem.

3INAN COP necessity that **1SG** go Jerusalem.

"I must go to Jerusalem." (Mt 16:21, 1996)

Li ane tilas ka m niḡid ala.

Lì à nē t̄lās kà m̄ níḡid àlá.

3INAN COP FOC necessity and **1SG** do:**DIPF ADV**:thus.

"I must do that." (1 Cor 9:16, 1996)

26.4 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:

Aseḡ linḡ an bē'ed ma'aa ka m na tun'e niḡ.

Àséḡ líni àñ bē'ed má'aa kà m̄ ná tūñ'e_∅ níḡ.

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 anḡ ya taaba banḡ 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:**DIPF** 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 sɔ' da bɛ Sizerea, ka o yu'ur buon Konelius.

Dà̀y-sɔ' dá bɛ Sizerea kà ò yū'ur búèn Konelius.

Man-**INDF.AN TNS EXIST** Caesarea and **3AN** name:**SG** call:**DIPF** Cornelius.

"There was a man in Caesarea whose name was Cornelius." (Acts 10:1)

Anina ka o nyɛ 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:**DIPF** Aeneas.

"There he found a man whose name was Aeneas." (Acts 9:33)

The main clause may have a non-verbal predicator [22](#):

Ōni_ ø lá kà fù dāa ñyēt.

3AN.CNTR CAT that and **2SG TNS** see:**DIPF**.

"This is he whom you saw." WK

Ànɔ'ɔni_ ø ñwá kà tì ñyētá +ø?

Who **CAT** this and **1PL** see:**DIPF CQ**?

"Who is this that we can see?"

Bɔɔ_ ø lá kà m̀ ñyētá +ø?

What **CAT** that and **1SG** see:**DIPF 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. This is the only case in which an Adnominal *kà*-clause has the same subject as the main clause:

Dau sɔ' da bɛ Listra tengin an pɔn'ɔri zin' o nɔba zug ka pu tun'e kenna.

Dà̀y-sɔ' dá bɛ Listra tɛŋi-n_ ø áñ pɔñ'òri_ ø zĩñ'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_ ø kēnná +ø.

upon and **NEG.IND** be.able **CAT** go:**DIPF** **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](#).

26.5 Content clauses

For Content clauses after prepositions used as conjunctions 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^ε</i>	"say"	<i>wòm^m</i>	"hear"
<i>ñyē⁺</i>	"see"	<i>tēñ'εs^{ε/}</i>	"think"
<i>mī⁺</i>	"know"	<i>bàŋ^ε</i>	"come to know"
<i>pà'al^ε</i>	"teach, show"	<i>kàrim^m</i>	"read"
<i>zī⁺</i>	"not know"		

Except in indirect speech [26.5.1](#), 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 +∅?

2SG hear:**DIPF** **3PL:NZ** say:**DIPF** **INDF.ADV** **ART** **PQ?**

"Do you hear what ["how"] they are saying?" (Mt 21:16)

Bà nà yēl-o_∅ ́n nà nīŋ sī'əm.

3PL **IRR** say **3AN.OB** **3AN:NZ** **IRR** do **INDF.ADV**.

"They will tell him what he is to do."

An Absolute clause [28.1](#) cannot be used as the object of a verb of cognition, reporting, or perception; for "know (etc) the fact that ..." Content clauses must be used.

Another possibility for the object of such verbs is NP + *yēlá* "about" [17.6](#).

In WK's speech *yē* + Content clause is usual, but he prefers *kà* + Content clause after *tēñ'εs^{ε/}* "think"; the structure is otherwise the same, and this therefore constitutes an exception to the rules that *kà* is never followed by Independency marking, and that *kà* deletes a following subject pronoun with the same reference as the preceding subject:

Ò *těň'ēs* *kà* ò *zàb* *ná'áb* *lā*.

3AN think and **3AN** fight chief:**SG** **ART**.

"He thinks he's fought the chief." WK

Ì *těň'ēs* *kà* ò *à* *nē* *du'átà*.

1SG think and **3AN** **COP** **FOC** doctor:**SG**.

"I think she's a doctor." WK

Ì *těň'ēs* *kà* ò *lù* *yā*.

"I think she's fallen." WK

1SG think and **3AN** fall **PFV**.

Ì *těň'ēs* *kà* *m* *lú* *yā*.

"I think I've fallen" WK

1SG think and **1SG** fall **PFV**.

Ì *těň'ēs* *kà* *nīgí* *lā* *śñbìd*.

1SG think and cow:**PL** **ART** chew:**DIPF**.

"I think the cows eat." WK

Ì *těň'ēs* *kà* *nīgí* *lā* *śñbìd* *nē*.

1SG think and cow:**PL** **ART** chew:**DIPF** **FOC**.

"I think the cows are eating." WK

NT/KB sometimes has *kà* + content clause after other verbs, and *yē* + content clause after *těň'ēs*^{ε/}.

Ya pūn wum ka ba da yeI ye...

Yà pún wùm kà bà dá yèI yē ...

2PL previously hear and **3PL** **TNS** say that...

"You previously heard that they had said ..." (Mt 5:43)

...yanam banim ka li san'auŋ li'el ya.

...yānám bāŋum 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 těň'ēs yé m mōɔd yé m mā'e nīdɪb súñf bée +∅?

And **2PL** think that **1SG** strive:**DIPF** 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 *nε* for *yε yē* "that" (cf Mampruli *ni id*):

Man bɔɔdin nɛ yanamɛ naan aan ma'asiga bɛɛ yanamɛ naan aan tvuliga.

Mān bɔɔdī-n nē yānámì_∅ nāan áa-n mā'asígā bɛɛ

1SG.CNTR want-REM that **2PL** **NZ** then **COP-REM** cold:ADV or

yānámì_∅ nāan áa-n tūvígā.

2PL **NZ** then **COP-REM** 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** [26.5.2](#) 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 kūl.

3AN TNS say that **3PL TNS** return.home.

"She said that they had gone home."

Tì dāa tēñ'es 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*⁺ 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*^{la/}"be hot")

There is tone overlay due to Independency marking on *tūl*^{la/}; the final LF is induced by the Negative Prosodic Clitic belonging with *zī'*.

26.5.1 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 [26.5.3](#). This is an uncommon strategy in the older texts and in 1976 NT version, where it seems to be chosen mostly for 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 [26.5.2](#) 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'əs-ó_ø 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 sūuñrí-n ... +ø?

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^a* 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^a* 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:

[M̄ yél yé] ò gòsim tēŋi-n.

1SG say that **3AN** look:**IMP** ground:**SG-LOC**.

"[I said] she should look down."

[M̄ tēñ'ès kà] tì pú'usim 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:

Ò zuanam ne o saamnama, ye ba kelisim.
Ò zuà-nàm né ò sàam-nàmā⁺∅, yé bà kèlɪsɪm!
3AN friend-PL with **3AN** father-PL **VOC** that **3PL** listen:IMP! (Acts 7:2, 1976)
 for "My friends and my fathers, listen!"

Ka m wum Wina'am kokor ka li yi arazana ni na ye,
o nidiba, ye ba yimi teng la ni na.
Kà m̀ wúm Wínà'am kúkór kà lì yī áràzánà ní nā yē,
 And **1SG** hear God voice:SG and **3INAN** emerge heaven **LOC** hither that
ò nīdibá⁺∅, yé bà yīmī_ ∅ 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)

26.5.2 Logophoric pronouns

Within Content clauses personal pronouns are altered throughout as in English indirect speech, except in directly embedded passages of direct speech [26.5.1](#).

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.

Thus "He₁ said he₁ would kill them." is usually

Ò yèl yē ɔn 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 "He₁ said he₂ would kill them."

So, for example (all from the 1976 NT version):

Wina'am ye ... arazana ane on na'am kuk ... bo yir ka ba na me n tis one?

Wínà'am yé ... àrazánà á nē ōn nā'am kúk

God say:that...heaven:SG COP FOC 3AN.CNTR realm chair:SG

... b̀̀-yr̀̀ k̀̀à b̀̀à ná mē n tís ònε +∅?

... what-house:SG and 3PL IRR build CAT give 3AN.CNTR CQ?

"God says: heaven is his throne ... what house will they build for him?"

(Acts 7:49)

for *Àrazánà á né m̀̀ nā'am kúk*

Heaven COP FOC 1SG realm chair:SG

... b̀̀-yr̀̀ k̀̀à ỳ̀à ná mē n tísì_m̀̀à +∅?

... what-house:SG and 2PL IRR build CAT give 1SG.OB CQ?

Festus tans Paul ye o geem ne ... ka Paul lebis ye on pu geem.

Festus táńs Paul yé ò gèēńm nē ... k̀̀à Paul lébìs

Festus shout Paul that 3AN go.mad FOC ... and Paul reply

yē ōn p̄̀ gèēńmm +∅.

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)

26.5.3 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](#).)

... amaa ye ba yaanam da pu bood ye ba siak o noore

... àmáa yé b̀̀à yāa-nám dá p̄̀ b̀̀òòd yé b̀̀à s̄̀ják-ò_∅

... but that 3PL ancestor-PL TNS NEG.IND want that 3PL agree 3AN.OB

n̄̀w̄̀r̄̀é +∅.

mouth:SG NEG.

" ... but their ancestors did not want to obey him" (Acts 7:39, 1976)

Alazug ye Wina'am sadigim tisi ba piini kan ka o daa tisi ti la...

Álá z̀̀g yē Wínà'am ∅ s̄̀adigim tísì_b̄̀ā p̄̀iini-kán k̀̀à ò dāa

Thus that God NZ since give 3PL.OB gift-REL.SG and 3AN TNS

tísì_t̄̀ī l̄̀ā...

give 1PL.OB ART.

"Thus, since God had given them the gifts that he had given us ..."

(Acts 11:17, 1976)

Ye ka Paul yel ye o bood ye o kpelim sarega ni.

Yé kà Paul yél yé ò bòòd yé ò kpélim sārígá 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 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 ka on ke ka ba mor o ba sa'an na ...

Àlá zùg yé kà òn ké kà bà mōr-ó_ø bà sā'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 also 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 bā Wínà'am né ò pù-pìəlim

And now-hither that **3AN** do **3PL.OB** God with **3AN** inside-whiteness

pjǎǎ'əd 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^{+ø}, yé bà kèlɪsɪm!

3AN friend-**PL** with **3AN** father-**PL** **VOC** that **3PL** listen:**IMP**!

"His friends and my 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 (cf [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'ari_ ∅ lōɔ-n_∅

3INAN then be.better-**REM 3PL** if take-**REM** millstone-big:**SG CAT** tie-**REM CAT**

kólī-n ɔn nín-gòɔr kà záŋ-ò_∅_∅ lōb_

put.around.neck-**REM 3AN.CNTR** body-neck:**SG** and take **3AN.OB CAT** throw

∅ bás kōlugu-n, n gát...

CAT abandon river:**SG-LOC CAT** pass:**DIPF...**

"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 dáɣ-kàŋáa +∅.

Thus **3INAN** then **COP** good:**ABSTR 3PL** if **NEG.IND** bear-**REM** 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 The Remoteness marker *n^ε*

The Remoteness marker *n^ε* can attach to any verb form in indicative or irrealis mood; it is not compatible with the imperative. In VP Chaining, if *n^ε* 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 (Huddleston and Pullum pp 148ff.) It expresses a hypothetical or unlikely state of affairs; it is frequently accompanied by the post-subject particle *nāan(i)* [27.1.2](#), which creates a contrary-to-fact interpretation. It is most often seen, without *nāan(i)*, in *yà'*-clauses, and with or without *nāan(i)* in apodoses [27.2](#) [27.3](#), but also appears both with and without *nāan(i)* in other main and subordinate clause types.

In main clauses, n^{ε} without $nāan(ɪ)$ is most often seen in $bòɔdīn$ "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

w̄u wán bòɔdī-n yé yà áa-n sīəm láa +∅.

like **1SG:NZ** want-REM that **2PL COP-REM INDF.ADV ART NEG.**

"I will perhaps find you not as I might wish." (2 Cor 12:20, 1996)

Man bòɔdin nε yaname naan aan ma'asiga bεε yaname naan aan tuuliga.

Mān bòɔdī-n nē yānámì_∅ nāan áa-n mā'asígā bēε

1SG.CNTR want-REM that **2PL** **NZ** then **COP-REM** cold:ADV or

yānámì_∅ nāan áa-n tūvlígā.

2PL **NZ** then **COP-REM** hot:ADV.

"I might wish you had been cold or you had been hot." (Rev 3:15)

The enclitic can be used temporally as a today-past, implying specifically that the state of affairs described no longer obtains [19.3.2](#):

M̄ ńbɪdī-n sūmma.

1SG chew:DIPF-REM groundnut:PL.

"I was eating groundnuts." ("and now I'm not.")

The modal sense, though it occurs much more frequently, is probably secondary to this temporal function.

27.1.2 $Nāan(ɪ)$ "in that/which case"

The post-subject particle $nāan(ɪ)$ is distinct from $ñyāan$ "next, afterwards, then", but $nāan$ (never $nāanɪ$) occurs commonly in the same sense as $ñyāan$. Thus in the parallel NT passages from the 1996 version:

Fu na k'i'is noor atan' ye, fu zi' ma, ka noraug nyaan kaas.

Fù ná kī'is nór àtáñ' yé fù zí'ɪ_ mā +∅,

2SG IRR deny occasion:SG **NUM**:three that **2SG NEG.KNOW** **1SG.OB NEG**,

kà nō-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'is mān nór àtáñ' kà nō-dáùg

2SG IRR deny 1SG.CNTR occasion:SG NUM:three and hen-male:SG

nāan kāas nór 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 *nyāan* is probably a form of *nyá'anj*^a "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 *nyāan* 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'am lā.

rain:**SG NZ emerge:DIPF 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'amà

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 wōsa 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 agɔla lit teŋin na.

Kà ñwād-bíbìs ná nāan àgólà_ ∅ lít tēŋɪ-n nā.

And moon-small:PL IRR be.there ADV:above CAT fall:DIPF 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^ε* is most often a by-form of *ñyāan* 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 the Remoteness marker is also present. Especially in Absolute clauses, *nāan(i)* without the Remoteness marker may be effectively equivalent to *yà* "if/when."

In non-conditional main clause contexts it appears most often in the NT/KB with *bɔɔd*^a "want, wish" to convey a hypothetical "might have wished":

M naan bɔɔdin ye ya sid aan na'anam.

M̄ nāan bɔɔdī-n yé yà sìd āa-n ná'-nàm.

1SG then want-REM that 2PL truly COP-REM 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 sō' nāan mōr pē'ēs kóbɪgá kà yīnní bòdɪge +∅?

And IND.F.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 sùm yē dāy yīnní nāan kpí nīdɪb lā yélà_∅ gāad ...

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(i) 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 ninjin sa.

Kà m̄ bɔɔd yé lì nāani pún nījī-n sá.

And 1SG want that 3INAN then already do-REM hence.

"I wish it had happened already." (Lk 12:49, 1976)

Li su'm ka fu daa naan zaŋin m ligidi n su'an banki ni.

Lì sù'm kà fù dāa nāan záŋí-n_ m̀ ligidi
3INAN be.good and **2SG TNS** then take-REM **1SG** money
n sū'a-n bánkì ní.

CAT hide-REM bank:SG LOC.

"You should have put my money in the bank." (Mt 25:27, 1976)

N-clauses:

M daa pu bood ye nimbane naan tisini m sumalisim la keen ka m moren susa'anya.

M̀ dāa pū bódòd yē nīn-báni nāan tísī-ní_ m
1SG TNS NEG.IND want that person-REL.PL then give-REM **1SG.OB**
sū-málsìim lā kēε-n kà m̀ mōri-n sū-sáñ'àŋā +∅.

heart-sweetness **ART** cause-REM and **1SG** have-REM 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_ ∅ wūv fún nāan dī'ə-ní_ m̀ sī'əm lā.
 ... **2SG.CNTR** receive:IMP **3AN.OB** like **2SG:NZ** then receive-REM **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 m̀ mēŋí_ ∅ nāani mōri-n sūā-káni nà kēε-n
 Even not **1SG** self **NZ** then have-REM way-REL.SG **IRR** cause-REM
kà m̀ 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 kpísìnkpìl
2SG:NZ then do bad and **3PL** put.down **2SG.OB** with fist:SG
kà fù sín kà mōr sūgurú, lì sùm 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-gbín \emptyset *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'misíd* *túùm-bàmmā* *námī-né* ^{+∅},
But NEG.IMP cause and 2PL INDF.AN suffer:DIPF 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 lém *kā'e* \emptyset *gáàd nīdī* \emptyset *nāan kpí* *ò* *zùà-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* \emptyset *nāani jáñk* *yà ñyá'aŋ*

resemble with like rain:SG NZ then jump 2PL behind

n tí *páe* *yà tùəna* *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* \emptyset *nāani vē'ed* *zúnzòŋ* *nē*.

3PL resemble with blind.person:SG NZ then lead:DIPF 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'misúg nē'ŋá *wēn* *nē* *pɔ'á* \emptyset *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 meɲ ne pe'es gbana n kpen' pe'esin.

wūw kúndùna_∅ nāan lūsí_bà mēɲ 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 the Remoteness marker *n^ε* or *nāan(i)* 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](#), [25.1.1](#). 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 tūma, o di'ed yɔɔd.

Nīd yá' tùm tūma, ò di'əd yɔɔd.

Person:SG if work:DIPF work, 3AN receive:DIPF pay.

"If a person works, he gets pay." (Rom 4:4)

Ka Kristo ya'a da pu vu'ug kumine, alaa ti labasuɲ la mɔɔlɔg la anɛ zaalim.

Kà Kristo yá' dà pū vū'ug kūmí-né +∅, àlāa_ tì làba-sùɲ

And Christ if TNS NEG.IND come.alive death-LOC NEG, ADV:thus 1PL news-good:SG

lā mɔɔlɔg 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 waayèe 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]"

Bōn-píə̀lìg bɛ̀ fù nīf lā púugū-n. Fù yá' b̀̀ɔ̀ɔ̀d, tì ná
 Thing-white:SG EXIST 2SG eye:SG ART inside:SG-LOC. 2SG if want, 1PL IRR
yīis, kà fù ná ñyē súḡā 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 keḡe, Sḡid la ku keen ya ni naa.
M̄ yá' pū kēḡé⁺∅, sḡid lā kú kēēñ_yà nī náa⁺∅.
 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 tūm, ɔ̄n 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)

27.3 Hypothetical

If the Remoteness marker *n^ε* [27.1.1](#) occurs in the *yà'*-clause, it also occurs in the main clause. Here the Remoteness marker has an effect similar to the non-temporal use of the preterite in English conditional constructions.

The particle *nāan(t)* 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 zuluḡ na paaen o salabir.
Wīəf yá' sīgí-n lì nī, lì zùluḡ ná páa-n ò sàlɪbɪr.
 Horse:SG if descend-REM 3INAN LOC, 3INAN depth IRR reach-REM 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 zúnzòḡñs, yà pū m̄rɪ-n táàllē⁺∅.
 2PL if COP-REM blind.person:PL, 2PL NEG.IND have-REM 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 pū áñ nú'ùg lā zúg,

Leg:SG if say-REM that 3AN:NZ NEG.IND COP hand:SG ART upon,

ò kā' nín-gbīŋ níú +∅, līn kú ñyāŋi-n_ ∅

3AN NEG.BE body-skin:SG LOC NEG, DEM.INAN NEG.IRR accomplish-REM CAT

kēε-n kà ò kā' nín-gbīŋ níú +∅.

cause-REM 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(l)* there is a contrary-to-fact implication:

Man ya'a pu kεen na tu'asini ba, ba naan ku mɔrin taale.

Mān yá' pū kēε-n nā_ ∅ tú'asī-ní_ bā, bā nāan kú

1SG.CNTR if NEG.IND come-REM hither CAT talk-REM 3PL.OB, 3PL then NEG.IRR

mɔri-n táallē +∅.

have-REM 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'ine li, ba naan ku kpa'an Zugsɔb one an na'atita'ar la dapuudir zugɔ.

Bà yá' dāa mī'i-ní_ lī, bā nāan kú kpā'a-n Zūg-sób ɔnì

3PL if TNS know-REM 3INAN.OB, 3PL then NEG.IRR fasten-REM head-one:SG REL:AN

àñ ná'-tītā'ar lā dá-pūvdá zùgɔ +∅.

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 line na tisi ya sumbugusum zina nwa, li naan aan su'um!

Yà yá' mī'i-n línì nà tīsī_ yá súmbūgusím zīnā ñwá,

2PL if know-REM REL.INAN IRR give 2PL.OB peace today this,

lì nāan āa-n sūm!

3INAN then COP-REM 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'ane alaa, m naan ku yeline ya ye ...

Yà' kǎ'a-ní àlá, m̄ nāan kú yēli-ní yā yē ...

If **NEG.BE-REM ADV:thus, 1SG** then **NEG.IRR say-REM 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 men.

Yà yá' sjákī-n Moses, yà nāanī sjákī-n mān mén.

2PL if **believe-REM Moses, 2PL** then **believe-REM 1SG.CNTR** also.

"If you had believed Moses you'd have believed me too." (Jn 5:46)

Li ya'a aane m meḡ gaḡir ka m tummin tuum kaḡa, m naani di'edin nyood.

Lì yá' āa-ní m̄ mēḡ gaḡir kà m̄ túmmī-n túòm-kàḡā,

3INAN if **COP-REM 1SG** self choice and **1SG work:DIPF-REM work-DEM.DEI.SG,**

m̄ nāanī dī'edi-n ḡyōōd.

1SG then **receive:DIPF-REM** 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 past tense marking:

Bōzugō Josua ya'a da tisini ba vū'usum zin'ig, Wina'am da ku lem pian' dabis-si'a yela ya'asē.

Bō zúgō Josua yá' dà tìsī-ní bā vū'usím zín'ig, Wínà'am dá kù

Because Joshua if **TNS give-REM 3PL.OB** resting place:**SG**, God **TNS NEG.IRR**

lēm piāñ' dábìs-sī'a yéla 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 [8.2.2.1.1](#).) 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 (relative to the narrative timeline within a series of Sequential clauses, however [25.3.2](#).)

They cannot use the imperative mood; irrealis appears instead:

Yaname na mɔr sam si'a anɛ ye ya nɔŋ taaba.

Yānámì_∅ nà mɔr 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 pō dít ná kpī.

Person-**REL.PL NEG.IND** eat:**DIPF IRR** die.

"People who don't eat will die." WK

M̄ ñyé nīn-báni pō dītā +∅.

1SG see person-**REL.PL NEG.IND** eat:**DIPF 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_∅ 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 ṃ tūma lín kà ṃ 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)

dàuy-kàni_ bòɔd 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 mì' ón dāa túm sī'əm ón dāa bé bà sā'an

3PL know **3AN:NZ TNS** work:**DIPF 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 me pu diti ba ki la.

mán pū sáñ'amídí_ bà lā'ad, kà mé pū dítí_

1SG:NZ NEG.IND spoil:**DIPF 3PL** goods:**PL** and also **NEG.IND** eat:**DIPF**

bà kī lāa +∅.

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*^{+/}, but they cannot take modifiers or post-determining pronouns. They can participate in forming larger NPs or AdvPs as pre-determiners, and may also themselves have pre-determiners:

ba diib n yit na'ateŋ la na zug

bà dīib ñ yīt ná'-tēŋ lā nā zúg

3PL food NZ emerge:DIPF 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*^{+/} is not repeated a second time after an ñ-clause which ends in a NP with *lā*^{+/}.

If the clause contains the VP-final particles *nā*^{+/} "hither" *sà*⁺ "hence" these may follow an article *lā*^{+/} 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 Zugsob 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-sób lā sūrī-n, kà ò

...teach 3PL.OB 3AN:NZ TNS see head-one:SG ART road:SG-LOC and 3AN

pjāñ'_ ∅ tís-ò_ ∅ sī'əm, 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'əm.

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*^{+/}.

The 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 *àeñ*^a "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:DIPF 3PL goods:PL and also NEG.IND eat:DIPF 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 [26.5](#) 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:**DIPF** 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 yéìl_ bā ...
 And **3PL:NZ** eat:**DIPF 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 *sādigim* "since, because" immediately following Nominaliser-*ñ* occur in the pre-subject adjunct position of a Main clause [25.1.1](#) and express "reason why":

Tinamε sagidim aan o biis la, ti da ten'εs ...
Tīnámì_∅ sādīgím áañ_ò bīis 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* *bèllím* *dōl* *né* *ò* *bòɔdım 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 alá* *lā*, *ò* *sìd* *nà* *tīsı* *tí* *sī'əl*

3AN:NZ since do ADV:thus ART, 3AN truly IRR give 1PL.OB INDF.INAN

mékàma wōsa lá'àm *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(i)* 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* *áñ* *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^ɔ* "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:**DIPF** 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⁺ "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:DIPF house:SG

Paul n sobid gboŋ nwa "Paul writing this letter"
Paul ñ s̀óbíd gbáŋ ñwá
 Paul NZ write:DIPF letter:SG this

28.2 Relative clauses

Relative clauses are usually restrictive in meaning, except when the construction is appositional [28.2.4](#). Compare [26.4](#) 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 [16.3.1.2](#) 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 post-determiner of 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 amɛŋa.
yē Wínà'am nɔ́-dí'èsídíb 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 pre-determiner 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_ṁ B́á_ ∅ zì'el nɔɔr sɔ' yéla_∅ 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'el.

... **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 post-determiner. 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 line banε* in KB) where the final -i is due to Liaison before the nominaliser, which is itself invariably realised ∅ in this case.

M ñyé dáɣ-kàni_ ∅ 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 pre-determiner 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 sɔb la

for *gbàḡ-kàn kà dāḡ lā sɔb 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 [2.3.1](#), and compounded forms are not necessarily bound tighter than un-compounded forms syntactically [16.9.1](#), 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_ ∅ gbāñ'ad sī'əl sī'əm lā

like trap:SG NZ seize:DIPF 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 [16.3.1.2](#) 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_ ∅ tís sɔ' 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 pre-determiner; all cases which I have found involve the pronoun *s̄*⁺:

Fun bɔɔd ye fu ku dau sɔ' la ya'a kpi...

Fún bòɔd yé fù kù dáy-s̄' 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)

ya na ban man yeI ye m an sɔ' la.

yà ná bāŋ mán yeI yé m 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)

Gɔsim ye fu na ban la'abama an sɔ' bunneε?

Gòsim yé fù ná bāŋ lá'-bàmmá_ ø àñ s̄' búnnèε +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 nɔɔr la sɔ' san'anε.

Àlāá mām mé kù yēI_ yá mán ñyē nɔɔr lā

Thus **1SG.CNTR** also **NEG.IRR** say **2PL.OB** **1SG:NZ** see mouth:**SG** **ART**

s̄' sá'anē +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 nɔɔr sɔ' yela la tisi ya

M̄ ná tūmí_ m̄ Bá'_ ø zì'əl nɔɔr s̄' yélà_ 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 post-determiner are quite uncommon. Only one case occurs in the 1996 NT of *s̄*⁺ or *s̄iba*⁺ in a relative clause preceded by a cb, but KB has several examples:

Nidib la da wum Yesu n tum tuum sieba ...

Nīdīb 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 kǎ' 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 ...

Kèm_ ∅ 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 dependent-only pronoun *sī'a*⁺ appears quite commonly in relative clauses in the 1996 NT, but of 56 examples, 27 involve *zīñ'-sī'a*⁺ "somewhere", as in

M Zugsoba, ti zi' fun ken zin'isi'a la.

M̄ Zūg-sóbā +∅, tì zī' fún kēn zīñ'-sī'a lāa +∅.

1SG Head-one:**SG VOC**, **1PL NEG.KNOW 2SG:NZ** go:**DIPF** 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*^a "land", and one each with *sō'ulím*^m "kingdom, country" and *dòɔŋ*^ɔ "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*⁺ "sometime", e.g.

Abraham da nan kae' sanjsi'a la, ka man pun be.

Abraham dá nām kǎ'ẹ sǎn-sí'a lā, kà mǎn 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 *s̄*⁺ and *s̄**āba*⁺, need not represent new information:

Nannanna, yaname daa sob gbauḡ si'a la ka m ye m sob lebisi ya.

Nānná-nā, yānámì_ø dāa s̄b gbáḡ-s̄'a lá kà m̄ yé

Now, 2PL NZ TNS write letter-INDF.INAN ART and 1SG that

m̄ s̄b_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'-s̄'a lā ñyó'òs dūt né

And fire NZ eat:DIPF land-big-INDF.INAN ART smoke ascend:DIPF FOC

àgól s̄aḡá d̄inì k̄a' 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-s̄'a yīgá lā, fūn yá'amí_ò nōr.

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 m̄ 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-s̄'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-s̄'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 retains the indefinite-but-specific sense which Indefinite pronouns have in other contexts [16.3.1.3](#) (the main exceptions are a sequence in Rev 2-3 of *man nye so' la* "the one I saw.") Moreover, in the 1996 NT, out of 33 examples of *sō*⁺ used in this way, 20 involve constructions where the Relative clause is the complement of a verb of cognition, reporting, or perception, usually expressing identity or resemblance, as in

o naan banjin po'a kane si'is o la a so'

ò nāan bāñī-n pɔ'á-kàni sī'is-ó_ ø lá_ ø àñ sō'.

3AN then realise-REM 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'ali_ yá ón wēn sō'.

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 mí' fún àñ sō'.

1SG know 2SG:NZ COP INDF.AN

Similarly, the 2016 Bible has

David da tum sō' ye o bu'osi ban pu'a la an sō'.

David dá tùm sō' yé ò bū'osi_ ø bāñ

David TNS send INDF.AN that 3AN ask CAT understand

pɔ'ā lá_ ø àñ sō'.

woman:SG ART NZ COP INDF.AN.

"David sent someone to ask and find out **who** the woman was." (2 Samuel 11:3)

... banji ba yaaname an sieba

... bāñì_ bà yāa-námì_ ø àñ sīēba

... understand 3PL ancestor-PL NZ COP INDF.PL

"... discover **who** their ancestors were." (Ezra 2:61)

It seems probable that Relative clauses with indefinite pronouns as relatives are strongly preferred, if not obligatory, in clauses which correspond to what Huddleston and Pullum call "subordinate interrogative clauses" (pp1070ff, pp972ff.) Such clauses represent the great majority of cases with uncompounded indefinite pronouns, but with compounded pronouns the meaning is very often simply relative.

This is confirmed by the data for Relative clauses headed by the independent inanimate indefinite pronoun *sī'əl*^a. These are very frequent; in fact, most occurrences of *sī'əl*^a in the 1996 NT are as Relative clause heads.

Of 130 examples in Matthew, Mark, Luke and John in the 1995 NT, 22 have *sī'əl*^a 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.

B5 zúgú yà àrazà'así_ø bè sī'əl lā, yà pù-tèñda mé bè 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.

Ōnɪ kēŋ līkɪ-n zī' ɔn kēn sī'əla +ø,

REL.AN go darkness-**LOC NEG.KNOW 3AN:NZ** go:**DIPF INDF.INAN NEG**.

"He who walks in darkness does not know where he is going." (Jn 12:35, 1996)

In 75 cases out of the remaining 108, either *sī'əl*^a 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 mī' sī'əl á nē yē, m dāa á nē zū'əm, kà yū'un ñyēt.

1SG:NZ know **INDF.INAN COP FOC** that, **1SG TNS COP FOC** blind:**SG**, and after see:**DIPF**.

"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.

Kēm_ø yēlɪ_ø Joon yānám_ø wùm kà ñyē sī'əl.

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 sī'əl láa +ø?

2PL understand **1SG:NZ** do **INDF.INAN ART CQ?**

"Do you understand what I have done?" (Jn 13:12, 1996)

In the remaining 33 examples, *sī'əl*^a also 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*⁺ "all":

M na tis uf fun bood si'el wusa.

M̀ ná tīsi_f fún bòod sī'əl wōsa.

1SG IRR give **2SG.OB 2SG:NZ** want **INDF.INAN** all. [28.2.2](#)

"I will give you anything you want." (Mk 6:23, 1996)

Sī'am^m, the form of the indefinite pronoun system with the mass *m*^m 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 (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 n̄ŋílím_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*^{+/} has its usual function with *sī'am* Relative clauses:

M̀ mí' mán nà nīŋ sī'am.

1SG know **1SG:NZ IRR** do **INDF.ADV**.

"I know what to do."

M̀ 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*^{+/}; 75% lacking *lā*^{+/} have irrealis mood. Cf the two standing expressions

Bà n̄ɪ ʒn yèl̄_bā s̄ɪəm lā.

3PL do 3AN:NZ tell 3PL.OB INDF.ADV ART.

"They did as he'd told them."

Like other AdvPs *s̄ɪəm* Relative clauses can be verb subjects:

Man n̄ɪɪ ya si'em la ane bedego.

Mán n̄ɪɪ_yā s̄ɪəm 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)

S̄ɪəm Relative clauses occur often as objects of *wōv* "like", *wēn*^{na/} "resemble"

Ò zòt wōv búɲù_ ø zòt s̄ɪəm lā.

3AN run:DIPF like donkey:SG NZ run:DIPF 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 n̄ɪɪb dɔl m̄an wōv z̄iɪŋ-gbāñ'adib_ø

...and **3PL IRR cause and person:PL follow 1SG.CNTR like fish-catcher:PL NZ**

gbāñ'ad z̄imí s̄ɪəm lā.

catch:DIPF 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 *s̄ɪəm* Relative clause in the sense "despite how...":

hali ne man daa s̄ɔbi tisi ya si'em la

hālí nē mán dāa s̄ɔb_ø t̄isì_yā s̄ɪəm 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 z̄iɪɪ s̄i'a ȳiɪga la, fun ya'am o n̄ɔɔr ...

kà fún gbāñ'e z̄iɪ-s̄i'a ȳiɪgá lā, fūn yá'àm ò n̄ɔɔr ...

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*⁺ "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 pre-modifier 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 gbaunon line an nyɔvupaal dim gbaun la

nīn-báni yūdá sōb Pē'-bíl lā gbáunō-n línì

person-**REL.PL** name:**PL** write Lamb:**SG ART** book:**SG-LOC REL.INAN**

àñ ñyó-vū-páàl 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 mɔr na

m̄ àntù'a lìnì kà bà mɔr nā

1SG case **REL.INAN** and **3PL** have hither

"the charge they are bringing against me" (Acts 25:11)

yēltɔɔd ayɔpɔɔi banε ka maliaknama ayɔpɔɔi mɔr la

yēl-tɔɔd àyɔpɔɔɛ bání kà màljāk-námá_ àyɔpɔɔɛ mɔr 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"

nijkanε [1996 nijkan] ka ba gban'e o la

nīn-kání 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)

Onε ka ba tis o ka li zu'oe, ba mε mɔr pɔtɛn'er ye o na lεbis line zu'oe.

Òni kà bà tí's-ò_∅ kà lì zú'e, bà mè mɔr

REL.AN and **3PL** give **3AN.OB** and **3INAN** become.much, **3PL** also have

pú-tèñ'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:DIPF 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

līnι 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 pre-determiner 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 bǔudí 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-kání 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 *sīəl^a* and *sīəm^m* (which have distinctive usage and meanings) are less common than those with Relative pronouns and *kà*, but the non-initial type is common, and perhaps required, when the sense of the clause corresponds to an English "subordinate interrogative clause." Nevertheless, antecedents with indefinite pronouns can be concrete and old information, just like those with relative pronouns, especially when the pronouns are compounded with a cb [28.2.2](#).

Relative clauses with locative reference using relative pronouns, like those using indefinite pronouns, do not take the locative *nī*^{+/} [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 nε 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 [16.3.1.2](#) or locatives; such cases are not confined to human-reference, and are simply parallel in usage to compounded constructions:

Mam Paul nε Timoti banε an Yesu Kristo tumtumnib la sɔbid gbauŋ 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 gbáuy-kàŋā...

ART write:DIPF 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

sālima láàs àyɔpɔɛ línì kà Wínà'am ónì bè

gold vessel:PL NUM:seven REL.INAN and God REL.AN EXIST

sāŋá lìni ká' 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)

nimbanε yuda sɔb Pɛbil la gbaunɔn linε an nyɔvupaal dim gbauŋ la

nīn-bánì yūdá sōb PĒ'-bíl lā gbáunŋ-n línì

person-REL.PL name:PL write Lamb:SG ART book:SG-LOC REL.INAN

añ ñyó-vū-páàl dím gbáunŋ 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 post-determining pronouns.

Ōn sōb á nē dáŋ-kànì 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-bànì bòɔd yé bà ñyée_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)

òní dŷ'à nē Sīg

REL.AN bear with spirit:SG

onε tumi m la na

"he who sent me hither" (Mk 9:37)

òní tùmì_m lā nā

(òní = REL.AN; contrast òn 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 p̄ bɔ̀̀d̄ 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)

P̄ 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 m̄ piàñ'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 undergo tone overlay from Independency marking [19.6.1.1](#).

mit (always imperative) "see that it doesn't happen that ..." is construed with a following subordinate *kà*-clause [26.2](#). In address to more than one person it may or may not have the usual postposed 2pl subject enclitic ^{ya}: *mitī*.

Mit ka ya maal ya tuumsuma nidib tuon ye ba gosi yaa.

Mìt kà yà máàl yà tùm-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* *bánì kēnní* *yà sà'an nā lā.*

Beware **2PL.SUB** lie mouth-receiver:**PL REL.PL** come:**DIPF 2PL** among hither **ART**.

"Beware of false prophets who come among you." (Mt 7:15, 1996)

zī'+ "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 anε dasaŋ , ka pu mi' wuv lin nar si'em.

M̃ *bīig* *Solomon á nē dá-sāŋ,* *kà pū mīi*

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'isigε* appears in KB, NT (e.g. Lk 12:40); cf *kà'asigē* below.

kā'ε+ "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, *àēñ*^a "be something/somehow" and *bè*+ "be somewhere, exist" and also to *mōr*^{a/} "have." **Pū bε* is not found, but *pū mōr* is quite common; *pū áēñ* 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'asìgē (LF always, as the word only appears clause finally) "not exist"

Ò bīig ká'asìgē +∅. "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 [26.2](#), and expressions of necessity and permission [26.3](#), but not Adnominal *kà*-clauses [26.4](#):

Li pu nar ye fu di fu ba'abiig po'a Herodiase.

Lì pū nār yé fù dí fù bā'-bīig 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*^a "want", but not e.g. *yèl*^ε "tell":

Ti pu bɔɔd ye dau kaŋa aan ti na'aba.

Tì pō bɔ̀̀d yē dáu-kàŋā áaŋ̀ 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^{ε/}* "think":

Tiname sagidim aan o biis la, ti da ten'εs ye Wina'am bellim nwenε bada banε ka ninsaal nɔk sanlima bεε anzurifa bεε kuga, ten'esi maal nε o nu'usε.

Tīnámì_∅ sādıgím áaŋ̀_ò bīs 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'εs_∅ 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⁺* "know", *bàŋ^ε* "realise":

Bùŋ-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."

Ka o ba' nε o ma pu baŋ ye o kpelim yaa.

Kà ò bā' né ò mà pō báj 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)

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](#)

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 Negative Clitic is dropped at the end of *h̄*-clauses containing a negative unless they are themselves clause final in the main clause, and also before the article *lā*^{+/}:

m bi'emnam banε pu bɔɔd ye m an na'abi su'oe ba la
m̄ bi'əm-nəm bání pū bɔɔd yé m̄ áñ ná'abì_∅ sú'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 dɔɔg lā
3PL if NEG.IND do INDF.AN 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 seem all to involve *yà'* clauses ending in words with final vowels or final *-m*, and probably do end in the Negative Clitic in reality.

With clauses with two VPs coordinated with *bēε/kūv* "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/kūv* also.

29.4 Constituent negation

Clefting is the usual way of achieving constituent negation, using the patterns

Lì k̄a' X k̄a ... /Lì k̄a' X n ... "It's not X that ..."
X k̄a'ε k̄a ... /X k̄a'ε n ... "There's no X that ..."

Sɔ' kae na nyanji dɔl zugdaannam ayi'...
Sɔ' k̄a'e_∅ ná ñyāŋɿ_∅ dɔl zūg-dáàn-nəm 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.
Sógjà-sɔ' k̄a'e n túm k̄a yɔɔd ò mēŋá +∅.
Soldier-INDF.AN NEG.BE CAT work:DIPF and pay:DIPF 3AN self NEG.
 "No soldier works and pays for himself." (1 Cor 9:7, 1976)

Lì kā' mān bīig kà fù ñwé'ε +∅.

3INAN NEG.BE 1SG.CNTR child:SG and 2SG beat NEG.

"It's not my child that you've beaten."

Another method is to use the particle *báa* (Hausa *bâa* "not exist") as *báa* + NP extraposed from a negated clause:

Bà pū kē náa +∅, báa yīnní.

3PL NEG.IND come hither NEG, not one.

"They didn't come, not one."

Báa yīnní can be used as a NP, or as a dependent following a NP head. The meaning is "not one", with a negative concord of the clause VPred, e.g.

Amaa ba pu nyaŋi nyε linε tu'al baa yinne.

Àmáa bà pū ñyāŋi_∅ ñyē línì tù'al [+∅] báa 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 yei ye on m̄r si'el la, onε su'oe lii.

Kà nīd báa yīnní pū yéi yē ón m̄r

and person:SG not one **NEG.IND** say that **3AN:NZ** have

sī'əl lā, ōni_∅ sū'v_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 báa yīnní kā'é kà ò yū'ur búèn àlāa +∅.

2SG relative:PL not one NEG.BE and 3AN name:SG call:DIPF ADV:thus NEG.

"Not one of your relatives is named thus." (Lk 1:61)

Relative clauses can also be used for constituent negation:

Da m̄r n̄c̄r yinne nε banε ka' yadda niŋidib la ye ya niŋ si'ela.

Dā m̄r n̄c̄r yīnní nē bānì kā' yáddā-niŋidib lā

NEG.IMP have mouth:SG one with **REL.PL NEG.BE** assent-doer:PL **ART**

yé yà níŋ sī'əla +∅.

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 Huddleston and Pullum, p1424, foregrounded elements in English need not be focussed.

Two syntactic devices in Kusaal relate to Focus: subject focussing with Catenator-*n* [30.1.1](#), and the use of the particle *nē*^{+/} [30.1.2](#). Clefting constructions with the clause linker *kà* and corresponding ellipted types relate to foregrounding rather than Focus [30.2](#), 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*^{+/} [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 niηgbinaa. 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_ī.

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 (Huddleston and Pullum 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 nwaɑ yisid nidib tuumbɛ'edi basida?

Ànɔ'ɔn_∅ ñwáɑ_∅ yīsɪd nīdɪb túùm-bɛ'edi_∅ básɪdà +∅?

Who CAT this CAT expel:DIPF person:PL deed-bad:PL CAT throw.out:DIPF 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 [8.2.2.1.2](#). 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_∅ dúm.ō_∅. "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*^{+/} [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_∅ kāburídà +∅?

Who CAT ask.for.entry:DIPF CQ?

"Who is asking permission to enter?"

Clauses containing interrogative pronouns may not contain focus-*nɛ*^{+/}, 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*^{+/} in all its rôles is excluded from clauses which are *n*-focussed, with verb aspect distinctions present but unmarked, as in other cases of formal exclusion of the marker [30.1.2.1.1](#):

Ì zūgv_∅ zábìd. "My head is hurting."

1SG head CAT fight:DIPF. (Reply to "Where is the pain?")

cf *Ṁ zūg lā pú'alim nē.* "My head is hurting."
1SG head ART damage:DIPF 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*^{+/}

As a constituent-focus particle *nē*^{+/} has two distinct rôles, readily distinguishable by position: preceding a VP-constituent, *nē*^{+/} focusses that constituent, while VP-final *nē*^{+/} 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*^{+/} from the preposition see [20.4](#).

Greater difficulty arises over the distinction from the *nē*^{+/} which is part of the aspect system [19.2](#)¹⁴, and which actually represents a specialised use of the same particle to focus the verb aspect. The aspect marker is subject to the same formal constraints on appearance as the focus marker, and *nē*^{+/} cannot appear twice in a clause to mark both focus and aspect [30.1.2.1.1](#). The *aspectual* sense normally prevails wherever semantically and formally possible; otherwise, the particle is interpreted as constituent focus. When aspectual *nē*^{+/} is excluded only by formal constraints, different verbal aspects still appear but are unmarked.

30.1.2.1 Restrictions

30.1.2.1.1 Where *nē*^{+/} cannot appear at all

Nē^{+/} cannot appear in either constituent focus or aspectual sense

- (a) if the subject has *n*-focus
- (b) in subordinate clauses other than Content clauses
- (c) in content questions

***Nē*^{+/} may only occur *once* in a clause;** this not necessarily in the *first* VP of a VP chain:

14) In Dagbani, two different particles, *mi* and *la*, correspond to Kusaal *nē*^{+/}, but they are in complementary distribution with no meaning difference to shed light on *nē*^{+/}; together, they show much the same range of senses. Mampruli *ni* shares the initial *n*- of *nē*^{+/}, 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 Sunj.

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, aspect distinctions are unmarked. This constraint reveals that Aspect- $n\bar{e}^{+/-}$ is a specialised use of Focus- $n\bar{e}^{+/-}$.

Examples of exclusion of Focus- $n\bar{e}^{+/-}$:

Exclusion with *N*-focussing of the subject:

M̄ zūgv_∅ zábìd.

1SG head **CAT** fight:**DIPF**.

"My head is hurting/hurts." (No aspectual $n\bar{e}^{+/-}$)

Reply to "Where is the pain?"

Àn'òni_∅ dít sá'abò +∅?

Who **CAT** eat:**DIPF** porridge **CQ?**

"Who eats/is eating millet porridge?" (No aspectual $n\bar{e}^{+/-}$)

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:**DIPF 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 aspectual *nē*^{+/}:

Ka ba due keŋ. Ka ban ken la, Jesus gbid ne.

Kà bà dūe_∅ kēŋ. Kà bán kēn lā, Jesus gbīsid nē.

And **3PL** arise **CAT** go. And **3PL:NZ** go:**IMPF ART**, Jesus sleep:**DIPF FOC**.

"So they started out. As they were travelling, Jesus was sleeping."

(Lk 8:22-23, 1976)

Exclusion of *nē*^{+/} in content questions: aspect-marking *nē*^{+/}:

Bó kà fù kúesida +∅? "What are you selling/do you sell?"

What and **2SG** sell:**DIPF CQ**?

Fù kúesid b́ +∅? "What are you selling/do you sell?"

2SG sell:**DIPF** what **CQ**?

Bó kà fù kúmmà +∅? "Why are you crying/do you cry?"

What and **2SG** cry:**DIPF CQ**?

Fù níŋìd b́ +∅? "What are you doing/do you do?"

2SG do:**DIPF** what **CQ**?

Fù wá'e yáa +∅? "Where are you going (just now)?"

2SG go where **CQ**?

Exclusion of *nē*^{+/} in content questions: constituent-focus *nē*^{+/}:

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 aspect distinctions unmarked because $n\bar{e}^{+}/$ cannot be used twice:

\grave{M} pú'vsìdī f nē. "I'm greeting you."
1SG greet:DIPF 2SG.OB FOC.

\grave{M} pú'vsìd nē ná'àb lā. "I'm greeting the chief."
1SG greet:DIPF FOC chief:SG ART.

\grave{O} kùəsìdī bá nē. "She's selling them."
3AN sell:DIPF 3PL.OB FOC.

but \grave{O} kùəsìd sūmma lā nē.
3AN sell:DIPF groundnut:PL ART FOC.
"She *sells/is selling* the groundnuts." ("They're not free.")

\grave{M} pú'vsìd ná'àb lā nē. "I greet/am greeting the chief."
1SG greet:DIPF chief:SG ART FOC.

30.1.2.1.2 Where $n\bar{e}^{+}/$ cannot be aspectual

There is potential ambiguity between $n\bar{e}^{+}/$ as marking constituent focus or as marking aspect. The default interpretation is aspectual, 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 Variable verb Base Form, by the absence of an explicit time marker with Descriptive verbs, or by the fact that the subject has generic status.

Aspectual use of $n\bar{e}^{+}/$ requires that it follow the verb word directly, with at most Liaison Enclitics intervening; if not, the relevant aspectual distinctions are unmarked:

\grave{O} kùəsìdī bá nē. "She's selling them." (Aspectual)
3AN sell:DIPF 3PL.OB FOC.

but \grave{O} kùəsìd sūmma lā nē.
3AN sell:DIPF groundnut:PL ART FOC.
"She *sells/is selling* the groundnuts." (VP focussed: "They're not free.")

$N\bar{e}^{+}/$ may only be used aspectually if the VPred has positive polarity; if not, the relevant aspectual distinctions are again unmarked:

Ò zàbɪd. "He fights."
3AN fight:DIPF.

Ò zàbɪd nĕ̄. "He's fighting."
3AN fight:DIPF FOC.

but Ò p̄ zábɪdā +∅. "He's not fighting"/"He doesn't fight."
3AN NEG.IND fight:DIPF NEG.

The Predicator must have indicative mood for aspectual use of $nĕ̄^{+}$. It is not clear if the relevant distinctions occur at all in the irrealis.

In direct commands $nĕ̄^{+}$ may occur only as the VP-final marker of contrastive focus on the entire VP [30.1.2.3](#). It cannot be aspectual or focus a constituent.

Ò gòsɪd nĕ̄. "She's looking."
3AN look:DIPF FOC.

Gòsim kpĕ̄. "Look here!"
 Look:IMP here.

but Gòsim nĕ̄. "Look!" ("Don't touch." WK)
 Look:IMP FOC.

Ò à nĕ̄ bāańlím. "She is quiet."
3AN COP FOC quiet:ABSTR.

but Ań bāańlím! "Be quiet!"
COP quiet:ABSTR.

However, a following *àlá* "thus" imposes a continuous/progressive imperfective sense on the verb, in a similar sense to $nĕ̄^{+}$ with a dynamic imperfective [19.4](#).

Passive constructions [20.1.1](#) may only express punctual events, and are thus limited to perfective aspect, along with dynamic imperfective forms in the propensity/habitual sense only. Accordingly, the particle $nĕ̄^{+}$ can never be interpreted aspectually 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 nùùd. "The beer gets drunk."
 Beer ART drink:DIPF.

Dāam nùùd zīná. "Beer gets drunk today."
 Beer drink:DIPF today.

but *Dāam lā nùùd nē.* Only "The beer is for drinking."
 Beer ART drink:DIPF FOC. ("Not for throwing away.")
 not "The beer is being drunk."

**Dāam nùùd 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:DIPF FOC door:SG ART.

Kùlìŋ lā yóòd nē. "The door is closing."
 Door:SG ART close:DIPF FOC.

Ò t̀lìgìd nē. "He's heating it up."
 3AN heat.up:DIPF FOC.

Lì t̀lìgìd nē. "It's heating up."
 3INAN heat.up:DIPF FOC.

Lì mà'ad nē. "It is getting cool" (dipf of *mā'e*^{+/} "get cool")
 3INAN get.cool:DIPF FOC.

but *Lì mà'an nē.* "It gets *cooled*." (contrastive focus on the VP)
 3INAN cool:DIPF FOC. (dipf of the causative *mā'al*^{E/} "cool" as passive)

A Variable verb Base Form can only be interpreted as a resultative stative 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' bŋā +∅. "I haven't bought a donkey."
1SG NEG.IND buy donkey:**SG NEG**.

M pū dá' nē búŋā +∅.
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 in Kusaal [11.2.1](#). Accordingly, the Base Form of an Assume-stance verb cannot accept a resultative reading:

Ò dīgɪl nē. "He's *laid it down*." ("I thought he'd pick it up.")
3AN lay.down **FOC**.

Ò dīgɪn 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 Descriptive verbs, aspectual *nē*^{+/} may only occur if there is an explicit time expression in the immediate context. If not, *nē*^{+/} 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**.

M̄ mór pɥ'ā. "I have a wife."
1SG have wife:**SG**.

but *M̄ mór nē pɥ'ā.* "I have a woman."
1SG have **FOC** woman:**SG**. (not "wife": implies an irregular liaison, WK)

The verb *àḡñ^a* "be something/somehow" is *characteristically* followed by *nē^{+/}* focussing its complement [21.2](#):

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

Descriptive 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 aspectual *nē^{+/}* 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-kān 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**.

Aspectual interpretation of *nē^{+/}* is also forced when the following constituent does not permit focussing with *nē^{+/}* [30.1.2.1.3](#).

A generic subject is not semantically compatible with the use of *nē^{+/}* in aspectual function:

Nīgí òñbɪd nē mōɔd. "Cows eat *grass*." ("What do cows eat?")
 Cow:**PL** chew:**DIPF** **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:**DIPF** **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^{+/}* in its aspectual sense is omitted in replying to polar questions or responding to questions by repeating the verb:

A: *Gòsim!* "Look!"
 B: *M̃ gósìd!* "I'm looking!"
 A: *Fù gósìd néé?* "Are you looking?"
 B: *M̃ 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*^{+/}

Certain words do not prevent Focus-*nē*^{+/} from being used in the clause (unlike interrogative proforms [30.1.2.1.1](#)), but cannot themselves be focussed with *nē*^{+/}. Words which behave like this include *sùŋā*^{+/} "good", *sùm*^m "good", *bē'ed*^ε "bad" *sìdà*⁺ "truth" when used as adverbs, and the "two, three exactly" quantifier forms *àyíŋā*^{+/} *àtáŋā*^{+/}

[16.4.2.1](#). AdvPs formed by coordinating such words and NPs with these quantifiers as dependents share the same property.

Lì àñ sùŋā. "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-kādɪb áñ sùm nē sídà.
3AN law-drive **COP** good:ABSTR with truth.

"His judgments are good and true. (Rev 19:2, 1976)

If *nē*^{+/} does occur before such constituents it must be interpreted aspectually, limiting the state described to a particular time period, even with Descriptive verbs and even if there is no explicit time marker in the clause (cf [30.1.2.1.2](#)):

M̄ mór bīisá_ àtáŋā.
1SG have child:PL **NUM**:three.exactly.
 "I've got exactly three children."

but *M̄ mór nē bīisá_ àtáŋā.*

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*^{+/} 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:DIPF **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*^{+/} before a definite object is usually aspectual:

Nīigí lā ǎ̀b̀ìd nē mṑd lā.

Cow:PL ART chew:DIPF FOC grass:PL ART.

"The cows are eating the grass."

Nā'-sīabà ǎ̀b̀ìd nē mṑd lā.

Cow-INDF.PL chew:DIPF FOC grass:PL ART.

"Some cows are eating the grass."

If focus does occur with old-information arguments, it is **contrastive**.

Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Sunj.

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 to *the Holy Spirit*." (Acts 5:4, 1996)

Linε ka ba'amaannib maanne tìsid bada la, ba maanne tìsidne kikiris, ka pu maanne tìsid Wina'am.

Lìni kà bà'-māannib máànni_ ∅ tìsìd bádà lā,

REL.INAN and idol-sacrificer:PL sacrifice:DIPF CAT give:DIPF idol:PL ART

bà màannì_ ∅ tìsìd nē kíkìris kà pū máànni_

3PL sacrifice:DIPF CAT give:DIPF FOC fairy:PL and NEG.IND sacrifice:DIPF

∅ tìsìd Wínā'amm +∅.

CAT give:DIPF God NEG.

"That which idol-worshippers sacrifice to an idol, they sacrifice to *demons* and they don't sacrifice to God." (1 Cor 10:20)

The predicative complement of *àṅṅ*^a "be something/somehow" in its ascriptive sense [21.2](#) is non-referring and almost prototypically "unpredictable or pragmatically non-recoverable", and therefore is naturally preceded by *nē*^{+/} for **ordinary** focus:

Ò à nē bīig.

"She is a child."

3AN COP FOC child:SG.

Ò dāa á nē bīig.

"She was a child."

3AN TNS COP FOC child:SG.

Ò à nē nīn-súŋ.

"She's a good person."

3AN COP FOC human-good:SG.

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'əmíd nē dúañ gbínnī-n. Bà zà'mísíd nē
Child:**PL ART** play:**DIPF FOC** dawadawa:**SG base:SG-LOC**. **3PL** learn:**DIPF FOC**
būla wá'àb. Bà à né À-Pām bīis.

bula dance:**SG**. **3PL COP FOC PERS**-Apam child:**PL**.

"The children are playing under a dawadawa tree. They are learning the *bula* dance. 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**

bànì 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 Huddlestone and Pullum 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*⁺ "not be") focus is difficult to interpret in the "ordinary" sense, so that if *nē*^{+/} 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 pre-determiner 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 pre-determiner. (Cf locative pre-modifiers [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 B́k. "I come from Bawku." SB
1SG emerge FOC Bawku.

Yadda niṅir yitne labaar la wummug ni.
Yàddā-níṅìr yít nē lábāar lā wúmmùg ní.
 Assent-doing emerge:DIPF FOC news ART hearing LOC.
 "Faith comes from hearing the news." (Rom 10:17)

Contrast the existential use of *bé*⁺, 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:DIPF 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 aspectual, 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:DIPF 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:DIPF 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:DIPF FOC. ("Not washing with!")

Lì mà'an nē. "It gets *cooled*."
 3INAN get.cool:DIPF 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 [26.4](#) 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:DIPF 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:**DIPF**.

"This is he whom you saw." WK

Ànó'ónì_ ∅ ñwá kà tì ñyētá +∅?

Who **CAT** this and **1PL** see:**DIPF CQ?**

"Who is this that we can see?"

Bṣṣ_ ∅ lá kà m ñyētá +∅?

What **CAT** that and **1SG** see:**DIPF 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:**DIPF 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*^{+/!}:

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:**DIPF** 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 bó?* *"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)
Bó kà tì ná niŋε +∅?
 What and **1PL IRR** do **CQ?**

Other queried NP objects in content questions are often preposed with *kà*:

Nū'-bíbísá_ àlá kà fù ñyētá +∅?
 Hand-small:**PL NUM**:how.many and **2SG** see:**DIPF 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 súŋf 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 bɔ̀ɔ̀d bó +∅? "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 díť sā'ab nē záàm.

1PL eat:DIPF 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:DIPF.

"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](#) [24.2](#) [23.1](#) [28.1.1](#) [25.3.2](#):

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^{+∅},

Branch-REL.SG EXIST 1SG LOC and NEG.IND bear.fruit:IPVF NEG.

òm Bā' ñwá'adī_lí n básìd.

1SG father:SG cut:DIPF 3INAN.OB CAT throw.out:DIPF.

"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 mωρ puten'er ye o na lεbis line zu'oe.

Òni kà bà tíς_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 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 gbáuy-kàŋā Wínà'am níðìb bàni àñ

1SG.CNTR Paul ... give:DIPF book-DEM.DEI.SG God person:PL REL.PL COP

sídà díim 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*⁺ typically reflects an indefinite but *specific* rather than generic reference 16.5. The NP may (but need not) have an indefinite post-determining pronoun or a post-determining number.

The verb *bè*⁺ "be somewhere/exist" is frequent in presentational clauses, often with a following VP Chaining construction 23 or Adnominal *kà*-clause 26.4.

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-sɔ' dá bè_ ∅ mār ò bī-púŋ kà kìkīrīg dɔll-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 zín'i Lystra ní kà pū tūñ'e_ ∅ kēnná +∅.

And man:SG TNS sit Lystra LOC and NEG.IND be.able CAT go:DIPF 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.

Áníná kà ò ñyē dāy kà ò yū'ur búòn Aneas.

ADV: there and 3AN see man:SG and 3AN name:SG call:DIPF 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⁺∅, 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 [26.5.2](#).

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⁺∅.

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 [16.3.1.1](#):

wuu mane a si'em la.

w̄v̄ m̄anī ∅ àñ s̄'am l̄ā.

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 Huddleston and Pullum'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 *h̄ālí*⁺, they occur after top-level NPs or AdvPs within clauses, and share the unusual morphological feature of forming the LF by adding *-n̄* to the SF [6.4](#).

m̄è DK KT SB NT *m̄èn* WK; clause finally (all sources) *m̄èn*^ε "also, too"

b̄zuḡ o an̄ε f̄v̄ biiḡ m̄en̄.

b̄z̄uḡ ó ò à n̄é f̄v̄ b̄iiḡ m̄én̄.

Because 3AN COP FOC 2SG child:SG also.

"Because he is your child too." (Genesis 21:13)

O pu'a m̄ε kena.

"His wife also came." (Acts 5:7)

Ò p̄u'ā m̄é k̄è n̄ā.

3AN wife:SG also come hither.

The particle may follow *k̄à* + ellipted subject pronoun [24.1.5.2](#):

Wina'am t̄isid ... ka m̄ε t̄isid ...

W̄in̄à'am t̄isid ... k̄à m̄é t̄isid ...

God give:IPVF ... and also give:DIPF

"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^{NE} "only"

M níŋi_lí m gùllum. "I did it myself alone."

1SG do **3INAN.OB 1SG** only

kòtāa^{NE} "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*^{NE/} "brightly, clearly" [6.4](#).

hālí⁺ 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:**DIPF ADV**:thus.

"Even sinners do that." (Lk 6:33)

Hālí bāa is also used in this way:

Hali baa lampōdi'esidib me niŋid ala.

Hālí bāa làmpō-dí'əsìdib mé niŋid àlá.

Even tax-receiver:**PL** also do:**DIPF 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 bāa 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-gbīnáa?

"[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

Bárikà 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 sǎ̄nsɔ̄gā.</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> ^{nɛ/} (spiritual essence, personal <i>genius</i>)
<i>Né fù b̄ūryá-sùŋ.</i>	"Merry Christmas." (<i>b̄ūryá</i> ⁺ ← * <i>burǔya</i> ← Twi/Fante <i>bronya</i> , of unclear ultimate origin)
<i>Né fù ỳ̀vum-pāalíŋ.</i>	"Happy New Year."

(c) Prayers. Reply *Ámí!* "Amen!"

<i>Wīn ná lēbisi f nē láafɿya.</i>	"Safe journey!" literally "[I pray that] God will bring you back in health."
<i>Wīn ná s̄ŋi 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 *T̀̀* "OK", or as appropriate.

<i>Bēogv lā.</i>	"See you tomorrow!" ("That's tomorrow.")
<i>Àtínì dáarì lā.</i>	"See you on Monday."
<i>Gbìsɪm s̄ŋā.</i>	"Sleep well."
<i>Kp̀̀lɪmī s̄úm.</i>	"Remain (ye) well." Said by departing person to those remaining.
<i>P̀̀'usɪm yín.</i>	"Greet (those) at home." i.e. "Goodbye." reply <i>T̀̀</i> "OK", or <i>Bà nà w̄m</i> "They will hear."

(e) Miscellaneous formulae

<i>M̀̀ p̀̀'ùs yā.</i>	"Thankyou." reply <i>T̀̀</i> , or <i>P̀̀'usug k̄'e.</i> "No thanks (sc. needed.)"
<i>M̀̀ p̀̀'ùs yā béduḡ.</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 bélìm 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 mōr 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> ^{ma} , less formally <i>bā</i> ^{+/}	
Father's elder brother		<i>sàam-kpēēñm</i> ^m	
Father's younger brother		<i>sàam-pīt</i> ^{a/}	
Father's sister		<i>pùgvɔɖɪb</i> ^a	

My			
Mother	is my	<i>mà</i> ⁺	
Mother's elder sister or senior co-wife		<i>mà-kpēēñm</i> ^m	
Mother's younger sister or junior co-wife		<i>mà-bīl</i> ^a or <i>mà-pīt</i> ^{a/}	
Mother's co-wives	are my	<i>mà nám</i> ^a	
Mother's brother	is my	<i>áñsib</i> ^a	

I am my mother's brother's *āñsínj*^a; to all the other relatives above I am *bīig*^a "child" or specifically *dà-kòcñr*^ε "son" or *pɔ'á-yù*⁺ "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> ^a ♂ <i>yāa-dáy</i> ⁺	Sex can be specified as ♀ <i>yāa-pɔ'á</i> ^a
Grandchild		<i>yáan</i> ^a	

These words are also used for ancestor/descendant.

My

Elder sibling of my own sex is my *bīār^ε*

Younger sibling of my own sex is my *pītú⁺*

Sibling of opposite sex is my *tāyŋ^{+/}*

These words are also used for cousins, with seniority, as always, going by family branch.

My

Wife is my *yī-py'á^a* or simply *py'ā^a*

Wife's parent *dīām^{ma}* Sex can be specified as

♂ *dīām-dāy⁺* ♀ *dīām-pyāk^a*

Wife's sibling *dàkīg^a* Sex can be specified as

♂ *dàkì-dāy⁺* ♀ *dàkì-pyāk^a*

Dīām^{ma} 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^ε*, the Fire Festival, one throws eggs at one's brothers-in-law.

I am my wife's parents' *bīig^a* "child" and my wife's siblings' *dàkīg^a*.

My

Husband is my *sīd^a*

Husband's parent *dàyāam^{ma}* Sex can be specified as

♂ *dàyāam-dáy⁺* ♀ *dàyāam-pyák^a*

Husband's elder brother *sìd-kpēñm^m*

Husband's younger brother *sìd-bīl^a*

Husband's sister *sìd-pyāk^a*

I am my husband's parents' *bīig^a* "child"; all my husband's siblings (of both sexes) call me *py'ā^a* "wife."

My co-wife is my *nìn-tāa⁼*, "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⁺* to the other; two women married to brothers are *nìn-tāas^ε*, "co-wives." "Fiancée" is *py'à-ēlín^a*.

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 *Ṁ-* 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-/Ṁ-*.

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*^{ε/}) assigned to a newborn child through the father's consultation with a diviner (*bā'a*[̄]); this may be the *wīn*^{ne/} 1.1 34 of an ancestor, or of a powerful spiritually significant tree:

<i>À-Wīn</i> ^{ne/}	Awini	<i>wīn</i> ^{ne/}	person with a <i>sīgir</i> ^{ε/} from father's side of the family
<i>À-Bōgur</i> ^ε	Abugri	<i>bōgur</i> ^ε	person with a <i>sīgir</i> ^{ε/} from mother's side of the family
<i>À-Tùg</i> ^a	Atiga	<i>tùg</i> ^a	"tree", as <i>sīgir</i> ^{ε/}
<i>À-Kūdvg</i> ^ɔ	Akudugu	<i>kūdvg</i> ^ɔ	"piece of iron" (sc. as a marker on a tree- <i>sīgir</i> ^{ε/}); displaced as a common noun by the pl-as-sg <i>kūt</i> ^ε

A younger sibling of *À-Wīn*^{ne/} with the same *sīgir*^{ε/} is called *À-Wīn-bīl*^a "Awimbillah", of *À-Kūdvg*^ɔ, *À-Kud-bīl*^a "Akudibillah" etc. Names for girls may follow the pattern *À-Wīn-pyák*^a "Awimpoaka."

Other names refer to birth circumstances:

<i>À-Nà'ab</i> ^a	Anaba	<i>nà'ab</i> ^a	"chief" but in the sense "afterbirth" (because a chief leaves his house after his retainers)
<i>À-Fūug</i> ^{ɔ/}	Afugu	<i>fūug</i> ^{ɔ/}	Name for sole survivor of twins
<i>À-Tūl</i> ^{lε}	Atuli	<i>tūl</i> ^{gε}	"clothing" for child born with a caul
			"invert" for breech-delivered child

A whole clause [16.6.1](#) 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^ε</i>	Tampuri	<i>tàmpūr^ε</i>	"ashpit, rubbish tip"
<i>À-Dūk^{ɔ̄}</i>	Aruk	<i>dūk^{ɔ̄}</i>	"pot"

Another strategy is pretended adoption by an outsider, resulting in names like *Jambeedu* "Fulani", or

<i>À-Sāan^{a/}</i>	Asana	<i>sāan^{a/}</i>	"guest, stranger"
<i>À-Sāan-dú⁺</i>	Sadow	<i>sāan^{a/}</i>	"guest" + <i>dāy⁺</i> "man"
<i>À-Zàngbèog^{ɔ̄}</i>	Azangbego	<i>Zàngbèog^{ɔ̄}</i>	"Hausa person"
<i>À-Nàsà-pyāk^a</i>	Anasapoaka		"European woman"; also a birth-circumstance name: "child delivered by a European midwife"

Names based on adjectives:

<i>Ñ-Dāvug^{ɔ̄}</i>	Ndago	<i>dāvug^{ɔ̄}</i>	"male"
<i>Ṁ-Pyāk^a</i>	Mpoaka	<i>pyāk^a</i>	"female"
<i>Ṁ-Bīl^a</i>	Mbillah	<i>bīl^a</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⁺</i>	"Girl born on Monday"
<i>À-Tàláatà⁺</i>	"Girl born on Tuesday"
<i>Àrúumà⁺</i>	"Boy born on Friday"
<i>À-Síbì⁺</i>	"Boy born on Saturday"

Muslims also have formal Islamic Arabic names, sometimes adapted to Kusaal phonology, like *Dàhamáani⁺/Dàsmáani⁺* 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>B̀̀k̀̀</i> ^ɔ	Bawku	"pit, geographical depression"
<i>K̀̀k̀̀</i> ^{a/}	Koka	"mahogany tree"
<i>K̀̀kp̀̀r̀̀g̀̀</i> ^a	Kokpariga	"palm tree"
<i>T̀̀mp̀̀áan</i> ^{nɛ}	Tempane	perhaps "new villages"
<i>M̀̀ỳ̀'à-n̄ɔr</i> ^{ɛ/}	Mogonori	"lakeside" ("lake-mouth")
<i>B̀̀às-ȳn</i> ^{nɛ/}	Basyonde	"abandon sacks" ?reason for name
<i>K̀̀g̀̀v̀̀r</i> ^{ɛ/}	Kugri	"stone"
<i>B̀̀g̀̀v̀̀r</i> ^ɛ	Bugri	<i>b̀̀g̀̀v̀̀r</i> ^ɛ , object housing a <i>w̄n</i> ^{nɛ/} "spirit"
<i>Ẁ̀id-ñyá'aj</i> ^a	Woriyanga	archaic for <i>ẁ̀id-ñyá'aj</i> ^a "mare"
<i>B̀̀ì-nà'ab</i> ^a	Binaba	"prince"
<i>G̀̀àarv</i> ⁺	Garu	Hausa <i>g̀̀àaruu</i> "wall around a town or compound"
<i>Ẁ̀id-nà'ab</i> ^a	Widinaba	"chief of the clan <i>Ẁ̀id</i> ^a "
<i>P̀̀ūsɪg̀̀</i> ^{a/}	Pusiga	"tamarind"
<i>T̀̀ìl</i> ^{ɛ/}	Tilli	"tree trunk" cf Toende Kusaal <i>t̀̀ìl id</i> (Hasiyatu Abubakari, p.c.)
<i>D̀̀ènnv̀̀g̀̀</i> ^ɔ	Denugu	No known meaning
<i>P̀̀ùlɪma K̀̀ú'è̀m</i> ^m	Pulimakom	"water by <i>p̀̀ùlɪma</i> ⁺ (grass sp)"
<i>Ẁ̀idāan</i> ^a	Widana	for <i>Ẁ̀id-dāan</i> ^a "Horse-Owner", title of a chief's <i>n̄ɔ-dí'ès</i> ^a "linguist" 34 . Usual informal name for Pulimakom, as the seat of this particular linguist.

<i>Mì'isug</i> ^a	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> ^ɔ "dunking" (not in my materials, but cf Toende <i>mi'isuk</i> "baptism", KED <i>mi'is</i> "duck someone")
<i>Sā-bíl</i> ^a	Zebilla	"small grass"?
<i>Sā-píəlìg</i> ^a	Sapeliga	" <i>Isobertia Doka</i> " ("white grass")
<i>Kòl-tā'amís</i> ^ε	Kultamse	"dog almonds" ("river shea trees")

WK thought that the first component of the names *Sā-bíl*^a and *Sā-píəlìg*^a was a plant used in making brooms. **Sāa*^{=/} does not occur in my data (only *sāa*⁼ "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*^a. The report also lists *ta-anga* "*Butyrospermum parkii*" (Kusaal *tá'an*^a), and *kulta-anga* "*Andira inermis*", so *kòl-tá'an*^a is probably this "dog almond."

<i>Kòlugúŋ</i> ^ɔ	Kulungungu	?? <i>kòl-gùŋ</i> ^a "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> ^{lε}	Agolle	the Kusaasi area east of the White Volta; cf <i>àgól</i> ^{lε} "upwards"; for the H toneme see 8.3 .
<i>Tùen</i> ^{nε}	Toende	Kusaasi area west of the White Volta; cf <i>tùen</i> ^{nε} "in front", "West"

For points of the compass, WK gave as accepted terms

N	<i>Bārvɔ</i> ^{ɔ/}	"Bisa country"
E	<i>Ñyá'aŋ</i> ^a	"behind"
S	<i>Zuēya</i> ⁺	"hills" (i.e. the Gambaga Escarpment)
W	<i>Tùən</i> ^{nɛ}	"in front"

reflecting the traditional Kusaasi West-facing orientation. For "South" and "North", KB has respectively *ya-dagɔbug yà dàgòbɔ*^a "your left hand" and *ya-datiuŋ yà dàtiuŋ*^ɔ "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*^ɔ. These can be nonce-formations and need not necessarily refer to any established political entity or permanent settlement:

<i>Kùtāuŋ</i> ^{ɔ/}	any place inhabited by the clan <i>Kùtām</i> ^{ma/}
<i>Kūsáùg</i> ^ɔ	"Kusaasiland"
<i>Mòɔg</i> ^ɔ	"Mossi country" (<i>Mòɔg Ná'àb</i> ^a "Moro Naba, King of the Mossi")

Places outside *Kūsáùg*^ɔ generally do not have Kusaal names (an exception is *Sānkáàñs*^ɛ "Sankanse" in Burkina Faso.) For "Accra" the Twi-derived name *Ankara* is usual. Niggli's Dictionnaire has Toende *Wa'aruk* for "Ouagadougou", but I could not elicit any Agolle equivalent. The form looks like **Wā'adúg*^ɔ "Place of the Dancers (*wā'adíb*^a)", 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*^a "river"; presumably this is simply because it is the only real river within *Kūsáùg*^ɔ.

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*^{nɛ/} from *Widɪ-ñyá'aŋ*^a will introduce himself as "Awini" from "Woriyanga." Similarly "Kusaasi" for *Kūsáàs*^ɛ, "Bawku" for *Bòk*^ɔ, 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'aŋ*^a 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*^a rather than Mampruli *Wuddaana* "(title of) a chief's linguist" and female personal names like "Awimpoaka" *À-Wīn-pyák*^a even show the characteristic Agolle Kusaal vowel breaking, in contrast to the Toende form *Awɪnpɔka* (Niggli.) Again, the personal name "Akudugu" *À-Kūdug*^ɔ shows the postvocalic *-d-* characteristic of Agolle Kusaal rather than Mampruli. The Toende place name *Tīl*^{ɛ/} "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*^{ɔ/}.

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*^ɔ "Hausa" and *Nàsāara*⁺ "European") and their language to the l^ε Subclass of $r^\varepsilon|a^+$. The place they inhabit has the suffix $-g^\varepsilon$.

<u>Ethnic gp sg</u>	<u>Ethnic gp pl</u>	<u>Language</u>	<u>Place</u>	
<i>Kūsáa</i> ⁼	<i>Kūsáàs</i> ^ε	<i>Kūsáàl</i> ^ε	<i>Kūsábog</i> ^ɔ	Kusaasi
<i>Ñwāmpūrg</i> ^{a/}	<i>Ñwāmpūrs</i> ^{ε/}	<i>Ñwāmpūrl</i> ^{ε/}	<i>Ñwāmpūrg</i> ^{ɔ/}	Mamprussi
<i>Bārig</i> ^{a/}	<i>Bārs</i> ^{ε/}	<i>Bāt</i> ^{ε/}	<i>Bārg</i> ^{ɔ/}	Bisa
<i>Mùa</i> ⁺	<i>Mòɔs</i> ^ε	<i>Mòɔl</i> ^ε	<i>Mòɔg</i> ^ɔ	Mossi
<i>Dàgbān</i> ^{nε/}	<i>Dàgbām</i> ^{ma/}	<i>Dàgbān</i> ^{nε/}	<i>Dàgbāng</i> ^{ɔ/}	Dagomba
<i>Bìn</i> ^{nε}	<i>Bìm</i> ^{ma}	<i>Bìn</i> ^{nε}	<i>Bìng</i> ^ɔ	Moba
<i>Sìmiig</i> ^a	<i>Sìmiis</i> ^ε	<i>Sìmiil</i> ^ε	<i>Sìmiug</i> ^ɔ	Fulbe
<i>Yàaŋ</i> ^a	<i>Yàaŋs</i> ^ε	<i>Yàan</i> ^{nε}		Yansi
<i>Gūríg</i> ^a	<i>Gūrís</i> ^ε	<i>Gūrín</i> ^{nε}		Farefare
<i>Yārig</i> ^{a/}	<i>Yārs</i> ^{ε/}	<i>Yāt</i> ^{ε/}		Yarsi
<i>Zàngbèog</i> ^ɔ	<i>Zàngbèed</i> ^ε	<i>Zàngbèel</i> ^ε		Hausa
<i>Bùlg</i> ^a	<i>Bùls</i> ^ε	<i>Bùl</i> ^{lε}		Bulsa
<i>Tàlŋ</i> ^a	<i>Tàls</i> ^ε	<i>Tàlɪn</i> ^{nε}		Tallensi
<i>Nàbɪd</i> ^a	<i>Nàbɪdɪb</i> ^a	<i>Nàbɪr</i> ^ε		Nabdema
<i>Bùsáŋ</i> ^a	<i>Bùsáàŋs</i> ^ε	<i>Bùsáàŋl</i> ^ε		Bisa
<i>Nàsāara</i> ⁺	<i>Nàsàa-nàm</i> ^a	<i>Nàsāal</i> ^ε		European
<i>Kàmbùŋ</i> ^a	<i>Kàmbùmɪs</i> ^ε	<i>Kàmbùnr</i> ^ε		Ashanti

Bārs^{ε/} is "Bisa" generally, not just the Bareka; *Bìm*^{ma} similarly is "Moba" in general, and not only the Bemba (WK.)

Note

<i>Tùen</i> ^{nε}	"Toende area"
<i>Tùennɪr</i> ^ε	"Toende dialect of Kusaal"
<i>Àgòl</i> ^{lε}	"Agolle area"
<i>Àgòl</i> ^{lε}	"Agolle dialect of Kusaal"
<i>Ò pjàŋ'ad Àgòl.</i>	"She speaks Agolle Kusaal."
3AN speak:DIPF Agolle.	

Kusaasi clan names include, among many others:

<u>Singular</u>	<u>Plural</u>	<u>Place</u>	
<i>Kùtān^{nε/}</i>	<i>Kùtām^{ma/}</i>	<i>Kùtāyη^{ɔ/}</i>	WK's clan
<i>Zùā⁺</i>	<i>Zùø^ε</i>		
	<i>Zyà-sābulís^ε</i>		subclans
	<i>Zyà-wiib^a</i>		
	or <i>Zyà-wiis^ε</i>		
<i>Wiid^a</i>	<i>Wiid-nam^a</i>	<i>Wiidug^ɔ</i>	
<i>Nàbɪd^a</i>	<i>Nàbɪdɪb^a</i>	<i>Nàbɪdug^ɔ</i>	
<i>Gòɔg^a</i>	<i>Gòɔs^ε</i>	<i>Gòɔg^ɔ</i>	
<i>Sà'dàbùā⁺</i>	<i>Sà'dàbùø^ε -bùøb^a</i>	<i>Sà'dàbòɔg^ɔ</i>	
	<i>Nà'dàm^{ma}</i>	<i>Nà'dayη^ɔ</i>	
	<i>Gùm-dim^a</i>	<i>Gùm^{mε}</i>	

Nàbɪd^a as a clan name is different from the ethnic group "Nabdema" (WK.)

32.6 Trees and fruits

Tree names are almost all *g^a|s^ε* Class, like *tìg^a* "tree"; their fruits are Classes *r^ε|a⁺* or *g^ɔ|d^ε*.

<u>Tree sg</u>	<u>Tree pl</u>	<u>Fruit sg</u>	<u>Fruit pl</u>	
<i>āāñdɪg^a</i>	<i>āāñdɪs^ε</i>	<i>āāñdɪr^ε</i>	<i>āāñda⁺</i>	Vitex doniana
<i>dùāñ⁺</i>	<i>dòɔñs^ε</i>	<i>dòɔñg^ɔ</i>	<i>dòɔñd^ε</i>	dawadawa
<i>gāāñ^{=/}</i>	<i>gāāñs^{ε/}</i>	<i>gāñr^{ε/}</i>	<i>gāñyá⁺</i>	Nigerian ebony
<i>gòη^a</i>	<i>gòmɪs^ε</i>	<i>gòm^{mε}</i>	<i>gòma⁺</i>	kapok
<i>kìkàη^a</i>	<i>kìkàmɪs^ε</i>	<i>kìkàm^{mε}</i>	<i>kìkàma⁺</i>	fig tree
<i>kpòkpàrɪg^a</i>	<i>kpòkpàrɪs^ε</i>	<i>kpòkpàr^ε</i>	<i>kpòkpàra⁺</i>	palm
<i>pūsɪg^{a/}</i>	<i>pūsɪs^{ε/}</i>	<i>pūsɪr^{ε/}</i>	<i>pūsá⁺</i>	tamarind
<i>sīsíbìg^a</i>	<i>sīsíbìs^ε</i>	<i>sīsíbìr^ε</i>	<i>sīsíbà⁺</i>	neem
<i>tá'ay^a</i>	<i>tā'amís^ε</i>	<i>tá'am^{mε}</i>	<i>tā'amá⁺</i>	shea butter
<i>tè'eg^a</i>	<i>tè'εs^ε</i>	<i>tè'og^ɔ</i>	<i>tè'εd^ε</i>	baobab
<i>vúη^a</i>	<i>vūømís^ε</i>	<i>vúø^ε</i>	<i>vūáa⁼</i>	red kapok

The stems for "red kapok" and its fruit are slightly different: tree **vuøm*- fruit **vuøg*-

32.7 Body parts

Most human and animal body parts belong to the Classes $r^\epsilon|a^+$ and $g^\gamma|d^\epsilon$:

<i>bjāuñk</i> ^γ	"shoulder"	<i>bīan</i> ^{nε}	"shin"
<i>bì'isur</i> ^ε	"woman's breast"	<i>dūm</i> ^{mε}	"knee"
<i>gbāuŋ</i> ^{γ/}	"animal skin; lip, eyelid"	<i>gbēr</i> ^{ε/}	"thigh"
<i>gbè'og</i> ^γ	"forehead"	<i>gbìn</i> ^{nε}	"buttock"
<i>gbìn-vòwñr</i> ^ε	"anus"	<i>gūr</i> ^ε	"ridge of back"
<i>íu</i> ^ε	"horn"	<i>kōbir</i> ^ε	"bone"
<i>kōñbug</i> ^γ	"hair"	<i>kpēñdir</i> ^{ε/}	"cheek"
<i>kpìsukpìl</i> ^ε	"fist"	<i>lām</i> ^{mε/}	"gum"
<i>lān</i> ^{nε}	"testicle"	<i>lōgur</i> ^ε	"organ, member"
<i>nìn-gbīŋ</i> ^{γ/}	"human skin, body"	<i>nìn-gòwr</i> ^ε	"neck"
<i>nóbùr</i> ^ε	"leg"	<i>nōb-púmpàuŋ</i> ^γ	"foot"
<i>nōwr</i> ^{ε/}	"mouth"	<i>ñyīn</i> ^{nε/}	"tooth"
<i>ñyōwd</i> ^ε	"intestines"	<i>ñyō'wŋ</i> ^{γ/}	"chest"
<i>ñyōwr</i> ^ε	"nose"	<i>pèn</i> ^{nε}	"vagina"
<i>pūr</i> ^{ε/}	"stomach"	<i>sōwñr</i> ^ε	"liver"
<i>tàsintàl</i> ^ε	"palm"	<i>tàtál</i> ^ε	"palm"
<i>tìəŋ-gūr</i> ^ε	"chin"	<i>tùb-kpìr</i> ^ε	"half of jaw"
<i>tùbur</i> ^ε	"ear"	<i>yìər</i> ^ε	"jaw"
<i>yū'ər</i> ^ε	"penis"	<i>zàñl</i> ^ε	"umbilicus"
<i>zìlm</i> ^{mε}	"tongue"	<i>zūg</i> ^{γ/}	"head"
<i>zūəbúg</i> ^γ	"human head hair"	<i>zūr</i> ^ε	"tail"

There are significant exceptions, however:

$g^a|s^\epsilon$ Class:

<i>nú'ùg</i> ^γ	"hand" 9.3.2.1	perhaps as the prototypical tool.
<i>nū'-bíl</i> ^a	"finger"	but <i>nū'-dávòg</i> ^γ "thumb"
<i>nū'-íñ'a</i> ⁺	"fingernail"	<i>nōb-bíl</i> ^a "toe"
<i>nōb-íñ'a</i> ⁺	"toenail"	<i>sīa</i> ⁺ "waist"
<i>ñyá'aŋ</i> ^a	"back"	<i>tìəŋ</i> ^a "beard"

$f|t^+$ Class:

<i>nīf</i> [/]	"eye"	as a "small round thing"?
<i>sjà-nīf</i> [/]	"kidney"	as a compound of "eye"
<i>sōñf</i> [/]	"heart"	beside <i>sūuñr</i> ^{ε/} $r^\epsilon a^+$ Class

32.8 Colour terms

Kusaal, like many local languages, has a basic three-colour system:

<i>zèñ'og</i> ^ɔ	"red"	covering all reddish shades
<i>sābɪlíg</i> ^a	"black"	covering all darker shades of colour
<i>pìəlɪg</i> ^a	"white"	covering all lighter shades of colour

Wiug^ɔ "red" is synonymous with *zèñ'og*^ɔ. 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*^{nɛ} "what time of day?"

<i>bēogv-n</i> ^{ɛ/}	"morning"	<i>àsùbá</i> ⁺	"dawn" (← Arabic)
<i>bèkèkèoŋg</i> ^ɔ	"very early morning"	<i>zàam</i> ^m	"evening"
<i>wìn-līr</i> ^ɛ	"sunset"	<i>yú'vɟ</i> ^ɔ	"night"
<i>wìn-kòɔŋr</i> ^ɛ	"sunset"	<i>nīntāŋ</i> ^{a/}	"heat of the day, early afternoon"

Win^{nɛ} "time of day" (cf *wìnnɪg*^a "sun"), always with a pre-determiner.

There are no traditional expressions for clock time; NT/KB adapts from Hausa:

<i>kérɪfà àtáñ'</i>	"three o'clock"	Hausa:	<i>karfèe ukù</i>
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The deictic particle *ñwà* "this" is commonly attached to time words:

<i>zàam ñwá</i>	"this evening"	[za:ma]	
<i>yú'vɟ ñwá</i>	"tonight"	[yʊ:ŋ:a]	8.5.1

The day begins at sunrise.

Answers to *bōn-dáàr*^ɛ "which day?":

<i>zīná</i> ⁺	"today"	<i>sù'əs</i> ^a	"yesterday"
<i>bēog</i> ^ɔ	"tomorrow"	<i>dāar</i> ^ɛ	"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> ^ε	"Sunday"	<i>Àtínì dáàr</i> ^ε	"Monday"
<i>Àtáláatà dáàr</i> ^ε	"Tuesday"	<i>Àlárìbà dáàr</i> ^ε	"Wednesday"
<i>Àlàmiisì dáàr</i> ^ε	"Thursday"	<i>À(r)zúmà dáàr</i> ^ε	"Friday"
<i>Àsíbitì dáàr</i> ^ε	"Saturday"		

Dāar^ε "day" is "twenty-four hour period" (*nīntān* "day as opposed to night") and is used with pre-determiners to specify a particular day; the word *dàbìsìr*^ε 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 dábìsà 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^{a/}</i>	"moon, month"	
<i>ñwād-kánì kēn nā lā</i>	"next month"	("the month which is coming")
<i>ñwād-kánì gāad lā</i>	"last month"	("the month which has passed")

There are two seasons:

<i>sēoṅṅ^ᵟ</i>	"rainy season"	<i>úun^{nε}</i>	"dry season"
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The Harmattan part of *úun* is called *sāpál^{lε}* and the very hot humid part before the rains is *dàwàlìg^a*.

<i>yùum^{mε}</i>	"year"	<i>dūnná⁺</i>	"this year"
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"Time" in general is the irregular noun *sānjá⁺* pl *sānsá⁺* cb *sān-*; "time of day" is *wìn^{nε}*; "time" as in "several times" is *nōɔr* [16.4.2.4](#). Examples with *sānjá⁺*:

<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 Minimal pairs

In this section I will note only a few instances from two areas where traditional orthography has been deficient: the tense/lax distinction in monophthongal high vowels, and tone.

33.1 Tense and lax vowels

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 [4.2.1](#). 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>liɖɪg</i>	"astonish, be amazed"	<i>liɖɪg</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" base form
<i>òk</i>	"vomit"	<i>ūk</i>	"bloat"
<i>bōn</i>	"thing"	<i>bùn</i>	"germinate" dipf
<i>kōɖvɔg</i>	"old"	<i>kūɖvɔg</i>	"piece of iron"
<i>kōg-káŋā</i>	"this mahogany tree"	<i>kūg-káŋā</i>	"this stone"
<i>tōlɪg</i>	"heat up"	<i>tùlɪg</i>	"invert"
<i>yōgúm</i>	"camel"	<i>yūgvdɪr</i>	"hedgehog"

Although contrasts do thus exist in short *i/t u/v* even when these are not the result of Apocope, written sources show great fluctuation in the writing of *e/i* and *o/u/v*, and in many contexts a three-way contrast may not be demonstrable.

Contrasts among the short root vowels seem often to be found only after particular classes of preceding consonant, especially with *i/t*; this is perhaps connected with the loss of the original palatal consonants in Western Oti-Volta. Some tense/lax contrasts among the long vowels probably arose by monophthongisation of earlier diphthongs.

33.2 Tones

Tone functions more as a syntactic marker than to distinguish lexemes, and words often undergo alteration of their tone patterns by tone sandhi or overlay. Lexical tone has a low functional load, and the absence of tone marking in the traditional orthography causes no great difficulty to Kusaasi experienced in reading the language. Minimal pairs exist, however; among other examples are

<i>àgɔ̌</i> ^{lɛ}	"upwards"	<i>Àgɔ̌</i> ^{lɛ}	"Eastern Kusaasiland"
<i>bāŋ</i> ^a	"ring, chain"	<i>bàŋ</i> ^a	"agama lizard"
<i>bū'ar</i> ^{ɛ/}	"skin bottle"	<i>bù'ar</i> ^ɛ	"hole"
<i>būk</i> ^{ɛ/}	"weaken"	<i>bùk</i> ^ɛ	"cast lots"
<i>dāvɔ̌</i> ^{ɔ̌}	"male"	<i>dàvɔ̌</i> ^{ɔ̌}	"piece of wood"
<i>dīgɪr</i> ^{ɛ/}	"lying-place"	<i>dìgɪr</i> ^ɛ	"dwarf"
<i>dúər</i> ^ɛ	"raising" (gerund)	<i>dūər</i> ^{ɛ/}	"stick"
<i>gāŋ</i> ^{ɛ/}	"choose"	<i>gàŋ</i> ^ɛ	"step over"
<i>gbāuŋ</i> ^{ɔ̌/}	"skin", "book" DK	<i>gbàuŋ</i> ^{ɔ̌}	"book" WK
<i>kūk</i> ^{a/}	"mahogany tree"	<i>kùk</i> ^a	"ghost"
<i>kūk</i> ^a	"chair"		
<i>māk</i> ^{ɛ/}	"measure"	<i>màk</i> ^ɛ	"crumple up"
<i>mɔ̌ɔ̌</i> ^{ɔ̌}	"bush, wilderness"	<i>Mòɔ̌</i> ^{ɔ̌}	"Mossi realm"
<i>nēm</i> ^{m/}	"grind with millstone"	<i>nèm</i> ^m	"emptiness; for free"
<i>nēr</i> ^{ɛ/}	"millstone"	<i>nèr</i> ^ɛ	"empty"
<i>nīs</i> ^ɛ	"birds"	<i>nīs</i> ^ɛ	"bodies"
<i>pīd</i> ^ɛ	"get bloated"	<i>pìd</i> ^ɛ	"put on hat, shoes etc"
<i>pīəs</i> ^{ɛ/}	"wash"	<i>pīəs</i> ^ɛ	"fool somebody"
<i>sām</i> ^{ma}	"guests"	<i>sàm</i> ^{ma}	"father"
<i>sām</i> ^{m/}	"mash up"		
<i>sĭāk</i> ^{ɛ/}	"suffice"	<i>sĭàk</i> ^ɛ	"agree"
<i>wēog</i> ^{ɔ̌}	"cheap/common thing"	<i>wèog</i> ^{ɔ̌}	"deep bush"
<i>yāaŋ</i> ^a	"grandchild"	<i>Yàaŋ</i> ^a	"Yansi, Yanga person"
<i>yīdɪg</i> ^{ɛ/}	"untie"	<i>yìdɪg</i> ^ɛ	"go astray"
<i>yō</i> ⁺	"pay"	<i>yò</i> ⁺	"close"
SFs: <i>lābɪs</i> ^{a/}	"be wide"	<i>làbɪs</i> ^ɛ	"walk stealthily"
cbs: <i>nā'-kàŋā</i>	"this cow"	<i>nà'-kàŋā</i>	"this chief"

Certain particles differ in tone alone:

<i>dāa</i>	"two days ago"	<i>dàa</i>	"day after tomorrow"
<i>dā</i>	negative imperative	<i>dà</i>	"before two days ago"

34 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^a|s^ε* Class form if extant, if not, then *g^ɔ|d^ε* or *r^ε|a⁺*. Variable verbs are listed under the Base Form.

Variable verb dynamic 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 *ɨ 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 sources) 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>dipf</i>	dynamic imperfective	<i>ger</i>	gerund
<i>imp</i>	imperative	<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^a pl *āāñdɪs^ɛ* cb *āāñd-* n. black plum tree, *Vitex doniana* [32.6](#)

āāñdur^ɛ pl *āāñda⁺* n. black plum fruit [32.6](#)

āāñs^ɛ vv. tear

àbùlá⁺ how many-fold? [16.4.2.4](#)

àbùyí⁺ **àbùtáñ⁺** **àbùnāasí⁺** adv. twice, three times etc [16.4.2.4](#)

à-dàalúŋ^ɔ pl *à-dàalís^ɛ* *à-dàalímìs^ɛ* cb *à-dàalúŋ-* n. stork [16.6](#)

àdàkón⁺ q. one [16.4.2.2](#)

àɛñ^a ger *àañlím^m* iv. be something/somewhat [21.2](#) [8.5.3](#) [8.5.2](#)

àeñ⁺ vv. get torn; *res* adj *àañlúŋ^ɔ* torn

à-gáùŋg^ɔ pl *à-gáàñd^ɛ* cb *à-gāñ-* n. pied crow [16.6](#)

àgól^ɛ **àgōlá⁺** adv. upwards

Àgòl^ɛ n. Agolle district of Kusaasi territory; n. Agolle Kusaal dialect

à-kōra-díàm^{ma} pl *à-kōra-díàm-nàm^a* n. praying mantis [16.6](#)

àlá⁺ adv. thus [16.3.3](#)

àlá⁺ q. so many; how many? [16.3.3](#)

àlááfù⁺ n. health; in greetings [31](#) cf *lááfɪya⁺* ← Arabic العافية *ʔal-ʕa:fiya(tu)*

Àláasìd dáàr^ɛ n. Sunday [32.9](#) ← Arabic

Àlànísì dáàr^ɛ n. Thursday [32.9](#) ← Arabic

Àlárɪbà dáàr^ɛ n. Wednesday [32.9](#) ← Arabic

àlá zùg^ɔ therefore [25.1.1](#) [16.3.3](#)

àlòpìr^ɛ pl *àlòpìya⁺* n. aeroplane ← English

àmáa⁼ but [24.1.3](#) ← Hausa ← Arabic

àmēŋá⁺ adv. really, truly [17.4](#)

àmí amen ← Arabic آمين; in replies to greetings [31](#)

à-mús^ɛ pl *à-mús-nàm^a* n. cat [16.6](#); cf Hausa *mussàa id*

ànāasí⁺ q. four [16.4.2.1](#)

àní⁺ adv. there [16.3.3](#)

àní⁼ q. eight [16.4.2.1](#)

àní nā^{+/} adv. there [16.3.3](#)

àníŋà⁺ adv. promptly [17.4](#)

àń'òń^ɛ who? [16.3.1.4](#)

àñruŋ^ɔ pl *àñruma⁺* cb *àñruŋ-* n. boat (written *aaruŋ* in the 1976/1996 NT)

āñs^ɛ vv. pluck (leaves)

āñsìb^a pl *āñs-nám^a* cb *āñs-* n. mother's brother [32.1](#)

āñsɪg^{ɛ/} vv. break at an angle

āñsíŋ^a pl *āñsí^ɛ* cb *āñsɪŋ-* n. (man's) sister's child [32.1](#)

àntù'a⁼ pl *àntù'əs^ɛ* cb *àntù'à-* n. lawsuit

ànū⁺ q. five [16.4.2.1](#)

àñwá⁺ *adv.* like this [16.3.3](#)

ānzúrfà⁺ *n.* silver; cf Hausa *azùrfaa* ← Berber **a-zrəf*, Souag 2016

àrazàk^a *pl* àrazà^a *as*^ε *cb* àrazà⁻ - Generally used in *pl*: *n.* wealth, riches ← Arabic الرزق *ʔar-rizq(u)*

àrazánà⁺ *n.* heaven ← Arabic الجنة *ʔal-janna(tu)*

Àrzúmà dáàr^ε *n.* Friday [32.9](#) ← Arabic

àsés except, unless [18.1](#) [24.1.3](#) ← Hausa *sai*

Àsíbitì dáàr^ε *n.* Saturday [32.9](#) ← Arabic

àsida⁺ *adv.* truly [17.4](#)

àsùbá⁺ *n.* dawn ← Arabic الصباح *ʔas^ε-s^εaba:h(u)*

àtán⁺ *q.* three [16.4.2.1](#)

Àtáláatà dáàr^ε *n.* Tuesday [32.9](#) ← Arabic

àtánā^{+/} *q.* three exactly [16.4.2.1](#)

Àtínì dáàr^ε *n.* Monday [32.9](#) ← Arabic

àtìyùk^ɔ *n.* sea ← Hausa *tèeku*

àwánā^{+/} *adv.* like this [16.3.3](#)

àwāē⁺ *q.* nine [16.4.2.1](#)

àyí⁺ *q.* two [16.4.2.1](#)

áyù no [25.2.4](#)

àyínā^{+/} *q.* two exactly [16.4.2.1](#)

àyópòē⁺ *q.* seven [16.4.2.1](#)

àyúebù⁺ *q.* six [16.4.2.1](#)

B

bà they, their (*proclitic*) [16.3.1.1](#)

ba⁺ them (*enclitic object*) [16.3.1.1](#)

bā^{+/} *pl* bā⁻ *nám*^a *cb* bā⁻ - *n.* father [9.4](#)

bāa⁼ *pl* bāas^ε *cb* bà⁻ - *n.* dog

báa (← Hausa *bâa* "not exist") in constituent negation [29.4](#)

bā'a⁼ *pl* bā'ab^a *cb* bà'a⁻ - *n.* traditional diviner; **bà'a-kòlug**^ɔ *pl* bà'a-kò^{nε} *cb* bà'a-kò⁻ - *n.* diviner's bag

bā'a⁼ *pl* bā'as^ε *cb* bà⁻ - *n.* peg to hang things on

bà'an^{nε} *pl* bà'ana⁺ *cb* bà'an⁻ - *n.* stocks (punishment)

bàañlug^a *pl* bàañlus^ε *adj.* narrow, slender

bāañlíg^a *adj.* quiet

bāañlím^m *adv.* quietly

bà'ar^ε *pl* bàda⁺ bà'a⁺ *cb* bà⁻ - *n.* idol

bābá⁺ beside *postposition* [17.6](#); cf *bābir*^{ε/} sphere of activity

bàbugā^{+/} *q.* many [16.4.1](#)

bákpàē⁺ *n.* week ← Hausa *bakwài* "seven"

- bàlàar**^ε pl *bàlàya*⁺ cb *bàlà-* n. stick, staff, club
bàlàŋɪr^ε pl *bàlàŋa*⁺ cb *bàlàŋ-* n. hat
bālērvg^{ɔ/} pl *bālērɪd*^{ε/} *bālērɪs*^{ε/} cb *bālér-* n. ugly person; cf *lēr*^ε get ugly
bàmmā^{+/} these, those *demonstrative* [16.3.1.2](#)
bàn^ε these, those *demonstrative* [16.3.1.2](#)
bán they (*subject of ñ-clause*) [16.3.1.1](#)
bān^ε they, them (*contrastive*) [16.3.1.1](#)
bāñ⁺ vv. ride
bānāa⁼ pl *bānāas*^ε cb *bànà-* (tone *sic* in my materials) n. traditional "fugu" smock
bāñ'ad^a pl *bāñ'ad-nàm*^a n. ill person
bāñ'al^{ε/} vv. make to ride (horse, bicycle)
bāñ'as^ε cb *bāñ'-* n. pl *as sg* disease
bàn-dāvug^ɔ pl *bàn-dāad*^ε cb *bàn-dà-* n. crocodile
bān-kúsél^{lε} pl *bān-kúsélá*⁺ cb *bān-kúsél-* n. lizard
bāŋ^a pl *bāaŋs*^ε cb *bàŋ-* n. ring, chain, fetter
bàŋ^a n. agama lizard
bàŋ^ε vv. come to know
báp wallop!
Bārɪg^{a/} pl *Bārɪs*^{ε/} cb *Bār-* n. Bisa person [32.5](#) (not only the Bareka, WK)
bárikà⁺ n. blessing; in greetings [31](#) ← Arabic بركة *baraka(tun)*
Bārvg^{ɔ/} n. Bisa country; North [32.3](#)
bàs^ε vv. go away; abandon; throw out
Bāt^{ε/} n. Bisa language [32.5](#)
bàtáñ⁺ q. three (*after personal pronoun* [16.4.2.1](#))
bàųŋv⁺ n. found only as in *Ò kpèñ' báųŋv*. He was circumcised. ← Songhay "pool"
 (for the idiom [15.1](#))
bàyéog^{ɔ/} betrayer of secrets (cf *yēs*^{ε/})
bàýí⁺ q. two (*after personal pronoun* [16.4.2.1](#))
bàýópɔ̀⁺ q. seven (*after personal pronoun* [16.4.2.1](#))
bè⁺ ger *bèllím*^m (*sic*) iv. exist; be in a place [21.1](#)
bēdɪg^{ε/} vv. go rotten
bèdug^ɔ **bèdir**^ε pl *bèda*⁺ cb *bèd-* adj. great
bèdugū^{+/} q. much, a lot [16.4.1](#)
bēε or [24.1.2](#) [25.2.2](#)
bèkèkèoŋg^ɔ or **bèkèoŋg**^ɔ n. very early morning
bèlim^m vv. beg
bèlɪs^ε vv. comfort
bēn^{nε} pl *bēna*⁺ cb *bèn-* n. end
bèñ⁺ ger *bèñ'εs*^ε vv. fall ill
bèñsɪg^ε vv. serve soup
bèŋ^ε vv. mark out a boundary

- bēñíd^ε** *cb* **bēñ-** *n. pl* bean leaves, *Vigna unguiculata* (Haaf); **bēñíd nē kī^{+/}** *n.* beanleaf-and-millet, a traditional snack
- bēñír^ε** *pl* **bēñá⁺** *cb* **bēñ-** *n.* brown bean
- bēog^ɔ** *n.* tomorrow [32.9](#); **Kà bēog níe kà ...** The next day ...
- bēogv-n^{ε/}** *n.* morning [32.9](#)
- bē'og^ɔ bī'a⁺** *pl* **bē'ed^ε bī'əs^ε** *cb* **bè'- bjà'-** *adj.* bad
- bèrɪŋ^a** *pl* **bèrɪŋs^ε** *sic n.* a plant used for fibre (KED), *Hibiscus cannabinus* (Haaf)
- bèrɪga⁺** *cb* **bèrɪg-** *pl* leaves of **bèrɪŋ** used for soup (KED)
- bēsug^ɔ** *pl* **bēsɪd^ε** *cb* **bès-** *n.* a kind of wide-mouthed pot
- bjāñ'ar^{ε/}** *pl* **bjāñ'ad⁺ bjāñ'a⁺** *cb* **bjāñ'-** *n.* wet mud, black mud; riverbed
- bjāuñk^ɔ** *pl* **bjāñ'ad^ε** *cb* **bjàñ'-** *n.* shoulder
- bīál^{lε}** *pl* **bīálá⁺** *adj.* naked
- bìəl^ε** *vv.* accompany
- bī'əlá⁺** *q.* a little [16.4.1](#); **bī'əl bī'əl** *q. and adv.* a very little; little by little
- bī'əm^m** *pl* **bì'əm-nàm^a bī'əmma** LF *cb* **bì'əm-** *n.* enemy
- bīən^{nε}** *pl* **bīəna⁺** *cb* **bīən-** *n.* shin
- bīər^{ε/}** *pl* **bjēyá⁺** *cb* **bjā-** *n.* elder sibling of the same sex
- bì'əs^ε** *vv.* doubt
- bìgɪs^ε** *vv.* show, teach
- bīig^a** *pl* **bīis^ε** *cb* **bì- bī-** *n.* child; **bī-díbìŋ^a** *n.* boy; **bì-līa⁺** *n.* baby; **bì-nà'ab^a** *n.* prince; **bì-pīt^{a/}** *pl* **bì-pītíb^a** *cb* **bì-pīt-** *n.* father's younger brother [32.1](#); **bī-púŋ^a** *n.* girl
- bì'ig^ε** *vv.* ripen, become pregnant
- bīilít^ɔ** *pl* **bīilít⁺** *cb* **bīil-** *n.* seed
- bīilím^m** *n.* childhood
- bīum^{m/}** *cb* **bī-** *n.* soup, stew
- bì'ísím^m** *n.* milk (human or animal)
- bì'isur^ε** *pl* **bì'isa⁺** *cb* **bì'is-** *n.* woman's breast
- bīl^a** *pl* **bībɪs^ε** *cb* **bìl-** or **bì-** *adj.* little, small
- bìlɪg^ε** *vv.* roll (*transitive*)
- bìlum^m** *vv.* roll (*intransitive*)
- bìmbìm^{mε}** *pl* **bìmbìma⁺** *cb* **bìmbìm-** *n.* altar NT (KED: mound or pillar of earth)
- Bìn^{nε}** *pl* **Bìm^{ma}** *cb* **Bìn-** *n.* Moba, Bimoba person [32.5](#) (not only Bemba, WK)
- Bìn^{nε}** *n.* Moba language [32.5](#)
- bīn^{nε}** *n.* excrement
- Bìŋ^ɔ** *n.* Moba country [32.5](#)
- bò⁺** *vv.* seek; **bòòd^a** *dipf* used for: want, like, love (sexual, romantic); *imperfective gerund* **bòòdum^m** will [13.1.1.4](#)
- bō⁺** *cb* **bò-** what? why? [16.3.1.4](#); **bò-būudi⁺** what sort of ..?; **bō-zúgō** because [24.1.3](#), why? [16.3.3](#); **bò-wìn^{nε}** what time of day?
- bòbɪg^ε** *vv.* wrap round, tie round
- bòdɪg^ε** *vv.* lose, become lost

- būrāa**[°] n. man, male adult (in ILK but characteristically *Toende* Kusaal; no examples in NT. See *dāy*⁺)
- būriyá**⁺ n. Christmas ← Twi/Fante *bronya*
- bùrkìn**^a pl *bùrkìn-nàm*^a cb *bùrkìn-* n. free person; honourable person ← Songhay [15.1](#)
- Bùsààñl**[°] n. Bisa language [32.5](#)
- Bùsáŋ**^a pl *Bùsáàñs*[°] cb *Bùsāŋ-* n. Bisa person [32.5](#)
- būtɪŋ**^a pl *būtɪs*[°] irregular [6.2.1](#) [2.4](#); cb *būtɪŋ-* n. cup (in general; etymologically ← "seed planting [cup]")
- būud**[°] n. pl as sg innocence
- būudi**⁺ cb *būud-* n. kind, sort, ethnic group
- būvg**^a pl *būvs*[°] cb *bù-* n. goat; **bù-dìbɪg**^a 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**⁺ vv. buy
- dà'a**[°] pl *dà'as*[°] cb *dà-* n. market
- dà'abɪr**[°] n. slave
- dàalɪm**^m n. masculinity
- dàalɪm**^m pl *dàalɪmìs*[°] n. male organs
- dāam**^{m/} cb *dā-* n. millet beer, "pito"; **dā-núùr**[°] n. beer-drinking; **dā-bín**^{n°} cb *dā-bín-* n. residue of beer; NT yeast (cf *bīn*^{n°})
- dàam**^m vv. disturb, trouble (cf Hausa *dàamaa* id)
- dāan**^a pl *dāan-nàm*^a cb *dāan-* n. owner of ... [16.10.3.1](#)
- dāar**[°] pl *dābá*⁺ cb *dà-* n. day, 24-hour period [32.9](#); **dà-pīiga**⁺ n. ten days
- dābìè**^m *tone sic* n. fear
- dàbìog**[°] pl *dàbìəd*[°] cb *dàbjà-* n. coward
- dàbɪsɪr**[°] pl *dàbɪsa*⁺ cb *dàbɪs-* n. day (as one of several)
- dādúk**[°] n. a kind of large pot
- dā'e**^{+/} vv. push; blow (of wind)
- Dàgàád**^a pl *Dàgàadɪb*^a *Dàgàad-nàm*^a cb *Dàgàád-* n. Dagaaba person (L prefix sic)
- Dàgbān**^{n°/} pl *Dàgbām*^{ma/} cb *Dàgbān-* n. Dagomba person [32.5](#)
- Dàgbān**^{n°/} n. Dagbani language [32.5](#)
- Dàgbāuŋ**^{°/} n. Dagomba country, Dagbon [32.5](#)
- dàgòbɪg**^a n. left-hand; (*yà*) *dàgòbɪg*^a South KB [32.3](#)
- dāká**⁺ pl *dāká-nàm*^a cb *dāká-* n. box ← Hausa *àdakàa*
- dàkīg**^a pl *dàkīis*[°] cb *dàkì-* n. wife's sibling [32.1](#); **dàkì-dāy**⁺ n. wife's brother; **dàkì-puāk**^a n. wife's sister; **dàkì-tuà**⁺ n. wife's sister's husband

- dà-kòǎr^ε** pl *dà-kòǎya⁺* cb *dà-kòǎ-* n. unmarried son [32.1](#)
- dàm^m** dipf *dàmmɪd^a* vv. shake
- dàmà'a⁼** n. liar cf *mà⁺*
- dàmà'am^m** n. lie, untruth, lying
- dàmà'ar^ε** n. lie, untruth
- dāmpūsāar^ε** n. stick
- dànkòŋ^ɔ** n. measles
- dà-pāal^{a/}** n. young man, son
- dà-sāŋ^a** pl *dà-sāaŋs^ε* *dà-sām^{ma}* cb *dà-saŋ-* n. young man
- dà-tāa⁼** pl *dà-tāas^ε* cb *dà-tà-* n. enemy
- dàtiŋ^ɔ** n. right-hand; (*yà*) *dàtiŋ^ɔ* North KB [32.3](#)
- dāu⁺** pl *dāp^a* cb *dàu-* *dàp-* [9.2.2](#) n. man (as opposed to woman)
- dàug^ɔ** pl *dàad^ε* cb *dà-* n. piece of wood, log; pl also: wood (material); **dà-kīəd^a** n. wood-cutter; **dà-kpīəd^a** n. carpenter; **dà-pūvdír^ε** n. cross-piece, pl **dà-pūvdá⁺** n. used as sg cross NT
- dāug^ɔ** pl *dāad^ε* cb *dà-* adj. male
- dàwàlɔg^a** n. hot humid season before the rains
- dàwān^{ne/}** pl *dàwāná⁺* cb *dàwān-* n. pigeon
- dàyāam^{ma}** pl *dàyāam-nám^a* cb *dàyāam-* n. husband's parent [32.1](#); **dàyāam-dáu⁺** n. husband's father; **dàyāam-puák^a** n. husband's mother
- dàyūug^{ɔ/}** pl *dàyūud^{ε/}* cb *dàyū-* n. rat
- dèbir^ε** pl *dèba⁺* n. mat, pallet, bed
- dēŋ^a** pl *dēēŋs^ε* *dēēmɪs^ε* *dēēna⁺* cb *dēŋ-* q. first [16.4.2.3](#)
- dēl^{la/}** ger *dēllúg^ɔ* *dēllím^m* iv. lean on something (of a person)
- dèlum^m** vv. begin to lean on something (of a person)
- dēŋ^a** pl *dēmɪs^ε* cb *dēŋ-* n. accidental bruise
- dēŋ^ε** vv. go, do first
- dēŋum** beforehand, *preverbal adverb* [19.7.2](#)
- dì** it, its (*proclitic*) [16.3.1.1](#) = *lì*
- dì⁺** dipf *dìt^a* imp *dìm^{ma}* vv. eat, receive; ger **dīub^ɔ** n. food; *Ò dì pu'ā*. He's married a wife. *Ò dì ñyán*. She's ashamed.
- djā^a** vv. get dirty
- djā'ad^{ε/}** n. dirt
- dī'e^{+/}** vv. receive, get
- dìəm^{ma}** pl *dìəm-nàm^a* cb *dìəm-* n. wife's parent [32.1](#); also in polite address to an unrelated person of opposite sex and similar or greater age than oneself; **dìəm-dāu⁺** n. wife's father; **dìəm-puāk^a** n. wife's mother
- dì'əm^m** vv. play, not be serious
- dì'əma⁺** n. festival
- dī'əs^{ε/}** vv. receive (many things)
- dīgɪ^{ya/}** ger *dīk^{a/}* KT *dīgɪ^{ε/}* WK iv. be lying down

- dīgísá**⁺ *n. pl* lairs
dīgí^{ε/} *vv.* lay down
dīgín^ε *vv.* lie down
dīgír^ε *pl* **dīga**⁺ *cb* **dīg-** *n.* dwarf
dūs^ε *vv.* feed; *agt* **dūs**^a *n.* glutton
dūsúŋ^ɔ *pl* **dūsímà**⁺ **dūsís**^ε *cb* **dūsúŋ-** *n.* spoon
dím^a *dummy head pronoun, animate pl* [16.10.3.1](#)
dìn^{nε} *dummy head pronoun, inanimate* [16.10.3.1](#)
dín *it (subject of ñ-clause)* [16.3.1.1](#)
dīn^ε *it (contrastive)* [16.3.1.1](#) = **līn**^ε
dìndēog^{ɔ/} *pl* **dìndēed**^{ε/} *cb* **dìndē-** *n.* chameleon
dìndūs^a *n.* glutton
dìn zúg^ɔ *therefore* [16.3.3](#)
dítúŋ^ɔ *n.* right-hand (see **dàtìyŋ**^ɔ)
dì-zōrvug^{ɔ/} *pl* **dì-zōrá**⁺ *cb* **dì-zōr-** *n.* crumb
dōl^{la/} *ger* **dōllím**^m *iv.* accompany in a subordinate rôle; **Àn'òni dōllí fò?** Who has come with you? (to an elderly patient.) **Bà dōl nē tāaba.** They went together.
dōlig^{ε/} *vv.* make accompany, send along with
dōlis^{ε/} *vv.* investigate, trace
dōñlig^{ε/} *vv.* stretch oneself
dòñ'w^ε *vv.* water plants
dòwɔ^ɔ *pl* **dòwd**^ε **dòt**^ε *cb* **dò-** *n.* house, hut; clan; **dòwɔ bíŋ**^a *n.* (house) cat
dòwɔŋ^ɔ *pl* **dòwɔŋd**^ε *cb* **dòwɔŋ-** *n.* dawadawa fruit [32.6](#)
dō⁺ *dipf* **dōt**^{a/} *imp* **dòm**^{ma} *vv.* go up
dū'à^a *vv.* bear, give birth, beget; *agt* **dū'ad**^a *n.* elder relation
dù'al^ε *vv.* make interest (of a loan)
dū'am^m *n.* birth
dùañ⁺ *pl* **dòwɔŋs**^ε *cb* **dòwɔŋ-** *n.* dawadawa [32.6](#) *Parkia clappertoniana* [*biglobosa*] (Haaf)
dū'átà⁺ *n.* doctor ← English
dūe^{+/} *vv.* raise, rise
dūg^ε *vv.* cook
dūk^{ɔ/} *pl* **dūgvud**^{ε/} **dút**^ε *cb* **dūg-** *n.* cooking pot; **dūg-pe'èla**⁺ *n.* full pots
dùm^m *vv.* bite
dūm^{mε} **dūm**^{nε} *pl* **dūma**⁺ *cb* **dùm-** *n.* knee
dòndùug^ɔ *pl* **dòndùud**^ε *cb* **dòndù-** *n.* cobra
dūnyá⁺ *cb* **dūnyá-** [9.7](#) *n.* world ← Arabic دنيا *dunya*:
dūnná⁺ *adv.* this year [32.9](#)
dūŋ^a *pl* **dūmɪs**^ε *cb* **dūŋ-** *n.* mosquito
dūer^{ε/} *pl* **dūyáyá**⁺ *cb* **dūyā-** *n.* stick
dū'es^{ε/} *vv.* lift up, honour
dūr^a *iv.* be many

dū'un^{El} vv. pass water (*ger* recorded as **dū'unóg**^o)

dū'uním^m *cb* **dū'un-** n. urine

dūsá⁺ n. pl. steps

E

ēñ yes [25.2.4](#)

ēñ or **ēñ tí** see *ñyēē*, *ñyēē tí* preverbal adverb [19.7.2](#)

ēñb^{El} vv. lay a foundation

ēñbír^E n. foundation [12.1.2](#)

èñbɪs^E vv. scratch

èñd^E vv. block up, plug up

èñdɪg^E vv. unblock, unplug

èñrɪg^E vv. shift along (e.g. a bench)

F

fāñ⁼ q. every [16.4.1](#)

fāñ^{+l} vv. save; *agt* **fāñd**^a **fāñgíd**^a n. saviour [15.1](#)

fāñ⁺ vv. grab, rob

fáss ideophone for *pìəlɪg*^a white [16.11.1.3](#)

fēeg^{El} vv. (of food) get old, cold

fēñ'og^o *pl* **fēñ'ed**^{El} *cb* **fēñ'**- n. ulcer

fɪəb^E vv. beat

fɪ'ig^E vv. cut off

fiiñ⁼ q. a little (liquid) [16.4.1](#)

fitlá⁺ n. lamp ← Hausa *fítílàa*; in KB adapted to the *r^E|a⁺* Class: *sg* *fitir* *pl* *fita*

fɔ̄ɔs^{El} vv. blow, puff (wind); *ger* **fɔ̄ɔsúg**^o n. hypocrisy NT

fù you, your *sg* (*proclitic*) [16.3.1.1](#)

f you *sg* (*enclitic object*) [16.3.1.1](#)

fùe⁺ vv. draw out

fūfūm^{mE} *pl* **fūfūma**⁺ *cb* **fūfúm-** n. envy; stye (believed to result from envy)

fún you *sg* (*as subject of ñ-clause*) [16.3.1.1](#)

fūn SF **fúnē** LF you *sg* (*contrastive*) [16.3.1.1](#)

fūug^o *pl* **fūud**^{El} **fūt**^{El} *cb* **fū-** n. shirt, clothing; *pl* also: cloth

G

gàad^E vv. pass, surpass [23.3.2](#)

gáafàra sorry formula [31](#) (Hausa *gaafaràa*, ultimately ← Arabic)

gà'al^E vv. button up

- gà'am^m** vv. grind teeth
gāañ^{≠/} pl *gāañs^{ε/}* cb *gāñ-* n. Nigerian ebony [32.6](#) *Diospyros mespilliformis* (Haaf)
gàas^ε vv. pass by
gādu⁺ **gāduḡ^{ᵛ/}** pl *gādu-nám^a* *gāt^{ε/}* cb *gād- gādu-* n. bed ← Hausa *gadoo*
gàlɪm^m vv. joke
gàlɪs^ε vv. exceed, get to be too much
gāñr^{ε/} pl *gāñyá⁺* cb *gāñr-* n. fruit of Nigerian ebony [32.6](#)
gàḡ^ε vv. step over
gāḡ^{ε/} vv. choose
gbāñ'e^{+/} vv. catch
gbáñyà'a[≠] n. lazy person [15](#)
gbáñyà'am^m n. laziness; 1976 NT *gonya'am*
gbàḡᵛ^ᵛ pl *gbàna⁺* cb *gbàn- gbàḡᵛ-* n. book WK
gbāḡᵛ^{ᵛ/} pl *gbāná⁺* cb *gbān- gbāḡᵛ-* n. animal skin WK; animal skin, book DK
gbéěḡm^m cb *gbēñ-* n. sleep
gbè'og^ᵛ pl *gbè'ed^ε* *gbèda⁺* cb *gbè'-* n. forehead; shore of a lake
gbēr^{ε/} pl *gbēyá⁺* cb *gbēr-* n. thigh
gbīgum^{nε} pl *gbīguma⁺* cb *gbìgum-* n. lion
gbìn^{nε} pl *gbìna⁺* cb *gbìn-* n. buttock; base (e.g. of a mountain); *postposition* [17.6](#)
gbìn-vòḡñr^ε n. anus
gbīs^ε vv. sleep
gēel^{ε/} vv. place between one's legs (Pattern H)
gēēñm^{m/} vv. go mad, madden
gēēñmís^ε n. pl as sg madness
gēēñḡ^a pl *gēēñmís^ε* n. madman
gél^{lε} pl *gēlá⁺* cb *gēl-* n. egg
gēñ⁺ vv. get tired; *res adj* **gēēñlúḡ^ᵛ** *adj.* tired
gēñ⁺ vv. get angry
gēog^ᵛ n. place between one's legs (Pattern O *sic*)
gīñlím^m n. shortness
gìk^a pl *gìgɪs^ε* cb *gìg-* n. dumb person
gīlḡ^{ε/} *dìpf* *gīn^{na/}* vv. go around [11.1.1](#)
gīm^{ma/} *iv.* be short
gīḡ^a pl *gīma⁺* cb *gìḡ-* *adj.* short
gìḡ^ε vv. scrimp
gīḡa⁺ *adv.* shortly [17.4](#)
gīḡulím^m n. shortness
gōdɪḡ^{ε/} **gò'ḡn^ε** vv. look up
gō^{la/} **gōr^{a/}** **gō'e^{ya/}** *iv.* be looking up
gòñ⁺ vv. hunt; *dìpf* **gòḡñd^a** wander, *ger* **gòḡñdum^m** wandering [13.1.1.4](#)
Gòḡḡ^a pl *Gòḡs^ε* n. clan name [32.5](#)

- Gòṅg**^ᵒ *n.* place of the **Gòṅṅ**^ᵉ Goosi clan
gò'ṅn^ᵉ *vv.* look up
gōr^{a/} *iv.* be looking up
gōs^ᵉ *dipf* **gōsɪd**^{a/} **gōt**^{a/} *imp* **gòsɪm**^a **gòm**^{ma} *ger* **gòsìg**^a *vv.* look; *agt* **gōt**^{a/} *n.* seer, prophet
gùl^ᵉ *dipf* **gùn**^{na} *vv.* suspend
gùl^{la} *ger* **gùlib**^ᵒ *iv.* be suspended
gùllum^{ne} *only; post-NP/AdvP particle* [30.6](#)
gùm^{me} *pl* **gùma**⁺ *n.* kapok fruit [32.6](#); also thread WK
Gùm^{me} *n.* place of the clan **Gùm-dìm**^a [32.5](#)
gūmpūzēr^{ᵉ/} *pl* **gūmpūzēyá**⁺ *cb* **gūmpūzēr-** *n.* duck
gùñ'a⁺ *pl* **gòñ'ṅs**^ᵉ *cb* **gòñ'-** *n.* thorn
gùngūm^{me} *n.* kapok material
gùṅ^a *pl* **gùmɪs**^ᵉ *cb* **gùṅ-** *n.* kapok tree [32.6](#) *Ceiba pentandra* (Haaf)
gūr^{a/} *ger* **gūrím**^m *iv.* be on guard, watch for [26.1](#)
Gūrín^{ne} *n.* Farefare language [32.5](#)
Gūrín^a *pl* **Gūrís**^ᵉ *n.* Farefare person [32.5](#)
gū'ul^{ᵉ/} *vv.* put on guard
gù'ulum^m *vv.* become half-ripe
gùur^ᵉ *pl* **gùya**⁺ *cb* **gù-** *n.* upland; bank of river
gūur^ᵉ *pl* **gūya**⁺ *cb* **gù-** *n.* ridge of back
gū'us^{ᵉ/} *vv.* take care, watch out
gū'us^ᵉ *n.* *pl* half-ripe fruit

H

- hālí**⁺ 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

- īā**⁺ *vv.* seek
īāñ'as^{ᵉ/} *vv.* leap
īāñk^{ᵉ/} *ger* **īāñ'ad**^{a/} *agt* **īāñ'ad**^{a/} *vv.* leap, fly [11.1.1](#)
īgu^{ya/} *ger* **īk**^{a/} KT **īgu**^{ᵉ/} WK *iv.* be kneeling
īgu^{ᵉ/} *vv.* make to kneel
īgun^ᵉ *vv.* kneel down
íul^ᵉ *pl* **īlálá**⁺ *cb* **īul-** *n.* horn
īsur^ᵉ *pl* **īsa**⁺ *cb* **īs-** *n.* scar
īsug^ᵉ *vv.* get up early

K

kà and, that [24.1.2](#) [25.3.2](#)

kāab^{ε/} vv. offer, invite

kāal^{ε/} vv. count

kāas^{ε/} vv. cry out, weep; (cock) crow

kà'asigē LF *only*; *iv.* not exist [29.1.1](#)

kābɨg^{ε/} vv. ladle out (liquid)

kābur^{ε/} vv. call out asking for admission [31](#); *ger* **kāburí**⁺ *n.* calling out for admission

kàd^ε vv. drive away; **kàd sàriyà** vv. judge [20.1](#); *agt* **sàriyà-kāt**^a *n.* judge NT

kā'e⁺ *ger* **kā'alím**^m *iv.* not exist, not be, not have [29.1.1](#) [8.5.3](#)

kāl^{ε/} *pl* **kālá**⁺ *cb* **kāl-** *n.* number

kàlɨgā^{+/} *q.* few [16.4.1](#)

kàm^a *q.* every [16.4.1](#)

Kàmbònr^ε *n.* Twi language [32.5](#)

Kàmbòŋ^a *pl* **Kàmbòmɨs**^ε *cb* **Kàmbòŋ-** *n.* Ashanti person [32.5](#)

kàn^ε this, that *demonstrative* [16.3.1.2](#)

kàñb^ε *ger* **kàñbur**^ε vv. scorch

kàŋā^{+/} this, that *demonstrative* [16.3.1.2](#)

kàr^a *iv.* be few

kàrim^m vv. read

kàsēt^{a/} *n.* witness; testimony (Mooré **kàsétò** "proof, testimony"; probably ultimately ← French *cachet* [15.1](#); *pl* **kàsētɨb**^a witnesses)

kē⁺ *dipf* **kēt**^{a/} *imp* **kèl**^a vv. let, cause to ... [11.1.1](#) [26.2](#)

kèekè⁺ *pl* **kèekè-nàm**^a *cb* **kèekè-** *n.* bicycle ← Hausa **kèekè**

kèes^ε vv. say farewell to

kèls^ε vv. listen

kēñ⁺ *dipf* **kēn**^{a/} *imp* **kèm**^a *ger* **kēn**^{nε/} vv. come [11.1.1](#); *always with* **nā** [20.7](#); **kēn kēn** welcome! [31](#)

kēŋ^{ε/} *dipf* **kēn**^{na/} *imp* **kēm**^{ma} (*disambiguated with* **sà** [20.7](#)) vv. go; walk [11.1.1](#); *agt* **kēn**^{na/} *n.* traveller

kérɨfà or **káɨfà** ← Hausa **karfèe**; *in telling time* [32.9](#)

kī^{+/} *cb* **kī-** **kā-** *n.* cereal, millet; **kì-dà'ar**^ε *pl* **kì-dà'ada**⁺ *n.* purchased millet; **kā-wēnnur**^ε *pl* **kā-wēnna**⁺ *cb* **kā-wén-** *n.* corn

kjà⁺ vv. cut

kídɨg^{ε/} vv. cross over, meet; **À-Kídɨgɨ Bū'os** *n.* the constellation Orion

kīibú⁺ *cb* **kīib-** *n.* soap WK; ← Mampruli [15.1](#); *written materials* **kī'ib**^ɔ, probably **kī'ib**^ɔ

kíiñp *pl* **kīiní**⁺ *n.* millet seed

kùs^ε vv. listen

kī'is^{ε/} vv. deny

kìkàm^{mε} *pl* **kìkàma**⁺ *n.* fig [32.6](#)

- kìkàŋ^a kìnkàŋ^a** pl *kìkàmìs^ε* cb *kìkàŋ-* n. fig tree [32.6](#) *Ficus capensis* (Haaf)
- kìkīrɔg^{a/}** pl *kìkīrìs^{ε/}* 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^{ε/}* hostile to man live in the bush: "Their feet are attached backwards to confuse trackers." WK; **kìkīr-bé'èd^ε** n. NT evil spirit, demon (KB just uses *kìkīrɔg^{a/}*)
- kīlɔm^{m/}** vv. become, change into
- kīm^m** vv. tend flock, herd; agt **kòñb-kīm^{na}** n. herdsman, shepherd
- kīr^ε** ger *kìkírùg^ɔ* *kīrɔb^ɔ* vv. hurry, tremble
- kīs^{a/}** ger *kísùg^ɔ* agt *kīs^{a/}* *kīsɔd^{a/}* iv. hate
- kísùg^ɔ** adj. hateful, taboo
- kò⁺** vv. get broken, break (*intransitive*); res adj **kòɔlúg^ɔ** adj. broken
- kòbɔgā kòbɔsɪ⁺** q. one hundred, two hundred [16.4.2.1](#)
- kòbɔr^ε** pl *kòba⁺* cb *kòb-* n. bone
- kòdú⁺** n. banana ← Twi *kwadu*
- kòl^ε** vv. put something around the neck
- kòlɔg^a** pl *kòlɔs^ε* cb *kòl-* n. river; **kòlɔgɔ-n nò-dáùg^ɔ** n. crayfish
- kòlɔg^ɔ** pl *kòn^{nε}* cb *kòlɔg-* [9.2.2](#) n. sack, bag
- kòm^{m/}** cb *kòm-* n. hunger
- kòñbɔg^ɔ** pl *kòñbɔd^ε* cb *kòñb-* (also used as cb of *būn-kòñbùg^ɔ* animal) n. animal hair or human body hair; cf *zūəbùg^ɔ*; **kòñb-kīm^{na}** pl *kòñb-kīmmɔb^a* n. shepherd, herdsman
- kòñ'ɔkò⁺** adv. alone, by oneself [17.4](#)
- kòñs^ε** vv. cough
- kòñsɔm^m** vv. cough
- kò'ɔg^ε** vv. break (*transitive or intransitive*)
- kò'ɔs^ε** vv. break several times
- kòtā^{nε}** at all; post-NP/AdvP particle [30.6](#)
- kótù⁺** n. lawcourt ← English, probably via Hausa
- kpà'a⁼** pl *kpà'a-nàm^a* n. rich person
- kpāad^{a/}** pl *kpāadɪb^a* cb *kpāad-* n. farmer, cultivator
- kpà'am^m** n. riches
- kpāañm^{m/}** cb *kpāñ-* n. grease, ointment; **kpāñ-sòñ'ɔdìm^m** n. anointing oil
- kpàkūr^{ε/}** pl *kpàkūyá⁺* cb *kpàkūr-* n. tortoise
- kpān^{nε}** pl *kpāna⁺* cb *kpān-* n. spear
- kpàñdɪr^ε** pl *kpàñda⁺* cb *kpàñd-* n. baboon
- kpàr^ε** vv. lock
- kpār-kéòŋg^ɔ** pl *kpār-kéèñd^ε* cb *kpār-kéñ-* n. rag
- kpā'úŋg^ɔ** pl *kpā'íní⁺* cb *kpā'-* n. guinea fowl
- kpē⁺** adv. here [16.3.3](#)
- kpēēñm^m** pl *kpēēñm-nàm^a* cb *kpēēñm-* n. elder

kpēñm^{ma/} *iv.* be older than

kpēlá⁺ *adv.* here [16.3.3](#)

kpèlum still; immediately after, *preverbal adverb* [19.7.2](#)

kpèlum^m *vv.* remain

kpèn reduced form of the preverbal adverb *kpèlum*

kpèñ⁺ *vv.* enter

kpèñdir^{ε/} *pl* kpèñdá⁺ *cb* kpèñd- *n.* cheek

kpèñ'ε^ε *vv.* make enter

kpè'η^ε *vv.* strengthen

kpēoñη^ᵓ *n.* seniority

kpì⁺ *vv.* die; *res adj* **kpìilúη^ᵓ** *adj.* dead

kpì'a⁺ *pl* kpì'əs^ε *cb* kpìà'- *n.* neighbour

kpìà⁺ *vv.* shape wood with axe etc

kpì'e⁺ *vv.* approach

kpī'əm^{ma/} *iv.* be strong, hard

kpīibig^a *pl* kpīibis^ε *cb* kpīib- *n.* orphan

kpīig^ε *vv.* go out (fire)

kpī'im^{m/} *pl* kpī'imís^ε *cb* kpī'im- *n.* dead person, corpse

kpīis^ε *vv.* quench (fire)

kpīkpīn^{na/} *pl* kpīkpīnníb^a *cb* kpīkpín- *n.* merchant

kpī'oj^ᵓ *pl* kpī'oma⁺ *cb* kpī'oj- *adj.* strong, hard

kpìsunkpìl^ε *pl* kpìsunkpìla⁺ *cb* kpìsunkpìl- *n.* fist

kpìsukpìl^ε *n.* fist

kpùkpàr^ε *pl* kpùkpàra⁺ *n.* palm tree fruit [32.6](#)

kpùkpàrig^a *pl* kpùkpàris^ε *cb* kpùkpàr- *n.* palm tree [32.6](#) (Probably *Borassus akeassii* or *aethiopum*)

kpùkpàuj^ᵓ *pl* kpùkpàma⁺ *cb* kpùkpàuj- *n.* arm, wing

kù not; negates *irrealis mood* [19.5](#)

kū⁺ *vv.* kill

kū⁺ *vv.* gather, threaten (of rain): *Sāa kú yā.* It looks like rain.

kūā⁺ *vv.* hoe, farm

kū'alíη^a *pl* kū'alímìs^ε kū'alís^ε *cb* kū'alíη- *n.* sleeveless traditional smock

kùd^ε *vv.* work iron

kùdug^ε *vv.* shrivel up, dry out, age

kūdum^m *n.* the olden days

kūdug^ᵓ **kūdur^ε** *pl* kūda⁺ kūt^ε *cb* kùd- *adj.* old

kūdug^ᵓ *pl* **kūt^ε** (used as sg [9.5](#)) *cb* kùt- *n.* iron, nail; *sg obsolete except in names* [32.2](#)

kūgur^{ε/} *pl* kūgá⁺ *cb* kūg- *n.* stone

kūk^a *pl* kūgus^ε *cb* kùg- *n.* chair

kūk^{a/} *n.* mahogany tree, *Khaya senegalensis* (Haaf); cf Hausa *kuukàa*

kùkòm^{mε} *pl* kùkòma⁺ *cb* kùkòm- *n.* leper

- kùkōr**^{ε/} pl **kùkōyá**⁺ cb **kùkōr**- n. voice
kùkpàrig^a see **kpùkpàrig**^a id
kūl^ε ger **kūlig**^{a/} vv. return home; transitive marry (woman subject, man object)
kōlum always, post-subject particle [24.1.4](#)
kùlɪŋ^a pl **kùlumɪs**^ε **kùlɪs**^ε cb **kùlɪŋ**- n. door
kùm^m vv. cry, weep
kūm^m cb **kùm**- n. death; **kùm-vō'ugír**^ε n. resurrection NT
kùndò'ar^ε pl **kùndò'ada**⁺ cb **kùndy'à**- n. barren woman
kùndòŋ^a pl **kùndòmɪs**^ε **kùndòna**⁺ n. jackal, hyena
kù'om^m cb **ku'à**- n. water; **ku'à-nūud**^{ε/} n. thirst; **ku'à-ñwīig**^{a/} pl **ku'à-ñwīs**^{ε/} n. current in a river
kùes^ε vv. sell
kùrkōr^{ε/} pl **kùrkōyá**⁺ cb **kùrkōr**- n. pig
Kūsáa^ε pl **Kūsáàs**^ε cb **Kūsá-** n. Kusaasi person [32.5](#)
Kūsáàl^ε n. Kusaal language [32.5](#)
Kūsáùg^ɔ n. Kusaasi country [32.5](#)
Kùtān^{ne/} pl **Kùtām**^{ma/} cb **Kùtān**- n. member of WK's clan
Kùtāŋ^{ɔ/} n. country of clan **Kùtām**^{ma/} Kutamba
kūv or [24.1.2](#) [25.2.2](#) ← Hausa
kūug^{a/} **kūug**^{ɔ/} pl **kūus**^{ε/} cb **kū**- n. mouse
kùul^ε vv. get drunk

L

- lā**^{+/} definite article [16.5](#)
là⁺ vv. laugh
lā'af n. cowrie; pl **ligudɪ**⁺ n. cowries, money; cb **lig-là**⁻; **là'-bīəlíf** n. small coin
lāafiya⁺ n. health ← Arabic العافية *ʔal-ʔa:fiya(tu)*; replaced throughout by *laafe* **lāafi** in 1996 NT and KB
là'am together, preverbal adverb [19.7.2](#)
là'am^m vv. associate with; together with [23.3](#)
là'as^ε vv. gather together (transitive); **Bà là'as tāaba** They gathered together.
làbāar^ε cb **làbà**- n. news ← Arabic الاخبار *ʔal-ʔaxba:r(u)*
làbɪ^{ya} iv. be crouching, hiding behind something (cf Hausa *laḃèe* "crouch behind something to eavesdrop" [15.1](#))
làbɪl^ε vv. make crouch behind something
làbɪn^ε vv. crouch behind something
làbɪs^ε vv. walk stealthily
lābɪs^{a/} iv. be wide
lābɪsíg^a **lābɪsír**^ε pl **lābɪsá**⁺ cb **lābɪs**- adj. wide
lābɪsím^m n. wideness

lāk^{ε/} vv. open (eye, book)

lāl^{la/} iv. be distant

lālɪg^{ε/} vv. get to be far, make far

lālɪ⁺ adv. far off

lālɪŋ^a pl **lālɪs^ε** cb **lālɪŋ-** adj. distant

lālɪg^ɔ pl **lālɪ⁺** cb **lāl-** adj. distant

lām^{mε/} pl **lāmá⁺** cb **lām-** n. gum (of tooth); **lām-fɔ̀g^ɔ** pl **lām-fɔ̀d^ε** adj. toothless

16.11.1.4

làmpɔ-dí'əs^a n. tax collector 15 ← French *l'impôt*

lān^{nε} pl **lāna⁺** cb **làn-** n. testicle

làngáuv^ɔ pl **làngáam^{mε}** **làngāamá⁺** cb **làngāuv-** n. crab (cf *màngáuv^ɔ* id)

lànnɪg^a pl **lànnɪs^ε** cb **lànnɪg-** 9.2.2 n. squirrel

lā'ŋ^{ε/} vv. set alight

lāŋɪm^m vv. wander around searching

lāuk^ɔ pl **lā'ad^ε** cb **là'-** n. item of goods pl goods

là'uv^ɔ pl **là'ama⁺** n. fishing net

lèb^ε ger **lēbɪg^a** vv. return (*intrans*)

lèbɪg^ε vv. turn over

lèbɪs^ε vv. answer; send back; divorce (wife)

lèε but, VPred particle 19.7.1

lèm again, preverbal adverb 19.7.2

lèm^m dipf **lèmmɪd^a** vv. sip, taste

lēr^ε vv. get ugly

lì it, its (*proclitic*) 16.3.1.1

lɪ⁺ it (*enclitic object*) 16.3.1.1

lɪ⁺ dipf **lìt^a** imp **lìm^{ma}** ger **līg^a** vv. fall

lī⁺ vv. block up

lìā where is ...? 22

lìdɪg^ε vv. turn a shirt WK

lìdɪg^ε vv. astonish, be amazed

lìəb^ε vv. become

lì'əɪ^ε vv. approach, come near

líəŋ^a pl **līəmɪs^ε** cb **līəŋ-** n. axe

lìg^ε vv. patch

lìgɪl^ε vv. cover

lìgɪn^ε vv. cover oneself

līɪbɪr^ε pl **līɪba⁺** cb **līɪb-** n. twin

līk^a pl **līgɪs^ε** n. darkness

līlāalɪŋ^a pl **līlāalɪs^ε** **līlāalɪmɪs^ε** cb **līlāalɪŋ-** n. swallow

lín it (*subject of ñ-clause*) 16.3.1.1

līn^ε it (*contrastive*) 16.3.1.1

lìn^ε that demonstrative [16.3.1.2](#)
líná⁺ that demonstrative [16.3.1.2](#)
lī⁺ vv. tie
līb^ε vv. throw stones at
lībídíg^a pl **lībídís^ε** n. water drawing vessel
līdíg^{a/} pl **līdís^{ε/}** cb **līd-** n. corner; **līdígín kúg-sún^ɔ** cornerstone NT
līdíg^{ε/} vv. untie
lìk^ɔ pl **lò'ad^ε** cb **lų'à-** n. quiver (for arrows)
lòmbò'ɔg^ɔ pl **lòmbò'ɔd^ε** cb **lòmbò'-** n. garden ← Hausa *làmbuu*
lōŋ^a pl **lōmıs^ε** cb **lòŋ-** n. a kind of frog
lō'ŋ^{ε/} vv. go across river, road etc
lór^ε pl **lóyà⁺** **lócm^{ma}** cb **lór-** n. car, lorry ← English
lù⁺ dipf **lùt^a** imp **lùm^{ma}** vv. fall
lūb^ε ger **lūbır^{ε/}** vv. buck, kick, struggle, throw off rider
lūg^ε vv. swim
lūgur^ε n. organ, member

M

m̄ I, my (proclitic) [16.3.1.1](#)
m^a me (enclitic) [16.3.1.1](#)
mà⁺ cb **mà-** n. mother; pl **mà nám^a** (tone sic) mother's sisters/co-wives; **mà-biig^a** n. sibling with same mother; **mà-bil^a** n. mother's younger sister or junior co-wife; **mà-kpēñm^m** n. mother's elder sister or senior co-wife; **mà-pīt^{a/}** n. mother's younger sister
mà⁺ vv. lie, deceive
mà'aa SF **mà'anē** LF only; post-NP/AdvP particle [30.6](#)
màal^ε vv. prepare, sacrifice; agt **màal-māan^{na}** n. sacrificer; used for "priest" in the NT, but in traditional usage just a worker who conducts the actual slaying for the the **tēŋ-dāan^a** earth-priest himself
mā'al^{ε/} vv. make cool, wet
māan^{ne} pl **māana⁺** cb **māan-** n. sacrifice [12.1.2](#)
má'an^{ne} pl **mā'aná⁺** cb **mā'an-** n. okra
mā'as^{a/} iv. be cool, wet
mā'asíg^a **mā'asír^ε** pl **mā'asá⁺** cb **mā'as-** adj. cool, wet
mā'asígā^{+/} adv. coolly [17.4](#)
mā'asím^m n. coolness, wetness
mādíg^{ε/} vv. overflow, abound
mā'e^{+/} vv. cool down
màk^ε vv. crumple up
māk^{ε/} vv. measure, judge

màljāk^{a/} pl *màljā'as^{ε/}* *màljāk-nám^a* cb *màljā'-* n. angel ← Arabic ملاك *malʔak(un)* [15.1](#)
written *malek* in NT versions before 2016

màlɔɔm again; preverbal adverb [19.7.2](#)

māls^{a/} iv. be sweet, pleasant

mālsíg^a **mālsír^ε** pl *mālsá⁺* cb *māls-* adj. sweet, pleasant

mālsím^m n. sweetness

mālsíɣ^a pl *mālsís^ε* cb *mālsíɣ-* adj. sweet, pleasant

mālvɔɔ^ɔ pl *mālvma⁺* cb *mālvɔɔ-* n. sacrifice

mām I, me [16.3.1.1](#)

mán I (as subject of *ɲ*-clause) [16.3.1.1](#)

mān SF **mánē** LF I, me (contrastive) [16.3.1.1](#)

màngáuvɔɔ^ɔ pl *màngáam^{mε}* *màngāamá⁺* cb *màngāuvɔɔ-* n. crab (cf *làngáuvɔɔ^ɔ* id)

màuk^ɔ pl *mà'ad^ε* adj. crumpled up

mè⁺ vv. build

mè mèn^ε too, also; post-NP/AdvP particle [30.6](#); **mè-kàma** -soever [16.3.1.3](#)

mēd^ε vv. mash up

mèɛɣ^a pl *mèɛmɛs^ε* cb *mèɛɣ-* n. turtle

mèlɔɔm^m n. dew

mēɣ^{a/} self [16.10.3.1](#)

mēɣír^ε adj. genuine

mēt^{ε/} cb *mēt-* n. pl as sg pus

mī⁺ ger *mī'ílím^m* iv. know; agt **gbàn-mī'id^{a/}** n. scribe ("book-knower") NT

míif^ɔ pl *mīiní⁺* n. okra seed

mì'ig^ε vv. become sour

mì'is^a iv. be sour

mì'isug^ɔ pl *mì'isa⁺* cb *mì'is-* adj. sour

mīlɔɔ^{ε/} vv. get dirty

mìmīlím^m **mìmīlúɔɔ^ɔ** n. sweetness

mít see that it doesn't happen that... [29.1.1](#); always *mid* in KB

mō⁺ vv. strive, struggle

mōd^ε vv. swell

mōdɔɔ^{ε/} vv. be patient, endure

mòlɛ^ɔ pl *mòlɛ⁺* cb *mòl-* n. gazelle

mōn^ε vv. grind millet to make *sā'ab^ɔ* porridge

mōɣ^{ε/} vv. refuse to lend

mōɔɔ^ɔ pl *mōɔɔ^ε* cb *mō-* n. grass, "bush"; **mō-pīl^{lε}** n. grass thatch

Mòɔɔ^ɔ n. Mossi realm; **Mòɔɔ Ná'àb^a** n. the Moro Naba, King of the Mossi

mōɔɔ^{ε/} vv. proclaim; agt **mōɔɔl-mòɔɔn^{na}** n. proclaimer

Mòɔɔ^ε n. Mooré language

Mōr^{ε/} pl *Móɔɔm^{ma}* cb *Mōr-* n. Muslim

mōr^{a/} ger *mōrím^m* iv. have, possess; **mōr nā** bring [20.7](#)

Mùá⁺ pl *Mòɔs*^ɛ cb *Mò-* n. Mossi person [32.5](#)
mụ'à^a vv. suck (of a baby)
mụàk^a pl *mù'as*^ɛ cb *mụ'à-* n. maggot
mù'ar^ɛ pl *mụ'àa*⁺ *mù'ada*⁺ cb *mụ'à-* n. dam; reservoir
mù'as^ɛ vv. give (to baby) to suck
mù'e⁺ vv. redden; catch fire/ignite; become intense, severe
mùj⁺ cb *mùj-* n. pl as sg rice
mùl^ɛ vv. itch
mùm^m vv. bury

N

̀n Clause Nominaliser particle [28](#)
n VP Catenator particle [23.1](#)
̀n- Personifier proclitic before an adjective [16.6](#)
n^ɛ Remoteness marker enclitic [27.1.1](#)
n^ɛ *nī*^{+/} Locative enclitic [17.3](#)
nà positive irrealis mood marker [19.4](#)
nā^{+/} hither; VP-final particle [20.7](#)
nā⁺ vv. join
náa reply to greetings invoking blessings [31](#)
nà'ab^a pl *nà'-nàm*^a cb *nà'-* n. chief, king; **nà'-bīig**^a n. prince, princess
náaf^p pl *nīigí*⁺ cb *nā'-* n. cow; **nā'-lór**^ɛ n. place in compound for tying up cows;
nā'-dàùg^p pl *nā'-dààd*^ɛ cb *nā'-dá-* n. ox; **nā'-dá-kūedír**^ɛ n. ox for ploughing
nàam^m vv. happen
nā'am^m cb *nà'am-* n. chieftaincy, kingdom
nāan next, afterwards = *nyāan*
nāan or **nāanu** then, in that case, being thus/there [27.1.2](#)
nà'anā^{+/} adv. easily [17.4](#)
nà'as^ɛ vv. honour; ger **nà'asi**⁺ n. honour
Nàbɪd^a pl *Nàbɪdɪb*^a cb *Nàbɪd-* n. Nabdema person [32.5](#)
Nàbɪdug^p n. Nabdema country
Nàbɪr^ɛ n. Nabit language [32.5](#)
Nà'dàm^{ma} n. clan name [32.5](#)
Nà'dàɹj^p n. place of clan Nadamba
nà'-dàwān^{nɛ/} n. pigeon KED (= *dàwān*^{nɛ/})
nāe^{+/} vv. finish
nàm still, yet; auxiliary tense particle [19.3.1](#)
nàm^a pluraliser [9.4](#)
nā'mɪs^{ɛ/} vv. persecute, suffer
nān^ɛ vv. love, respect, appreciate

nà'-nēsɪnnēog^{ɔ/} n. centipede WK

nānná⁺ adv. now [16.3.3](#)

nānná-nā^{+/} adv. now [16.3.3](#)

nànzù'us^ε n. pepper ?tones

nāŋ^a pl *nāmɪs*^ε cb *nàŋ-* n. scorpion

nār^{a/} ger *nārím*^m iv. be obliged to; impersonal: to be necessary; with following subordinate *yē* or *kà*-clause [26.3](#); negated: be obliged not to [29.2](#)

nàrvuŋ^ɔ pl *nàrvuma*⁺ cb *nàrvuŋ-* adj. necessary

Nàsāal^ε n. English/French language

Nàsāara⁺ pl *Nàsàa-nàm*^a *Nàsàar-nàm*^a cb *Nàsàa- Nàsàar-* n. European person

← Arabic نصارى *Nasʿa:ra:*; **Nàsàa-biig**^a n. European child

nàyiig^a pl *nàyiig-nàm*^a *nàyiis*^ε n. thief

nàyiigum^m n. thievery

nà'-zòm^{mε} n. locust

nē preposition: with [18.1](#); linking NPs and AdvPs: and [16.7](#)

nē uncommon variant of *yē* that [26.5](#) (cf Mampruli *ni id*)

nē^{+/} focus particle [30.1.2](#); aspectual marker [19.2](#)

nē^{+/} meaningless particle after objects of *wōv* and *wēn*^{na/} [18.1](#)

nē^{+/} this (pronoun) [16.3.1.2](#)

nèel^ε vv. reveal

nèem^m adv. for free

nēem^{m/} vv. grind with a millstone

nēer^{ε/} n. millstone

nèes^ε vv. reveal

nèesum^m n. light

nēm-néèr^ε pl *nēm-néyà*⁺ n. someone who grinds

nēn^{na/} ger *nēnním*^m iv. envy

nē'ŋá⁺ this (pronoun) [16.3.1.2](#)

nèog^ɔ **nèer**^ε pl *nèed*^ε *nèya*⁺ cb *nè-* adj. empty

nēsɪnnēog^{ɔ/} pl *nēsɪnnèed*^{ε/} cb *nēsɪnné-* n. envious person WK; others: centipede

n fá! Well done! [25.2.4](#)

nī^{+/} locative enclitic [17.3](#) see *n*^ε

nì⁺ vv. rain

nīd^{a/} pl *nīdɪb*^{a/} cb *nīn-* n. person; **nīn-sààl**^a pl *nīn-sààlɪb*^a cb *nīn-sààl-* n. human being;

nīnpōnān^{na/} pl *nīnpōnānɪb*^a cb *nīnpōnán-* n. disrespectful person; **nīn-**

sábilis^ε n. Africans

nìe⁺ vv. appear, reveal

- nīf^{pl}** pl *nīn*⁺ cb *nīn-* *nīf-* n. eye; **nīf-gbáun³** n. eyelid; **nīf-sób^a** n. miser; **nīf-ñyáuk³** adj. one-eyed [16.4.2.3](#) [16.11.1.4](#); **nīn-dáa[≡]** pl *nīn-dáàs^ε* cb *nīn-dá-* n. face; **nīn-gótìŋ^a** n. mirror pl **nīn-gótìs^ε** n. spectacles, glasses; **nīn-kúgvdiŋ^a** pl *nīn-kúgvdiŋ^ε* n. eyebrow; **nīn-tá'àm^m** n. tear(s); **nīn-múa⁺** n. concentration ("eye-redness"); *m̄ nīn* *m̄*'e *nē* ... I'm concentrating on ... (KB "zealous for ...")
- nīŋ^a** pl *nīimís^ε* *nīs^ε* cb *nīŋ-* n. bird
- nīm^{nε/}** **nī'm^{nε/}** pl *nīmá⁺* cb *nīm-* n. meat
- nīn-báalìg^a** n. pity; **nīn-báal-zōr^ε** n. pity; *Ò zòt-ō nīn-báalìg*. He has pity on him.
- nīŋ^a** pl *nīs^ε* cb *nìŋ-* *nìn-* n. body (uncommon); **nìn-tōllím^m** n. fever; **nìn-tāa[≡]** pl *nìn-tāas^ε* cb *nìn-tà-* n. co-wife; husband's sister's wife (Ghanaian English: "rival"); **nìn-gbīŋ³** pl *nìn-gbīná⁺* cb *nìn-gbīŋ-* n. body (plural often used as singular); **nìn-gòr^ε** n. neck
- nīn-púòd^ε** n. pl as sg pus
- nīntāŋ^{a/}** pl *nīntāaŋ^{ε/}* cb *nīntāŋ-* n. heat of the day, early afternoon
- nìŋ^ε** 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⁺** vv. tread
- nōb^ε** vv. get fat
- nōbìg^{ε/}** vv. grow (e.g. child, plant)
- nóbìr^ε** pl *nōbá⁺* cb *nōb-* n. leg, foot; **nōb-bíl^a** n. toe; **nōb-yíun³** adj. one-legged [16.4.2.3](#) [16.11.1.4](#); **nōb-íñ'a⁺** n. toenail; **nōb-púmpàun³** n. foot
- nōk^{ε/}** vv. pick up, take up
- nòŋ^ε** agt *nòŋid^a* (irregularly Pattern L) vv. love (family, spiritual); irr aspect [11.1.1](#)
- nōŋ³** cb *nōŋ-* n. poverty; **nōŋ-dáàn^a** n. poor person
- nòŋilím^m** n. love
- nōr^{ε/}** pl *nōyá⁺* cb *nō-* n. mouth; command, message, opinion; **nō-dí'ès^a** 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^a** ("God's linguist") prophet NT/KB; **nō-lóòr^ε** n. fasting ("mouth-tying", as throughout W Africa); **nō-náàr^ε** n. covenant; **nō-póòr^ε** n. oath; **nō-gbáun³** pl *nō-gbánà⁺* n. lip
- nōr^{ε/}** times [16.4.2.4](#)
- nōrím^m** times [16.4.2.4](#)
- ñpòè** q. seven, in counting [16.4.2.2](#)

̀ntáń' *q.* three, in counting [16.4.2.2](#)

nū⁺ *vv.* drink

nūa^{+/} *pl* **nōɔs^{ε/}** *cb* **nō-** *n.* hen; **nō-dáùg^ɔ** *n.* cock; **nō-ńyá'àŋ^a** *n.* (specifically female) hen; **Nō-ńyá'àŋ-né-ò-Biis** the Pleiades

nūlɪg^{ε/} *vv.* make drink

nūlɪs^{ε/} *vv.* make drink

nú'ùg^ɔ *pl* **nú'ùs^ε** *cb* **nū'-** *n.* hand, arm; **nū'-bíl^a** *pl* **nū'-bíbìs^ε** *n.* finger; **nū'-dáùg^ɔ** *n.* thumb; **nū'-yíɟŋ^ɔ** *adj.* one-armed [16.4.2.3](#) [16.11.1.4](#); **nū'-íń'a⁺** *pl* **nū'-éń'ès^ε** *cb* **nū'-éń'-** *n.* fingernail; **nū'-wéń'èd^a** *n.* mediator

ńwà⁺ *this* [16.5](#)

ńwā⁺ *vv.* smash, break up

ńwāaŋ^a *pl* **ńwāamɪs^ε** *cb* **ńwàaŋ-** *n.* monkey

ńwādɪg^{a/} *pl* **ńwādɪs^{ε/}** *cb* **ńwād-** *n.* moon, month; **ńwād-bíl^a** *pl* **ńwād-bíbìs^ε** *n.* star; **ńwād-dár^ε** *n.* Venus

ńwà'e⁺ *vv.* cut wood

ńwāe *q.* nine, in counting [16.4.2.2](#)

ńwām^{mε} **ńwān^{nε}** *pl* **ńwāma⁺** **ńwāna⁺** *cb* **ńwām-** **ńwān-** *n.* calabash

ńwāmpūrig^{a/} *pl* **ńwāmpūris^{ε/}** *cb* **ńwāmpūr-** *n.* Mamprussi person [32.5](#)

ńwāmpūri^{ε/} *n.* Mampruli language [32.5](#)

ńwāmpūrv^{ɔ/} *n.* Mamprussi country

ńwè⁺ *vv.* beat; **ńwè'** X **nú'ùg** make an agreement with X; **ńwè'** **ńyō'ɔg** boast

ńwiig^{a/} *pl* **ńwiis^{ε/}** *cb* **ńwī-** *n.* rope; **ńwī-ték^a** *pl* **ńwī-tékìdɪb^a** *cb* **ńwī-ték-** *n.* rope-puller; **ńwī-tékìr^ε** *pl* **ńwī-tékà⁺** *n.* rope for pulling

ńwiig^{ε/} *vv.* make a rope

ńyā'al^{ε/} *vv.* leave behind

ńyāan next, afterwards; *post-subject particle* [24.1.4](#)

ńyá'aŋ^a *pl* **ńyá'as^ε** **ńyā'amís^ε** *cb* **ńyā'aŋ-** *adj.* female (animal)

ńyá'aŋ^a behind, *postposition* [17.6](#); East [32.3](#); **ńyà'an-dòl^{la}** **ńyà'an-dòl^{lε}** *pl* **ńyà'an-dòlla⁺** **ńyà'an-dòllɪb^a** *cb* **ńyà'an-dòl-** *n.* disciple NT; *tones unexpected, Pattern L*

ńyā'ar^ε *pl* **ńyā'a⁺** *cb* **ńyà'-** *n.* root

ńyāe^{nε/} *adv.* in the light, brightly, clearly [17.3](#)

ńyālúŋ^ɔ *pl* **ńyālmá⁺** *cb* **ńyālvŋ-** *adj.* wonderful

ńyàn^{nε} *n.* shame; **Ò dì ńyán.** He's ashamed.

ńyāŋ^{ε/} *vv.* overcome [23.3](#)

ńyàùk^ɔ *pl* **ńyà'ad^ε** *adj.* only (eye) [16.4.2.3](#) [16.11.1.4](#)

ńyē⁺ *dipf* **ńyēt^{a/}** *imp* **ńyèm^{ma}** *vv.* see, find; **ńyē láafiya** get well

ńyēε, ńyēε tí habitually, *preverbal adverb* [19.7.2](#)

ńyē'εr^{ε/} *pl* **ńyēdá⁺** *cb* **ńyē'-** *n.* next-younger sibling

ńyèes^a *iv.* be self-confident

ńyèesum^m *n.* self-confidence

ńyèesíŋ^a *pl* **ńyèesís^ε** *cb* **ńyèesíŋ-** *adj.* self-confident

ñyèesíḡā^{+/} *adv.* self-confidently [17.4](#)

ñyí *q.* two, in counting [16.4.2.2](#)

ñyīn^{ne/} *pl* ñyīná⁺ *cb* ñyīn- *n.* tooth

ñyīrí^f *pl* ñyīrí⁺ *n.* a kind of edible seed, egusi: *Colocynthis citrullus* (Haaf)

ñyṵṵ^e *n.* intestines

ñyṵ'ṵḡ^{d/} *n.* chest

ñyṵṵ^e *pl* ñyṵya⁺ *cb* ñyṵ- *n.* nose; breath; **ñyṵ-vūr**^{e/} *pl* ñyṵ-vūyá⁺ *cb* ñyṵ-vūr- *n.* life;

ñyṵ-vūr-páàl^{le} *n.* new life NT

ñyṵ'ṵs^{e/} *n.* smoke

ñyúèb *q.* six, in counting [16.4.2.2](#)

ñyūur^{e/} *pl* ñyūyá⁺ *cb* ñyū- *n.* yam

O

ò [ʊ] he, she, his, her (*proclitic*) [16.3.1.1](#)

º LF [ʊ] him, her (*enclitic object*) [16.3.1.1](#) [8.2.1.1](#)

ón he, she (*subject of ñ-clause*) [16.3.1.1](#)

ōn^e he, she (*contrastive*) [16.3.1.1](#)

òn^e this, that (*animate sg demonstrative*) [16.3.1.2](#)

òñb^e *ger* òñbir^e *vv.* chew

òḡā^{+/} this, that (*animate sg demonstrative*) [16.3.1.2](#)

ṵṵs^{e/} *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^e *vv.* teach, inform; *agt* **pā'an**^{na} *pl* pā'annib^a *cb* pà'an- *n.* teacher

pà'al^e *vv.* put on top of something

pāalíg^a **páal**^{le} *pl* pāalís^e pāalá⁺ *cb* pāal- *adj.* new

pāalím^m *adv.* recently [17.4](#)

pāalú⁺ *adv.* openly [17.4](#)

pàañlúḡ^d *pl* pàañlímìs^e *n.* spider's web

pàam^m *vv.* receive a gift

pàas^e *vv.* add up to, amount to

pāe^{+/} *vv.* reach

pàk^e *vv.* surprise

pàk^e *vv.* take off from the top

pāmm SF **pāmné** LF *q.* much, a lot [16.4.1](#) [6.4](#)

pàñ'alum^m *vv.* dedicate

pàñsig^e *vv.* lack

pàḡ^a *pl* pàañs^e *cb* pàḡ- *n.* power

- pà' tì** perhaps; *post-subject particle* [24.1.4](#)
- pèbɪs^ɛ** vv. blow (of wind)
- pèbɪsɪm^m pèbɪsɔg^ɔ** n. wind
- pè'ɛɪ^ɛ** vv. fill; *res adj* **pè'ɛɪúŋ^ɔ** full
- pè'ɛs^ɛ** vv. add up to, amount to
- pèɪɪg^ɛ** vv. whiten, go white
- pèɪs^ɛ** vv. sharpen
- pèn^{nɛ}** n. vagina
- pē'ŋ^{ɛ/}** vv. borrow; knock over WK
- pèog^ɔ** pl **pèed^ɛ** cb **pè-** n. basket
- pē'og^{ɔ/}** pl **pē'ɛs^{ɛ/}** cb **pē'-** n. sheep; **pē'-sá'a⁼** n. ewe lamb
- pēsɪg^{ɛ/}** vv. sacrifice
- pjā⁺** vv. dig up
- pjāñ^a** vv. speak, praise; *ger* **pjāuñk^ɔ** n. word pl **pjāñ'ad^ɛ** language cb **pjāñ'-**;
pjāñ'-zòna⁺ n. foreign language
- pìbɪg^ɛ** vv. uncover
- pìbɪ^ɛ** vv. cover up
- pìbɪn^{nɛ}** pl **pìbɪna⁺** cb **pìbɪn-** n. covering [12.1.2](#)
- pìd^ɛ** vv. put on (hat, shoes, rings)
- pìd^ɛ** vv. get bloated
- pìdɪg^ɛ** vv. take off (hat, shoes, rings)
- pìe^{+/}** vv. wash (part of one's own body)
- pìəb^ɛ** vv. blow (e.g. flute)
- pìəɪg^a pìəɪ^ɛ** pl **pìəla⁺ pìəɪs^ɛ** cb **pìəɪ-** *adj.* white; **pèɪɪɪg^ɔ** in **zū-péɪɪlòg^ɔ** bald; grey haired [16.11.1.4](#)
- pìəɪɪm^m** n. whiteness
- pìəs^ɛ** vv. fool someone
- pìəs^{ɛ/}** vv. wash
- pīiga⁺** q. ten [16.4.2.1](#)
- pīim^{m/}** pl **pīmá⁺** cb **pīm-** n. arrow
- píuñ^ɔ** pl **pīuñí⁺** cb **pīuñ-** n. genet
- pīini⁺** cb **pīin-** pl as sg (?) n. gift
- pìl^ɛ** vv. put (hat, shoes, rings) on someone
- pìɪg^ɛ** vv. take (hat, shoes, rings) off someone
- pīñ'il^{ɛ/}** vv. begin
- pīpīriɪg^{a/}** pl **pīpīriɪs^{ɛ/}** cb **pīpír-** n. desert
- pīsí⁺** q. twenty [16.4.2.1](#)
- pītú⁺** pl **pītíb^a** cb **pīt-** n. younger sibling of the same sex [32.1](#)
- pō⁺** vv. swear
- pòñd^ɛ** vv. crouch down
- pōñ'ɔɪ^{ɛ/}** vv. cause to rot

pòñ'ulum^m vv. cripple, get crippled

pòñ'ur^ε pl **pòñda⁺** cb **pòñ'-** n. cripple

pòñr^a ger **pōñrub^ɔ** iv. be near

pòɔd^a iv. be few, small

pòɔdug^a **pòɔdir^ε** pl **pòɔda⁺** cb **pòɔd-** adj. few, small

pòɔdum^m n. fewness

pōɔg^ɔ pl **pōɔd^ε** / **pōt^ε** cb **pō-** n. field, farm

pò'ɔg^ε vv. diminish, denigrate

pōɔr^ε n. "slogan" of a clan, part of its traditional genealogy WK; ← **pō⁺** swear (cf Farefare **pɔte**, **pɔre** "nom de famille, nom par lequel on jure", also "serment")

pō not: negates indicative mood [19.5](#)

pō⁺ vv. divide

pū'ā^a pl **pū'ab^a** cb **pū'à-** n. woman, wife; *Ò dì pū'ā*. He's married a wife; **pū'à-dūr^ε** n. marriage; **pū'à-élíŋ^a** n. fiancée; **pū'à-ginníg^a**, **pū'à-gōɔñdir^ε** n. prostitute; **pū'à-ñyá'an^a** pl **pū'à-ñyá'as^ε** n. old woman; **pū'à-pāal^a** n. bride; **pū'à-sādir^ε** n. young woman; **pū'à-sāñ'am^{na}** n. adulterer; **pū'à-yù^a** n. daughter

pūāk^a pl **pū'as^ε** adj. female (human only)

pù'alum^m vv. cook

pù'alum^m vv. harm, damage; res adj **pù'alúŋ^ɔ** damaged

pù'alum^m n. femininity

pù'alím^m pl **pù'alímìs^ε** cb **pù'alím-** n. female sex organs

pùd^ε vv. name

pūdug^ε vv. divide, share out

pùgudib^a pl **pùgud-nàm^a** cb **pùgud-** n. father's sister [32.1](#)

pùkòñr^ε pl **pùkòñya⁺** cb **pùkòñ-** n. widow

pūkpaad^a pl **pūkpaadíb^a** cb **pūkpa-** (irreg: contrast **kpāad^a**) n. farmer

pùluma⁺ n. a species of grass, *Imperata cylindrica* (Haaf)

pùmpōɔg^ɔ n. housefly

pùn previously, already; preverbal adverb [19.7.2](#)

pūñ'e⁺ vv. rot

pūsug^a pl **pūsìs^ε** cb **pūs-** n. tamarind [32.6](#)

pūsir^ε pl **pūsá⁺** n. tamarind fruit [32.6](#)

pū-súk^a pl **pū-súgùs^ε** n. half [16.4.2.1](#)

pūt^ε n. pl as sg contents of stomach WK

pūum^m / cb **pūum-** n. flowers

pūvg^a cb **pù-** n. inside, belly; *Pū'ā lā mór pūvg* The woman is pregnant;

pūvgv-n^ε inside, postposition [17.6](#); **pù-piəlum^m** n. holiness; **pù-tèñ'er^ε**

pl **pù-tèñda⁺** cb **pù-tèñ'-** n. mind

pūvr^ε n. stomach

pù'us^ε vv. greet, worship, thank; ger **pù'usum^m** n. worship; ger **pù'usug^ɔ** n. thanks;

pù'usug dɔ̀ɔ̀g^ɔ NT temple

S

sà yesterday, tense particle [19.3.1](#)

sà hence, ago, VP-final particle [20.7](#)

sā⁺ vv. be in distress

sàa tomorrow, tense particle [19.3.1](#)

sāa⁼ pl **sāas**^ε cb **sà-** n. rain; sky; as subject of **jāñk**^{εl} "leap": lightning; **sāa** **díndēog**^{pl} rainbow ("rain chameleon"); **sāa zúg**^{pl} n. sky [17.6](#)

sā'ab^{pl} cb **sà'-** n. millet porridge, "TZ", the staple food of the Kusaasi

sāafi⁺ (?tones) n. lock, key ← Twi **safē**

sàal^a pl **sàalb**^a cb **sàal-** n. human (perhaps ← "hairless" cf **būn-kóñbùg**^{pl}); **sàal-biig**^a pl **sàal-biis**^ε n. human being

sàalíjā^{+l} adv. smoothly [17.4](#)

sàam^{ma} pl **sàam-nàm**^a cb **sàam-** n. father; **sàam-kpēñm**^m n. father's elder brother; **sàam-pīt**^a pl **sàam-pítib**^a cb **sàam-pīt-** n. father's younger brother

sāam^m/ vv. mash, crumble

sā'an^{εl} in the presence of, in the opinion of; postposition [17.6](#)

sāan^a/ pl **sāam**^{ma} cb **sāan-** n. guest, stranger

sāannim^m n. strangerhood

sàbēog^{pl} pl **sàbēed**^ε cb **sàbè-** n. wind, storm

sābilíg^a **sābíl**^{le} pl **sābilís**^ε **sābilá**⁺ cb **sābil-** adj. black

sàbùà⁺ pl **sàbùes**^ε cb **sàbùà-** n. lover, girlfriend

Sà'dàbòog^{pl} n. place of the clan Sarabose [32.5](#)

Sà'dàbùà⁺ pl **Sà'dàbùes**^ε **Sà'dàbùeb**^a n. clan name: [32.5](#)

sādígím since, because [24.1.4](#) [28.1.1](#)

sāeñ⁺ or **sāeñ**^a pl **sāañb**^a cb **sàñ-** n. blacksmith

sākàrùg^{pl} pl **sākàrid**^ε cb **sākár-** n. fox

sàlbur^ε n. bridle

sālima⁺ cb **sālim-** n. pl as sg gold; **sālim-kùes**^a n. gold merchant

sām^{ne}/ pl **sāmá**⁺ cb **sām-** n. debt; **sām-kpá'às**^a n. household servant

sāmán^{ne} pl **sāmánà**⁺ cb **sāmán-** n. open space in front of a **zàk**^a compound;

Sāmán-píer^ε n. traditional New Year ceremony

sàñ'am^m vv. spoil, get spoiled, get broken; destroy

sāngúnnir^ε pl **sāngúnnà**⁺ cb **sāngún-** n. millipede

sānjá⁺ pl **sānsá**⁺ cb **sān-** n. time [32.9](#) [9.3.2](#); **sān-kán**^ε adv. then; when?

sān-sí'ēn lā adv. at one time, once ... [24.1.3](#)

sàŋ-gbàuj^{pl} n. sky, heaven; cf **sāa**⁼

sāpál^{le} n. Harmattan part of the dry season **úun**^{ne}

sāri-gá⁺ n. prison ← Hausa **sarkàa** "chain"

sàriyà⁺ or **sèriyà**⁺ n. law ← Arabic شريعة **fari:ʔa(tun)**; **sàriyà-kāt**^a n. judge NT

sāvug^{pl} pl **sāad**^{εl} cb **sā-** n. broom, brush

- sàvk**^ɔ pl *sà'ad*^ɛ n. mote of dust
sāúŋ^ɔ n. hospitality
sè⁺ dipf *sèéd*^a vv. transplant
sēoŋ^ɔ n. rainy season
sì⁺ vv. skin, flay
sī'a⁺ some, any (sg) [16.3.1.3](#)
sīa⁺ pl *sīās*^ɛ cb *sjà-* n. waist; **sjà-lōɔdíŋ**^a n. belt ("waist-tying-thing"); **sjà-nīf**^ɔ
n. kidney
sjà'al^{ɛ/} vv. get to be enough
sjà'ar^ɛ pl *sjà'a*⁺ cb *sjà'-* n. forest (WK), wilderness
sjàk^ɛ vv. agree (cf Mooré *sàke id*)
sjàk^{ɛ/} vv. suffice (cf Mooré *sékè id*)
sībɔg^{a/} pl *sībí*⁺ cb *sīb-* n. a kind of termite
sìd truly, post-subject particle [24.1.4](#)
sìda⁺ pl *sìd-* n. pl as sg truth
sìd^a pl *sìdib*^a cb *sìd-* n. husband [32.1](#); **sìd-bīl**^a n. husband's younger brother;
sìd-kpēñm^m n. husband's elder brother; **sìd-puāk**^a n. husband's sister
sīe^{+/} vv. descend, be humbled
sīəba⁺ some(ones), any (ones) [16.3.1.3](#)
sī'əl^a something, anything [16.3.1.3](#)
sī'əm^m somehow, anyhow [16.3.1.3](#) [16.3.3](#)
sīg^ɛ vv. descend
sīgur^{ɛ/} n. guardian spirit, typically but not invariably the *wīn*^{ne/} of an ancestor [32.2](#)
sīgus^{ɛ/} vv. lower
sīgusír^ɛ pl *sīgusá*⁺ n. stopping-place
sīg^a pl *sīls*^ɛ 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 *kikīrs*^{ɛ/} (qv); **Sì-sùŋ**^ɔ n. Holy Spirit NT
sīlum^m vv. cite proverbs
sīlín^a **sīlón**^ɔ pl *sīlís*^ɛ *sīlímís*^ɛ *sīlímà*⁺ cb *sīlín-* n. proverb
sīñd^{ɛ/} n. honey
sīñf^{ɔ/} **sīñg**^{a/} pl *sīñs*^{ɛ/} cb *sīñ-* n. bee
sī'is^{ɛ/} vv. touch
sīlinsíùg^ɔ pl *sīlinsís*^ɛ n. ghost
sīlinsíùŋ^ɔ pl *sīlinsíñd*^ɛ n. spider
sìlv^ɔ pl *sìn*^{ne} *sìls*^ɛ cb *sìl-* n. hawk
sīm^m vv. sink in a liquid
Sìmiig^a pl *Sìmīs*^ɛ cb *Sìmì-* n. Fulbe person, Fulani [32.5](#)
Sìmiil^ɛ n. Fulfulde language
Sìmiug^ɔ n. place of the Fulbe
sīn^{na/} ger *sīnním*^m iv. be silent

sīnsáañ^ƒ *n.* a kind of tiny ant

sīŋ^a *pl* **sīũs**^ƒ *cb* **sìŋ**- *n.* a kind of very big pot

sī'ŋ^ƒ *vv.* begin

sīsíbìg^a *pl* **sīsíbìs**^ƒ *cb* **sīsíb**- *n.* neem tree [32.6](#) *Azadirachta indica* (Haaf)

sīsíbìr^ƒ *pl* **sīsíbà**⁺ *n.* fruit of neem tree [32.6](#)

sìsì'əm^m *n.* wind, storm

sìsùvǵū-n^ƒ *between, postposition* [17.6](#) KB *svvǵun*

sī'úŋ^ɔ *pl* **sī'imís**^ƒ *cb* **sī'uh**- *n.* a kind of large dish

sī⁺ *some(one), any(one), animate sg* [16.3.1.3](#)

sōb^a *dummy head pronoun, animate sg* [16.10.3.1](#)

sōb^ƒ *vv.* go/make dark; usually write; **sōbir**^ƒ *n.* piece of writing [12.1.2](#)

sōbìg^ƒ *vv.* blacken

sōeñ⁺ or **sōeñ**^a *pl* **sōwñb**^a *cb* **sòñ**- *n.* witch

sógjà^a *n.* soldier ← English

sōlŋ^ɔ *pl* **sōlímá**⁺ *n.* story

sōñ⁺ *vv.* rub

sōñ'e^{ya} *iv.* be better than; *agt* **sōñ'wɔd**^a *pl* **sōñ'wb**^a *cb* **sōñ'wɔd**-

sōnnur^ƒ *pl* **sōnna**⁺ *cb* **sòn**- *n.* courtyard dividing wall

sōñs^ƒ *ger* **sōñsìg**^a *vv.* converse, talk with

sōwñg^ɔ *n.* witchcraft

sōwñr^ƒ *pl* **sōñya**⁺ *cb* **sòñ**- *n.* liver

sòs^ƒ *ger* **sōsìg**^a *vv.* ask; *agt* **sòs**^a *n.* beggar

sù⁺ *vv.* take a bath

sù'ā^a *vv.* do secretly, hide

sùāk^a *n.* hiding place

sūeñ⁺ *vv.* anoint

sū'e^{ya} *iv.* own; *ger* **sū'ulím**^m *n.* property, country, realm

sūgur^ƒ *vv.* show forbearance, be patient with; **sūgurú**⁺ *n.* forbearance

sùm^m *n.* goodness; well [17.4](#) [21.2](#)

sùm^{ma} *iv.* be good

sùmbōgusím^m *n.* peace

sūmmur^ƒ *pl* **sūmma**⁺ *cb* **sùm**- *n.* groundnuts; **sūm-dúgudà**⁺ *n.* cooked groundnuts

sùn^{ne} *ger* **sùnnur**^ƒ or **sùnnug**^ɔ *vv.* bow one's head [6.2.1](#); *agt* **sūn**^{na} *n.* ("someone who goes about with bowed head") deep thinker, close observer WK

sūñ'e⁺ *vv.* become better than

sūñ^ɔ / **sūñr**^ƒ *pl* **sūñyá**⁺ *cb* **sūñ**- *n.* heart; **sūñ-kpí'òŋ**^ɔ *n.* boldness [16.10.1](#);

sūñ-má'asìm^m *n.* joy (*M sūñf má'e yā*. "My heart has cooled" = I'm joyful);

sūñ-málisìm^m *cb* **sūñ-mális**- *n.* joy; **sūñ-péèn**^{ne} *n.* anger (*M sūñf pélìg nē*. "My heart is whitened" = I'm angry); **sūñ-sáñ'òŋ**^ɔ *n.* sorrow (*M sūñf sáñ'àm nē*.

"My heart is spoiled" = I'm sad)

sùŋ^ƒ *vv.* help

sùŋ^ɔ sùm^{mɛ} pl sùma⁺ cb sùŋ- adj. good

sùŋā^{+/} adv. well [17.4](#) [21.2](#)

sú'əŋ^a pl sū'əmís^ɛ cb sū'əŋ- n. rabbit

sūer^{ɛ/} pl sūēyá⁺ cb sūā- n. road; permission in *sūer bé, m̄r sūer* [26.3](#)

sù'es^a n. yesterday [32.9](#)

sù'es^ɛ vv. trick

sùr^a iv. have one's head bowed

sùsùm^{mɛ} n. grasshopper

Sūtáanà⁺ n. Satan

sōvg^{ɛ/} vv. wither (leaves) WK

sù'vg^a sù'vg^ɔ pl sù'vs^ɛ cb sù'- n. knife

T

tāa⁼ tāas^ɛ fellow- as second part of compound [13.1.1.4](#)

tāaba⁺ tāab each other [16.3.1.5](#)

tā'adur^ɛ pl tā'ada⁺ cb tād- n. sandal

tàal^{lɛ} pl tàala⁺ cb tād- n. fault, sin

tá'am^{mɛ} pl tāmá⁺ n. shea tree fruit [32.6](#)

tá'aŋ^a pl tāmís^ɛ cb tā'aŋ- n. shea butter tree [32.6](#) *Butyrospermum Parkii* (Haaf)

tā'as^{ɛ/} vv. help someone to walk; in greetings [31](#)

tàb^ɛ vv. get stuck to

tàbi^{y^a} iv. be stuck to

tàbiɔ^ɛ vv. get unstuck from

tàbi^{lɛ} vv. stick to (*transitive*)

tàdiɔ^ɛ n. become weak

tādım^{m/} pl tādım-nàm^a cb tādım- n. weak person

tādımís^ɛ n. weakness

Tàlun^{nɛ} n. Talni language

Tàlɔ^a pl Tàlts^ɛ cb Tàlɔ- n. Tallensi person [32.5](#)

tàm^m dipf tàmıd^a vv. forget

tàmpūa⁺ pl tàmpōs^ɛ cb tàmpò- n. housefly [9.3.2](#)

tàmpūr^ɛ cb tàmpò- n. ashpit, rubbish tip

tān^{nɛ} pl tāna⁺ cb tād- n. earth; **tān-mēed^a** n. builder

tāŋp^ɔ n. war; **tāŋp-sōb^a** n. warrior

tāŋs^ɛ ger tāŋsvɔ^ɔ vv. shout; *Winnɔg tāŋsıd nē*. The sun is shining.

tār^{a/} ger tārım^m iv. have; more typical of Toende Kusaal; NT always has the Agolle word *m̄r^{a/}* instead

tàsıntàl^{lɛ} n. palm of hand

tàtəl^{lɛ} n. palm of hand

tāuñ^{+/} pl tāŋp^{a/} cb tāuñ- tāŋp- n. sibling of opposite sex [32.1](#)

- tèb^ε** *ger* **tēbig^a** vv. carry in both hands
tēbig^{ε/} vv. get heavy
tēbis^{a/} *iv.* be heavy
tēbisíg^a tēbisír^ε *pl* **tēbisá⁺** *cb* **tēbis-** *adj.* heavy
tēbisím^m *n.* heaviness
téebùl^ε *pl* **téebùl-nàm^a** *n.* table ← English
tēeg^{ε/} vv. drag (ILK)
tè'eg^a *pl* **tè'es^ε** *cb* **tè'-** *n.* baobab [32.6](#) *Adansonia digitata* (Haaf)
tēk^{ε/} vv. pull
tèñb^ε *ger* **tèñbug^ɔ** vv. tremble, struggle
tèñ'es^ε vv. remind
tēñ'es^{ε/} vv. think; *ger* **tēñ'esá⁺** *n.* thought
tèñr^a *ger* **tèñrib^ɔ** or **tèñrím^m** (*tone sic; ??misheard for tèñrím^m*) *iv.* remember
tēŋ^a *pl* **tēñs^ε** *cb* **tēŋ-** *n.* land; **tēŋ-biig^a** *n.* native; **tēŋ-dāan^a** *n.* traditional earth-priest; **tēŋ-dū'adig^a** *n.* native land; **tēŋ-gbàuŋ^ɔ** *n.* earth, land; **tēŋ-pūvug^{n-ε/}** *pl* **tēŋ-pūvudi-n^{ε/}** *n.* village [17.3](#); **tēŋ-zùŋ^ɔ** *pl* **tēŋ-zùvñs^ε** *n.* foreign country
tēŋi-n^{ε/} downward; *as postposition* under [17.6](#)
tēŋí^ε downward; *as postposition* under [17.6](#)
tèog^ɔ *pl* **tèed^ε** *n.* nest
tè'og^ɔ *pl* **tè'ed^ε** *n.* baobab fruit [32.6](#)
tì we, our (*proclitic*) [16.3.1.1](#)
tì⁺ us (*enclitic object*) [16.3.1.1](#)
tì *preverbal adverb conveying completion or purpose* [19.7.2](#)
tjà'al^ε vv. come next
tjàk^ε vv. change
tī'əb^a *n.* healer
tì'əb^ε vv. heal; *ultimately* ← Arabic طب *t'ibb(un)* "medicinal art"
tienñ⁺ vv. inform WK (KED remember)
tienñ⁺ vv. stretch out
tìəŋ^a *pl* **tìəms^ε** *cb* **tìəŋ-** *n.* beard; **tìəŋ-gōvr^ε** *n.* chin
tìg^ε vv. become sated; *ger* **tìgir^ε** *n.* glut
tī'iyal^{a/} *ger* **tī'ib^{ɔ/}** *iv.* be leaning (object)
tìig^a *pl* **tìis^ε** *cb* **tì-** *n.* tree
tī'il^{ε/} vv. lean something
tìum^m *cb* **tì-** *n.* medicine; **tì-kōvdím^m** *n.* poison (killing-medicine); **tì-sābilím^m** *n.* "black medicine" (a particular traditional remedy) **tì-vōnním^m** *n.* oral medication
tì'in^ε vv. begin to lean
tìlās^ε *n.* necessity ← Hausa *tiilàs* [26.3](#)
tìlig^ε vv. survive, be saved
tīnámì we (*subject of ñ-clause*) [16.3.1.1](#)

tīnám^a we, us (*contrastive*) [16.3.1.1](#)

tīntōñríg^a pl *tīntōñrís^ε* cb *tīntōñr-* n. mole (animal)

tìp^a pl *tìp-nàm^a* cb *tìp-* n. healer (see *tī'əb^a* id)

tīráàn^a pl *tīráàn-nàm^a* cb *tīráàn-* n. neighbour, peer

tīráànum^m n. neighbourliness

tírìgà ideophone for *gīŋ^a* short [16.11.1.3](#)

tìs^ε dipf *tìsɪd^a* *tìt^a* agt *tìs^a* vv. give; also *tì* before enclitic pronouns: *tì f* gave you

tītā'al^ε n. proud person

tītā'alum^m n. pride

tītā'am^m n. multitude

tītā'ug^ɔ **tītā'ar^ε** pl *tītāda⁺* cb *tītá'-* adj. big, great

tò OK [25.2.4](#) (= Hausa *tôo*)

tòd^ε vv. give to the poor, share

tōē^{a/} iv. be bitter, difficult

tóklàe⁺ n. torch ← English "torchlight"

tólùlù ideophone for *wōk^{ɔ/}* tall [16.11.1.3](#)

tólìb onomatopoeic word [16.11.1.3](#)

tòñ⁺ vv. shoot

tòñ'ɔs^ε vv. hunt

tōɔg^ɔ pl *tōɔd^ε* cb *tò-* adj. bitter, difficult

tōɔm^{m/} vv. depart, disappear

tò'ɔtō^{+/} adv. straight away [17.4](#)

tṵà⁺ vv. grind in a mortar; **tṵà-bīl^a** n. pestle

tṵ'à^a vv. speak, plead in court

tṵ'al^ε vv. condemn in court

tṵ'as^ε vv. talk

tòbur^ε pl *tòba⁺* cb *tòb-* n. ear; **tòb-kpìr^ε** n. half of jaw; **tòb-yīuŋ^{ɔ/}** adj. one-eared
[16.4.2.3](#) [16.11.1.4](#)

tōl^{la/} iv. be hot

tùlg^ε vv. invert

tōlg^{ε/} vv. heat up

tòm^m vv. work; ger *tōum^{mε}* n. deed pl **tōuma⁺** n. deeds; work cb *tòum-*; **tòum-bē'ed^ε** n. bad deeds; **tòum-bē'ed-dím^a** n. sinners NT; agt **tòm-tòm^{na}** n. worker

tòm^m ger *tìtōmɪs^ε* vv. send; compare Hausa *àlkaa* "send", *alkàtaa* "work"

tūñ'e iv. be able [23.3](#)

tūədɪr^ε pl *tūəda⁺* cb *tùəd-* n. mortar

tùen^{ne} in front; as postposition [17.6](#); West (KB *yà tùena*) [32.3](#); **tùen-gāt^a** n. leader

Tùen^{ne} n. Toende, Western part of Kusaasiland

Tùennur^ε n. Toende dialect of Kusaal

tūsɪr^{ε/} n. thousand [16.4.2.1](#)

tòtūl^ε n. upside-down thing cf *tùlg^ε*

tōvlígā^{+l} *adv.* hotly [17.4](#)
tōvlóg^ɔ *pl tōvlá⁺ cb tōvl-* *adj.* hot
tō'vs^{εl} *vv.* meet

U

ùdvg^ɔ *pl ùt^ε cb ùd-* *n.* (piece of) chaff
ūgvs^{εl} *vv.* bring up a child
ùk^ε *vv.* vomit
ūk^ε *vv.* bloat
ùm^m *vv.* close eyes
úun^{nε} *n.* dry season [32.9](#)

V

vābı^{ya/} *ger vāp^{ɔ/} KT vābı^{εl} WK iv.* be lying prone
vābı^{εl} *vv.* make lie prone
vàbın^ε *vv.* lie prone
vāvňg^{ɔ/} *pl vāaňd^{εl} cb vāň-* *n.* leaf
vē⁺ *vv.* lead
vē'εg^{εl} *vv.* drag
vèn^{na} *iv.* be beautiful
věň^{la} *iv.* be beautiful
věňllıg^a *pl věňllıs^ε věňlla⁺ cb věňl-* *adj.* beautiful
věňllıg^a *pl věňllıs^ε cb věňllıg-* *adj.* beautiful
věnnıg^a vėnnır^ε *pl vėnnıs^ε vėnna⁺ cb vėn-* *adj.* beautiful
vėnnım^m *n.* beauty
vī⁺ *vv.* uproot
vīk^{εl} *vv.* uproot
vīug^{ɔ/} *pl vīid^{εl} cb vī-* *n.* owl
vū⁺ *ger vūug^{ɔ/} vv.* make a noise; **vūud^{εl}** *n.* noise
vōg^{a/} *iv.* be alive
vōl^ε *vv.* swallow
vòlınvòuňl^{lε} *n.* mason wasp
vōm^{m/} *cb vōm-* *n.* life; **vōm-páàl^{lε}** *n.* new life
vúeḡ^a *pl vūémıs^ε n.* red kapok [32.6](#) *Bombax buonopozense* (Haaf)
vúe^ε *pl vūáa⁼ cb vūe-* *n.* fruit of red kapok [32.6](#)
vūr^{εl} *pl vūyá⁺ cb vūr-* *adj.* alive
vū'vg^{εl} *vv.* come, make alive
vū'vs^{εl} *vv.* breathe, rest
vū'vsím^m *n.* resting

W

wā⁺ vv. dance

wāad^{ε/} n. cold weather

wāaf^ɸ pl **wīigí**⁺ cb **wā**⁻ n. snake

wāal^{ε/} vv. sow, scatter seed

wā'alím^m n. length

wā'am^{ma/} iv. be long, tall

wàbig^a **wàbir**^ε pl **wàbis**^ε **wàba**⁺ cb **wàb**⁻ n. lame person

wàbulum^m vv. make, go lame

wābug^{ɸ/} pl **wābɪd**^{ε/} cb **wāb**⁻ n. elephant

wādir^{ε/} pl **wādá**⁺ cb **wād**⁻ n. law (← English "order" via Hausa) plural as sg: law

wād-tís^a n. lawgiver NT

wà'e^{ya} iv. be travelling

wālig^a pl **wālis**^ε **wālí**⁺ (tone sic) cb **wàl**⁻ n. a kind of gazelle

wàŋum^m vv. waste away

wàsɪnwàl^{lε} n. a parasitic gall on trees, called "mistletoe" in local English

wàɹɹ^ɸ pl **wàna**⁺ cb **wàɹɹ**⁻ adj. wasted, thin

wèɛd^a see **wìd**^a

wēɛl^{ε/} vv. be left unsold (KED) but see **wēog**^{ɸ/}

wēl^ε vv. bear fruit

wēl^{lε/} pl **wēlá**⁺ cb **wēl**⁻ n. fruit

wēlá⁺ or **wālá**⁺ how? [16.3.3](#); *nìŋ wēlá kà* how can ...? [26.2](#)

wēn^{na/} iv. resemble; in KB **wēn nē** appears as **nwɛnɛ**; ger **wēnním**^m ??misheard for **wēnním**^m; cf the Pattern O adjective **wēnnur**^ε

wēnnur^ε adj. resembling (Pattern O, specifically confirmed with WK)

wèog^ɸ n. deep bush

wēog^{ɸ/} pl **wēɛd**^{ε/} n. cheap thing sold in abundance WK

wìdɪg^ε vv. scatter

wìəf^ɸ pl **wìdɪ**⁺ cb **wìd**⁻ n. horse; **wìd-l̩r**^{ε/} n. place for tying up horses in a compound;

wìd-dāvg^ɸ n. stallion; **wìd-ñyá'aŋ**^a n. mare; **wìd-zōvr**^ε n. horsetail

wìd^a or **wèɛd**^a pl **wìb**^a cb **wìd**⁻ n. hunter

Wiid^a pl **Wiid-nàm**^a cb **Wiid**⁻ n. member of the clan Wiid [32.5](#)

Wiidvg^ɸ n. place of the clan Wiid

wīig^{a/} n. whistle

wìum^m n. sickness, disease ("worse than **bāñ'as**^ε" WK)

wìk^ε dipf **wìid**^a vv. fetch water [11.1.1](#)

wìl^{lε} pl **wìla**⁺ cb **wìl**⁻ n. branch

wīlɪsúŋ^ɸ pl **wīlɪmís**^ε cb **wīlɪsúŋ**⁻ n. a kind of snail [9.3.2.1](#)

wím ideophone for **zìñ'a**⁺ red [16.11.1.3](#)

wīn^{nε/} pl **wīná**⁺ cb **wīn-** n. God; god; spiritual double, *genius*; destiny; **wīn-tóòg**^ɔ
n. misfortune

Wínà'am^m n. God [15.1](#) (usually Christian)

wìnnig^a cb **wìn-** n. sun; talent; **wìn-līir**^ε n. sunset; **wìn-kòòñr**^ε n. sunset

wiug^ɔ **wiir**^ε pl **wiya**⁺ **wiid**^ε cb **wi-** adj. red

wōk^{ɔ/} **wā'ar**^{ε/} pl **wā'á**⁺ **wā'ad**^{ε/} cb **wōk-** **wā'**- adj. long, tall

wòm^m vv. hear; understand (a language)

wōsa⁺ q. all [16.4.1](#)

wōv⁺ q. all [16.4.1](#)

wōv like, resembling [18.1](#)

wō'ug^{ε/} vv. get wet

wō'vl^{ε/} vv. make wet

Y

yà you, your pl (*proclitic*) [16.3.1.1](#)

ya⁺ you pl (*enclitic object*) [16.3.1.1](#)

ya^a you pl, *enclitic subject after imperative* [16.3.1.1](#) [25.2.3](#)

yā⁺ *Independent/perfective particle* [19.6.2.1](#)

yà' if, when [27](#)

yáa adv. whither? [16.3.3](#)

yā'a as for ... [25.1.1](#)

yáab^a pl **yāa-nám**^a cb **yāa-** n. grandparent, ancestor [32.1](#); **yāa-dáú**⁺ n. grandfather;
yāa-pu'á^a n. grandmother

yà'al^ε vv. hang up; make perch (bird)

yà'an^ε vv. perch (of a bird)

Yàan^{nε} n. Yansi language (apparently Mooré now)

yáa ní⁺ adv. where? [16.3.3](#)

yáan^a pl irr **yáas**^ε (*consistently without nasalisation*) cb **yāan-** n. grandchild,
descendant [32.1](#)

Yàan^a pl **Yàam**^{ma} **Yàamɪs**^ε **Yàas**^ε cb **Yàan-** n. Yansi person [32.5](#)

yāar^{ε/} vv. scatter

yàarɪm^m cb **yàar-** n. salt

yà'as^a **yà'as**^ε again [23.3](#)

yā'as^{ε/} vv. open repeatedly

yàddā or **yàdā** n. faith, trust ← Hausa *yàrda*; probably ← Arabic *يرضى yardʿa*: [15.1](#)
[20.1](#); **yàddā-níjìr**^ε n. belief

yāɖɪg^{ε/} vv. scatter; *agt* **yāt**^{a/} *irreg. agent noun*: technical term for a participant in a
housebuilding ritual

yā'e^{+/} vv. widen, open (mouth)

yàk^ε vv. unhang, unhook

yàlɪm^{ma} iv. be wide

yā̀lɪsúŋ^ɔ pl *yā̀lɪmɪs^ɛ* cb *yā̀lɪsúŋ-* n. quail [9.3.2.1](#)

yàlɪŋ^ɔ pl *yàlɪma⁺* cb *yàlɪŋ-* adj. wide

yām^{mɛ} pl *yàma⁺* cb *yàm-* n. hay WK

yām^{m/} cb *yām-* n. gall; gall bladder; common sense WK *yā'm^{m/}*.

yàmmɪg^a **yàmmug^a** **yàmmug^ɔ** pl *yàmmɪs^ɛ* cb *yàm-* n. slave

yānámì you pl (subject of *̀n*-clause) [16.3.1.1](#)

yānám^a you pl (contrastive) [16.3.1.1](#)

Yāriŋ^{a/} pl *Yāris^{ɛ/}* cb *Yār-* n. Yarsi [32.5](#); also called Kantonsi; said to have been originally of Manding/Dyula origin

Yāt^{ɛ/} n. Yarsi language (no longer Dyula/Bambara, but a Western Oti-Volta language)

yàug^ɔ pl *yàad^ɛ* n. grave, tomb

yē that [26.1](#) [26.3](#) [26.5](#) [26.5.3](#)

yē be about to ... [19.3.2](#)

yè⁺ vv. dress oneself; *res adj* **yè̀elúŋ^ɔ** worn (e.g. of a shirt)

yè̀eg^ɛ vv. undress oneself

yè̀el^ɛ vv. dress someone

yḕes^{ɛ/} vv. betray a secret

yè̀l^ɛ dipf *yèt^a* ger *yè̀lɪg^ɔ* vv. say, tell

yḕl^{lɛ/} pl **yḕlá⁺** (as postposition: about [17.6](#)) cb *yḕl-* n. matter, affair; **yḕl-méŋ̀r^ɛ** n. truth; **yḕl-nárùŋ^ɔ** n. necessity; **yḕl-pákìr^ɛ** n. disaster; **yḕl-sú'adìr^ɛ** n. confidential matter

yḕŋ̀ím^m vv. oscillate (like waves)

yè̀og^ɔ pl *yè̀ed^ɛ* n. bird's crop; person displaced from family (KED)

yḕóŋ q. one, in counting [16.4.2.2](#)

yī⁺ dipf *yīt^{a/}* imp *yìm^{ma}* vv. go, come out

yìdɪg^ɛ vv. go astray

yìdɪg^{ɛ/} vv. untie

yìər^ɛ n. jaw

yīigá⁺ q. firstly [16.4.2.3](#) [17.4](#); **yīig-sób^a** n. first person [16.10.3.1](#)

yīis^{ɛ/} ger *yīisíb^ɔ* vv. make go/come out, extract

yīmmír^ɛ pl *yīmmá⁺* cb *yīm-* adj. solitary, lone [16.4.2.3](#)

yīmmú⁺ adv. straight away, at once [16.4.2.4](#)

yīnní⁺ q. one [16.4.2.1](#)

yìŋ^a adv. outside

yīr^{ɛ/} pl *yā^{+/}* cb *yī-* n. house; **yī-dáàn^a** n. householder; **yī-sób^a** pl *yī-sób-nàm^a* n.

householder; **yī-dím^a** n. members of the household; **yī-póŋ̀rùŋ^ɔ** pl *yī-póŋ̀rà⁺*

n. neighbouring house; **yī-sígidìr^ɛ** n. lodging-house; **yín^{nɛ}** at home pl *yáan^ɛ*

yīs^ɛ vv. make go/come out, extract

yīŋ̀ŋ^{ɔ/} pl *yīná⁺* adj. single- [16.4.2.3](#) [16.11.1.4](#)

yò⁺ vv. close; *res adj* **yò̀ɔlúŋ^ɔ** closed

yō⁺nvv. pay; *ger* **yōɔd^{ε/}** n. pay
yōls^{ε/} vv. untie
yōlsím^m n. freedom
yōlvɔɔ^{ɔ/} pl **yōn^{nε/}** cb **yōl-** n. sack, moneybag, £100, ₣200 (200 cedis)
yò'ɔg^ε vv. open
yòɔr^ε pl **yòya⁺** cb **yò-** n. soldier ant
yua⁺ vv. bleed; also fornicate WK
yùbɔg^a pl **yùbis^ε** cb **yùb-** n. small bottle-like pot
yūgvdir^ε pl **yūgvda⁺** cb **yūgvd-** n. hedgehog
yōgúm^{mε} **yōgúm^{nε}** pl **yōgumá⁺** cb **yōgum-** n. camel
yùlvɔ^ε vv. swing (transitive)
yūñ'e^{+/} vv. set alight
yū'ər^ε pl **yūāda⁺** cb **yū'ər-** n. penis
yùug^ε vv. get to be a long time, delay; *Tì yùùg nē tāaba*. It's a long time since we met.
yùul^ε vv. swing (intransitive)
yū'um^{m/} vv. sing; *agt* **yūum-yú'òm^{na}** pl **yūum-yú'òmniɔ^a** n. singer
yú'um^{nε} pl **yú'umá⁺** cb **yū'um-** or **yūum-** n. song
yùum^{mε} pl **yùma⁺** cb **yùum-** n. year; **yūum-pāalíg^a** n. new year
yū'vn then, next [24.1.4](#)
yú'vɔɔ^{ɔ/} pl **yú'vmís^ε** cb **yú'vɔɔ-** n. night
yū'vr^{ε/} pl **yūdá⁺** cb **yū'-** n. name
yūvr^ε pl **yūya⁺** cb **yù-** n. water pot

Z

zā^{+/} cb **zā-** n. millet
zāalíg^a **záal^ε** pl **zāalís^ε** **zāalá⁺** cb **zāal-** adj. empty
zāalím^m adv. emptily
zàam^m cb **zà-** n. evening; **zà-sìsōbur^{ε/}** n. evening
zàańsim^m vv. dream
zāańsím^m cb **zāańs-** n. soup; *soup in general, not "fish soup" despite Mampruli*
zaasim "fish"; cf Toende zāasím "soupe à viande" (Niggli)
zàańsúɔɔ^{ɔ/} pl **zàańsímà⁺** cb **zàańsúɔɔ-** n. dream
zàb^ε *ger* **zàbur^ε** vv. fight; hurt (of body part); *agt* **zàb-zàb^a** n. warrior;
agt **gbān-záb^a** n. leather-beater, leather-worker
zàbul^ε vv. cause to fight
zàk^a pl **zà'as^ε** cb **zà'-** n. compound; **zà'-nōɔr^{ε/}** n. gate; **zà'-nō-gúra^a** n. gatekeeper
zàkum^m vv. itch
zàlvɔ^a pl **zàlvms^ε** cb **zàlvɔ-** n. electric eel
zàm^m *dipf* **zàmmid^a** vv. cheat; *agt* **zàm-zām^{na}** n. cheat
zà'mvs^ε vv. learn, teach

- zāñ'a**^q = q. every [16.4.1](#)
- zāñ'as**^{vv} vv. refuse
- zāñbu**^{vv} vv. tattoo, mark skin
- zāñbun**^{pl} *pl zāñbuna*⁺ *cb zāñbun-* n. tattoo; NT sign [12.1.2](#)
- Zàngbèèl**ⁿ n. Hausa language [32.5](#)
- Zàngbèèg**^{pl} *pl Zàngbèèd*^{vv} n. Hausa person [32.5](#)
- zàngùøm**^{pl} *pl zàngùøma*⁺ *cb zàngùøm-* n. wall
- zànkù'ar**^{pl} *pl zànkù'aa*⁺ *zànkù'ada*⁺ *cb zànkù'à-* n. jackal
- zāñl**^{ger} *ger zāñllím*^{iv} iv. be holding, carrying in hands
- zāñl**ⁿ n. umbilicus
- zàŋ**^{vv} vv. pick up, take up
- zēm**^{ma/ger} *ger zēmmúg*^{iv} iv. be equal
- zē'mis**^{vv} vv. make equal
- zēmmúg**^{pl} *pl zēmmá*⁺ *cb zēm-* adj. equal
- zī**^{ger} *ger zīd*^{vv} vv. carry on one's head; *agt zī-zīd*ⁿ n. carrier on the head
- zī**^{ger} *ger zī'ílím*^{iv} iv. not know [29.1.1](#); *agt zī'íd*ⁿ n. ignorant person
- zì'e**^{ger} *ger zī'a*⁺ KED; DK KT *zī'æg*^a (*exceptional phonology* [15 12.1.1.2](#)) *iv*. be standing
- zì'əl**^{vv} vv. make to stand; *zì'əl nōɔr*^{vv} promise, command; *with n tìs* X: promise to X
- zì'ən**^{vv} vv. stand still; *Ò zì'ən nē*. She's pregnant.
- zīum**^{cb} *cb zī-* n. blood
- zīng**^{pl} *pl zīm*⁺ *cb zīm-* n. fish; **zīm-gbáñ'àd**ⁿ n. fisherman
- zìlum**^{pl} *pl zìluma*⁺ *cb zìlum-* n. tongue
- zìlnzìùg**^{adj} adj. unknown
- zím** ideophone for *sābúlig*^a black [16.11.1.3](#)
- zíná**⁺ today [32.9](#)
- zīñ'a**⁺ **zēñ'ug**^{pl} *pl zēñ'ed*^{vv} *zēñ'es*^{vv} *zēñda*⁺ *cb zēñ'-* adj. red
- zìñ'iyá** *iv*. be sitting; *ger zīñ'ig*^a *pl zīñ'is*^{vv} *cb zìñ-* (*also place*)
- zìñ'il**^{vv} vv. make sit, seat
- zìñ'in**^{vv} vv. sit down
- zīnzāuŋ**^{pl} *pl zīnzāná*⁺ *cb zīnzáuŋ-* n. bat
- zīr**ⁿ n. lie, untruth
- zò**^{dipf} *dipf zòt*^a *imp zòm*^{ma} vv. run; fear; experience emotion; *ger zūa*⁺ *zōɔg*^{vv} run; *imperfective ger zòtum*^m fear [13.1.1.4](#) *Ò zòt-ō nīn-báalig*. He has pity on him
- zōl**^{vv} vv. castrate
- zōlumís**ⁿ n. foolishness
- zōlug**^{pl} *pl zōn*^{ne/} *cb zōl-* n. fool
- zōm**^{cb} *cb zōm-* n. flour
- zōɔm**^{pl} *pl zōɔm*^{ne} *pl zōɔma*⁺ *cb zōɔm-* n. refugee, fugitive
- zōrɪg**ⁿ n. small child WK
- zōrug**^{pl} *pl zōrá*⁺ n. piece
- zū**^{vv} vv. steal

zʌ̀+ pl zʌ̀-*nàm*^a cb zʌ̀- n. friend

Zʌ̀+ pl Zʌ̀*es*^ε n. member of clan Zoose [32.5](#); *pl Zʌ̀-*wiis*^ε Zʌ̀-*wiib*^a, pl Zʌ̀-*sābilís*^ε subclans of Zoose*

zù'e⁺ vv. get higher, more

zùe⁺ vv. perch, get on top (? variant of zù'e⁺)

zūg^ɔ/ pl zūt^ε/ cb zūg- zū- [9.2.2](#) n. head; as postposition [17.6](#); **zūgú-n^ε** is also used as a postposition; **zūg-dáàn^a** n. boss, master (replaces zūg-sób^a in KB for meanings other than "the Lord"); **zūg-kōgur^ε** pl zūg-kōga⁺ cb zūg-kúg- n. pillow; **zūg-máuk^ɔ** pl zūg-má'ád^ε adj. crushed-headed [16.11.1.4](#); **zūg-sób^a** n. boss; NT Lord (often read as zū-sób in the audio NT); **zū-péelùg^ɔ** pl zū-péelà⁺ adj. bald, grey-haired [16.11.1.4](#); **zū-píbìg^a** n. hat

zùlɪg^ε vv. deepen

zùlum^{ma} iv. be deep

zùlɪg^ɔ pl zùlɪma⁺ cb zùlɪg- adj. deep

zùlɪg^ɔ n. depth

zùnzòŋ^a zùnzòŋ^ɔ pl zùnzòŋs^ε cb zùnzòŋ- n. blind person

zūebúg^ɔ pl zūebíd^ε cb zūeb- n. hair (of human head); see *kõñbug^ɔ*

zùed^ε n. friendship

zùel^ε vv. make to perch

zū'om^m/ pl zū'omís^ε cb zū'om- n. blind person

zū'om^m/ vv. go blind, make blind

zùen^ε vv. begin to perch

zūer^ε pl zūēya⁺ cb zʌ̀- n. hill

zùes^ε vv. befriend

zūríf^ɔ pl zūrí⁺ cb zūr- n. dawadawa seed

zúvñf^ɔ pl zúvñí⁺ n. dawadawa seed

zùuňg^ɔ pl zùuňs^ε zùuňd^ε cb zùň- n. vulture

zōvr^ε pl zōya⁺ cb zò- n. tail; **zò-wōk^ɔ/** adj. long-tailed [16.11.1.4](#)