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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Swansea, December 2016
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Preface to the Revised Version

> *Citius emergit veritas ex errore quam ex confusione.*
> Truth will sooner come out from error than from confusion.
> > Francis Bacon, Novum Organum, Book II, Aphorism XX

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 $n\bar{\varepsilon}^{+/}$ following the morphologically unmarked bare-stem form of the verb 22.2.2.1 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 (Huddlestone 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 morphononemic 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 ι 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 *e̯ i̯ u̯* instead of *e i u* for non-moraic segments and *iə uɵ* rather than *ie uo* for the phonemic monophthongs *realised* [iə] [uɵ] 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 19.8.1.3 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 29.3.2 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	*Bunkonbid ne Niis ne ba yɛla* (see Sources)
C	Consonant
cb	combining form (of nominal)
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	*Kusaas Kuob nɛ Yir yela Gbauŋ* (see Sources)
KSS	*Kusaal Solima ne Siilima* (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 (not "Verbal Predicator" 22)
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	17
AN	Animate Gender	19.2.2
CNTR	Contrastive (Personal Pronouns)	33.5
COMP	Complementiser (underlyingly *ǹ*)	8.2.2.1.1 31
COP	Copula *àe̯ň*ᵃ	24.2
CQ	Content Question Prosodic Clitic	2.2.1 8.1
DEM	(Short) Demonstrative Pronoun	15.2
DEM.DEI	Deictic (Long) Demonstrative Pronoun	15.2
DIPF	Dynamic Imperfective Verb Form	11.1
EXIST	Existence/Location Verb *bɛ̀*⁺	24.1
FOC	Focus Particle *nɛ̄*⁺/	33.1.2 22.2
GER	Gerund	12.1.1
IMP	Independent Imperative Verb Form	11.1
INAN	Inanimate Gender	19.2.2
INDF	Indefinite Pronoun	15.3
IRR	(alone) Positive Irrealis Mood Marker	22.4
LOC	Locative Postposition (*nī*⁺/ ~ *n*ᵋ)	20.3
NEG	(alone) Negative Prosodic Clitic	2.2.1 8.1
NEG.BE	Negative Verb to and **COP** and **EXIST**	32.1.1
NEG.HAVE	(Another use of the same verb)	32.1.1
NEG.IMP	Negative Imperative Marker	22.4
NEG.IND	Negative Indicative Marker	22.4
NEG.IRR	Negative Irrealis Marker	22.4
NEG.KNOW	Negative Verb *zī'*⁺	32.1.1
NEG.LET	Negative Verb *mìt*	32.1.1
NUM	Number Prefix *à- bà- ǹ- bʊ̀-*	16.2.1
OB	Object (Liaison Enclitic Pronouns)	8.2.1
PERS	Personifier Clitic *à-*	19.10
PFV	Independent Perfective Marker *yā*⁺	22.6.2.1
PL	Plural	19.2.1
PQ	Polar Question Prosodic Clitic	2.2.1 8.1
REL	Relative Pronoun	31.2.2
REM	Remoteness Marker	30.1.1
SER	Serialiser (underlyingly *n*)	8.2.2.1.2 26.1
SG	Singular	19.2.1
TNS	Tense Marker	22.3.1
VOC	Vocative Prosodic Clitic	2.2.1 8.1

Personal Pronouns:

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

The linker particles *kà* and *yɛ̄* are conventionally glossed "and" and "that" respectively throughout, though this very often does not reflect the true meaning in context 27.1.2.; similarly *yà'* 30.1 is glossed "if" in all cases. The empty particle *nɛ̄* which follows objects of comparison which lack the article 21.1 is glossed "like."

Mass nouns 19.2.1 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 *ø* 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 ⁺*ø*, 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 Nominal combining forms, the Personifier particle *À-*, and the Liaison Enclitics *n*ᵉ **LOC** *n*ᵉ **REM** ʸᵃ **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: *pʊ̄ʊgʊ-n* "inside", not *pʊ̄ʊgʊ‿n*.

Transcription Conventions

For the working orthography used for Agolle Kusaal in this grammar see <u>1.3</u>.

Phonetic transcriptions are written in square brackets; they are quite broad, and ignore a good deal of allophony, as explained in <u>3.1</u> <u>4.1</u>.

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 *ι ʋ* 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 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 <u>this</u>.

Sources

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 Tempane)
DK	(from Kukpariga)	SB	(from Bawku)

Texts

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

Bunkonbid ne Niis ne ba yεla   "Animals and birds and their affairs"
Būn-kɔ́ñbɩ̀d nē Níis nέ bà yēlá   Matthew M. Abokiba

Kusaal Solima ne Siilima   "Kusaal Stories and Proverbs"
Kūsáàl Sɔ́lɩmà nē Síilímà   Samuel Akon, Joe Anabah

Kusaas Kuob nε Yir yela Gbauŋ   "A book on Kusaasi farming and housing"
Kūsáàs Kú̀b nē Yīr yέlà Gbàu̯ŋ   William A. Sandow, Joseph A.H.Anaba

Bible Translations:

Wina'am Gbauŋ   Kusaal Bible
Wínà'am Gbáu̯ŋ   1976 NT © World Home Bible League
   1996 NT © The Bible League/GILLBT
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1 Introduction to Kusaal and the Kusaasi

Upper East Region of Ghana (Public Domain, created by <u>Rarelibra</u>
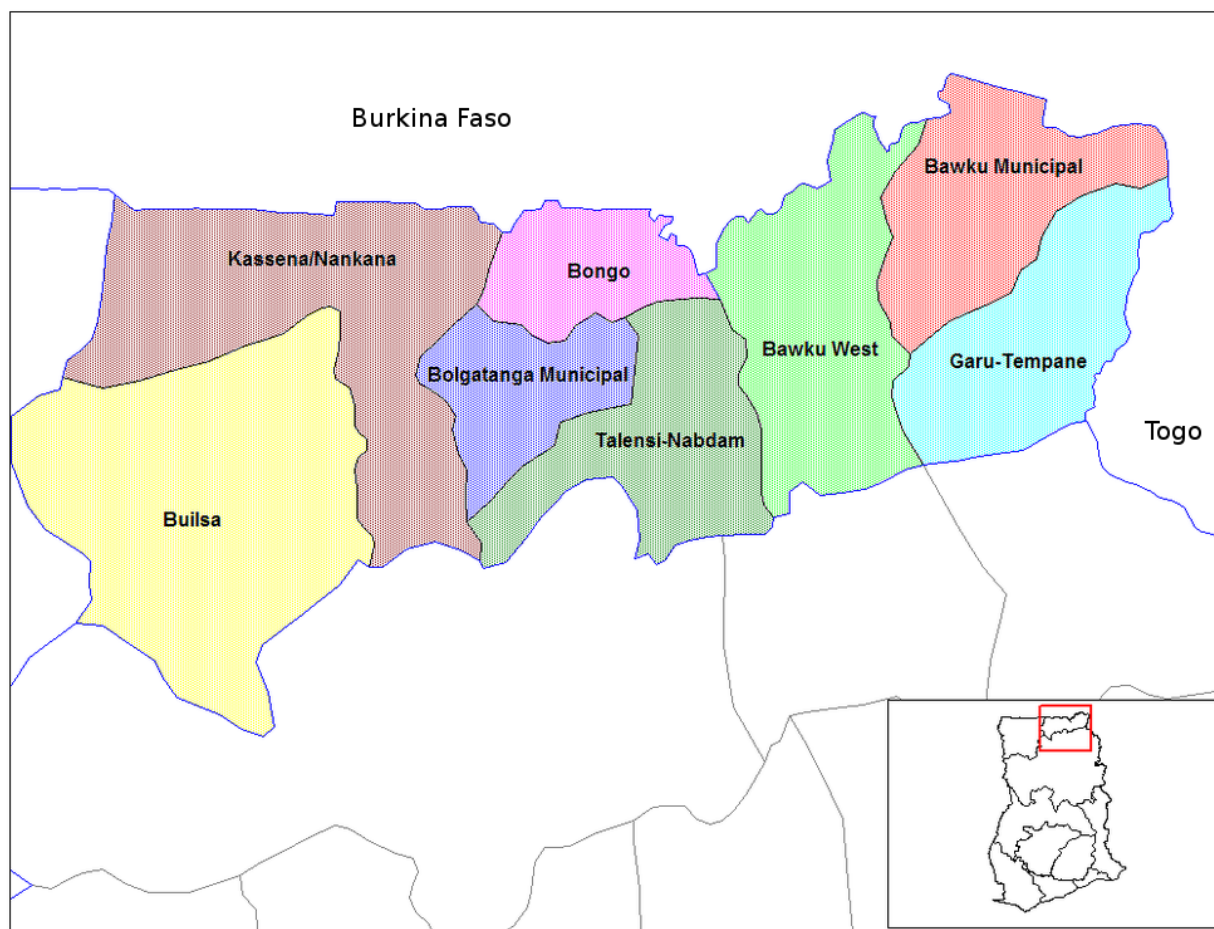
     Kusaal is the language of the Kusaasi, the majority ethnic group of the Bawku Municipal, Bawku West and Garu-Tempane Districts of the Upper East Region in the far northeast of Ghana, extending from the Red Volta river and the Gambaga Escarpment to the national borders with Burkina Faso and Togo. The 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 *Tɔ́ɔ̄n* "in front, West", Agolle Kusaal[1] *Tùən*ⁿᵉ. The larger eastern part is **Agolle** (less accurately spelt "Agole"), Kusaal *Àgɔ̀l*ᴵᵉ "Upper." The Ghanaian districts comprise most of *Kūsáùg*ᵓ "Kusaasiland", but there are also a good number of Kusaasi settlements in the neighbouring part of Burkina Faso, west of the White Volta and south of Zabré, and a few over the border in Togo.

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1) Superscript letters represent the parts of Kusaal words deleted in most contexts by Apocope <u>2.2</u>. They play no part in the pronunciation of citation forms, and may be ignored in this section, along with the ᐟ tone mark which follows some superscripts.

1.1 The Kusaasi People

The name *Kūsáàl*ᵋ "Kusaal" and the name of the people *Kūsáàs*ᵋ "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 Fulɓe 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" /tiˈzɛd/ 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 *pɔ̄ɔr*ᵋ/ "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-dàan-nàm*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*ᵓ⁾ "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*ⁿᵋ⁾, 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   nɛ̄   Wīn,   dā   tʊ́'às nɛ̄   Wīnnɛ́* ⁺ø.
> 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   ňyɛ́ 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*ⁿᵋ⁾. A *wīn*ⁿᵋ⁾ resides in an object such as a stone or horn, which is a *būgʊr*ᵋ, often called a "fetish" in old ethnographic accounts; the implications of this term are however very misleading, as it is the *wīn*ⁿᵋ⁾ 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 (*būgʊd*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: *nìn-gbīŋ*ᵓ⁾ "body"; *ňyɔ̀-vūr*ᵋ⁾ "life" as opposed to death, possessed by all living animals; *wīn*ⁿᵋ⁾ (in this sense) "*genius*, spirit, a person's own spiritual self or double"; and *kìkīrɩs*ᵋ⁾, protective

spirits (called "fairies" in local English.) Men have three *kìkīrıs*[ɛ/], 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 *kìkīrıs*[ɛ/] in the bush which are hostile and try to lead travellers astray. The term *sīɩg*[a] "life force", used to render "spirit" in Christian materials, is in traditional belief intimately associated with the individual's tutelary *kìkīrıs*[ɛ/].

The key term *wīn*[nɛ/] has yet further senses, overlapping with the European concepts of fate or destiny: *wīn-tɔ̌ɔ̀g*[ɔ], literally "bitterness of *wīn*[nɛ/]" is "misfortune." Most people have a particular *sīgɩr*[ɛ/] "guardian spirit" which is often the *wīn*[nɛ/] of an ancestor; the word *būgʋr*[ɛ] may also mean "a *wīn*[nɛ/] inherited from one's mother's family." Many Kusaasi personal names refer to an individual's *sīgɩr*[ɛ/] 35.2.

Sɔ̌ɔ̌b[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 35.5.) 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
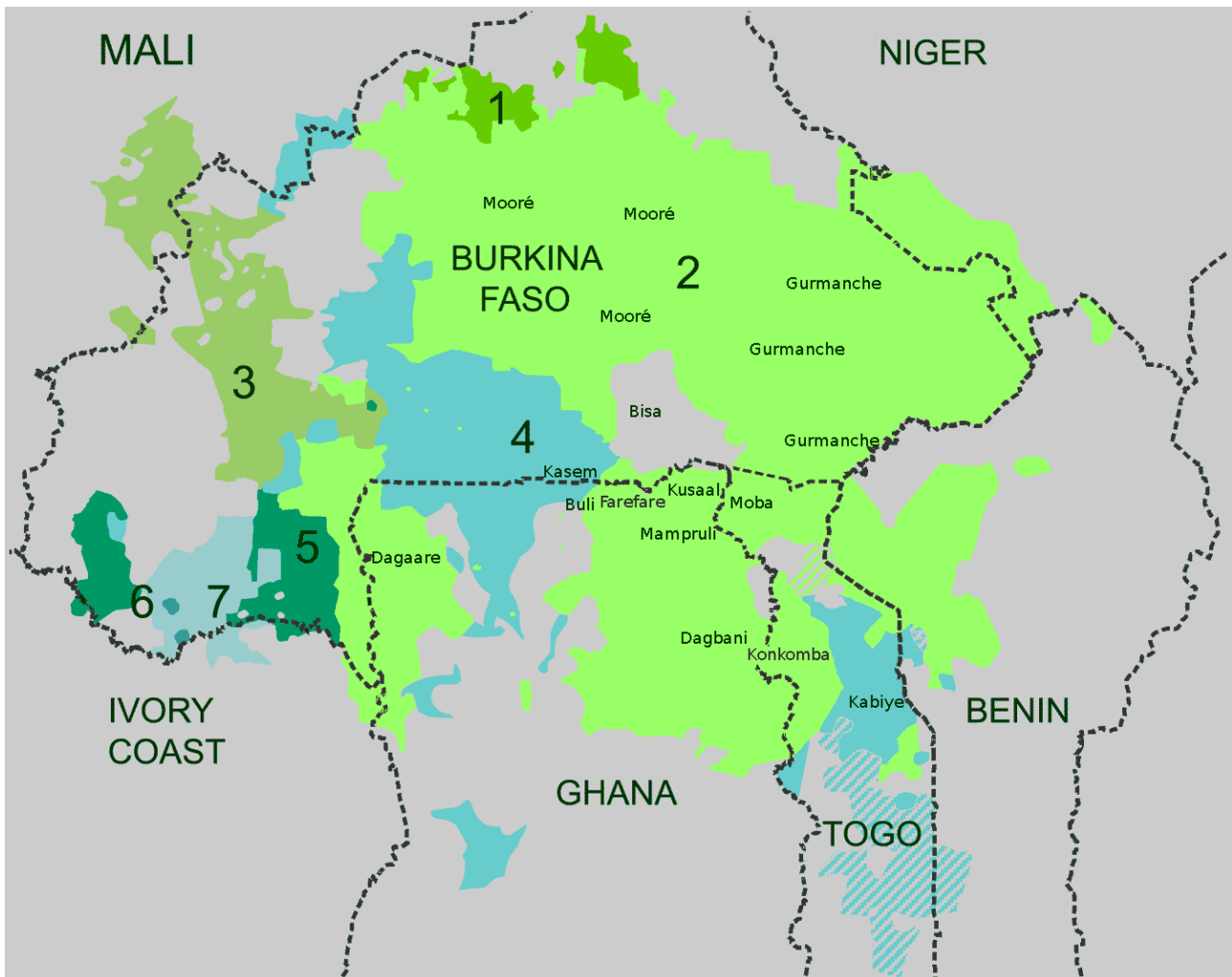
| 1 Koromfé | 2 Oti–Volta languages | 3 Bwamu | 4 Gurunsi |
| 5 Kirma–Lobi | 6 Dogoso–Khe | 7 Doghose–Gan | |

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.
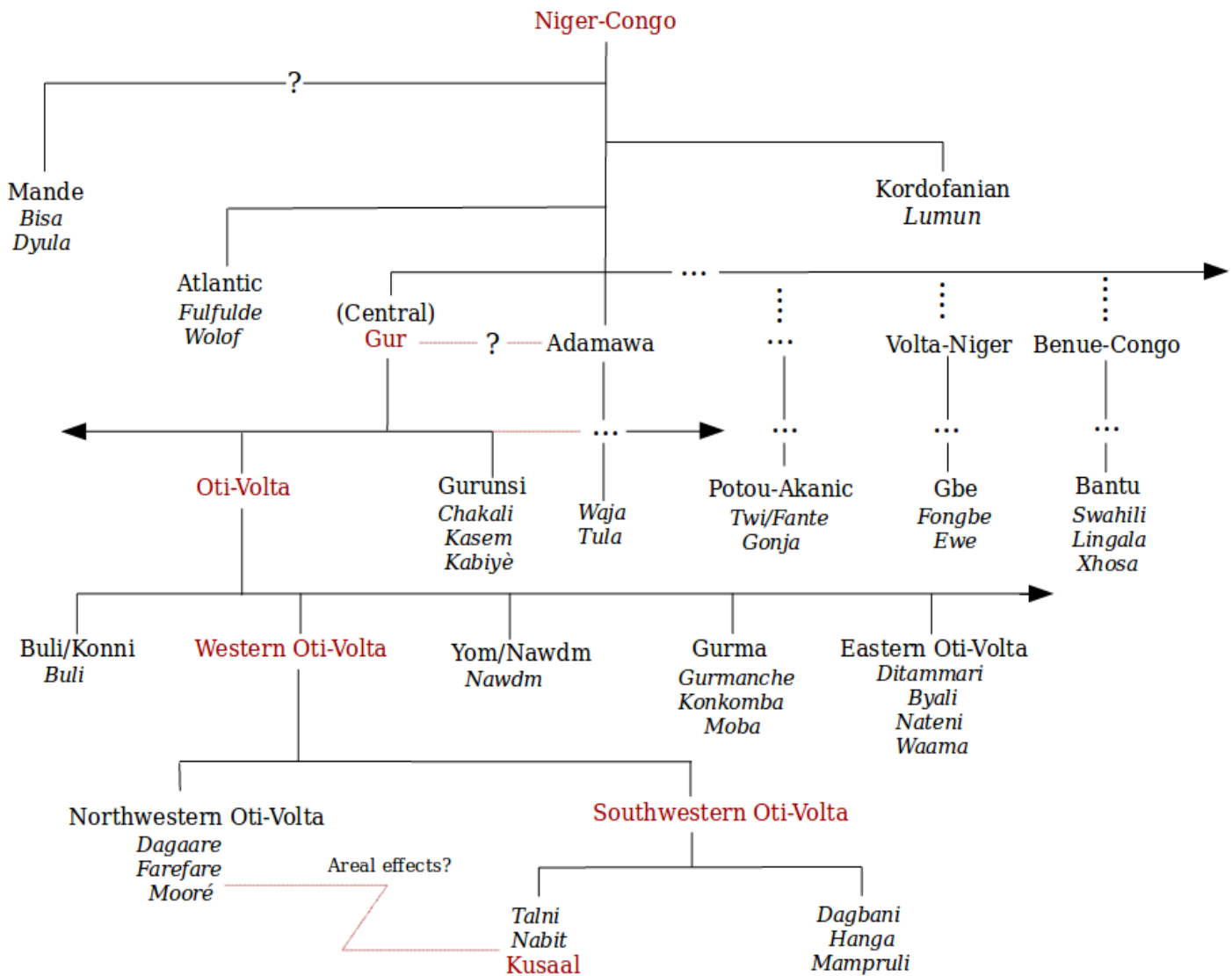
This chart shows approximate relationships between some of the Niger-Congo languages mentioned in this account, omitting all but a few branches and individual languages. Precise subclassifications are often uncertain. For example, the Mande languages are the most divergent group, and may well not truly 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 *bīig*ᵃ "child", *dì*⁺ "eat", *nū*⁺ "drink", *kpì*⁺ "die", *tìig*ᵃ "tree", *àtáñ*'⁺ "three", *tòbʋr*ᵋ "ear", corresponding respectively to e.g. Fongbe *ví, dù, nù, kú, átín, àtɔ̀n, tó* (Lefebvre 2002.) Guthrie's Proto-Bantu reconstructions parallel all of these except "child": *-dí-* "eat", *-nú-* "drink", *kú-* "die", *-tí* "tree", *-tátò* "three", *-tʋ́* "ear"; his Proto-Bantu *-tʋ́m-* "send" corresponds to Kusaal *tʋ̀m*ᵐ. The Potou-Akanic language group, which includes Twi/Fante and Gonja, here shows a regular sound correspondence *t ~ s*: Twi *ɛsã* "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 *nīdɪb*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*ᵋ|*a*⁺ seen in Kusaal *tòbʋr*ᵋ "ear", *tòba*⁺ "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 Phillippson 2003.) Lingala has the cognate of Kusaal *tòbʋr*ᵋ 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 *tìig*ᵃ pl *tìis*ᵋ, 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 **-bʋ*: Buli *tìib*, 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'ɵm*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*ᵉ of language names like *Kūsáàl*ᵉ 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.

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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-bìīk id*.) Many
lexical items *are* specifically Western Oti-Volta, such as that exemplified by Kusaal
kù'əm[m] "water"; 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.

A **Northwestern** subgroup of Western 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.

Kusaal belongs to a **Southwestern** group which includes Nabit and Talni along
with Mampruli, Dagbani, Hanga, Kamara and some similar smaller languages.

One feature distinguishing these languages from the Northwestern group is
the presence of a specific verbal inflection *-ma* for positive imperatives. Various
isoglosses cut across the Northwestern/Southwestern division, but most 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 contrastive vowel glottalisation in Kusaal, Nabit, Talni and Farefare only 4.2.2, and
the preservation of the contrast between non-initial /r/ and /d/ in Mooré, Agolle
Kusaal (but not Toende), Talni and Nabit. The form of the singular pronoun "you" also
cuts across the division, Kusaal going with the Northwestern languages:

Dagbani	*a*	Mampruli	*i*
Nabit	*i*	Talni	*i*
Kusaal	*fʋ̀*	Mooré	*fò*
Farefare	*fʋ*	Dagaare	*fʋ*

Judging by Buli *fi* the Kusaal and Northwestern forms seem conservative;
Nawdm too has sg *bé* pl *né*. However, Gurmanche has 2nd singular *à*, plural *ì*,
Konkomba has singular *i*, plural *nɪ*, and Moba has singular *ā*, plural *ī* for the non-
contrastive pronouns but *fī*, *yīm* for contrastive. (In these plural forms, the *y-*/*ø* and
the *n-* both derive from *n-* 8.2.1.2.) The Moba pronouns suggest that other languages
may have independently levelled and remodelled an original system with distinct
contrastive and non-contrastive forms.

Many other points of likeness between Kusaal, Nabit and Talni and the Northwestern group are probably due to extensive contact; there is evidence for this particularly with Farefare and Nabit and with Mooré and Kusaal.

A subdivision of Southwestern Oti-Volta itself seems justifiable. Mampruli, Dagbani and Hanga share a considerable simplification of the inherited vowel system, with loss of glottalisation, contrastive nasalisation and the high vowel distinctions *i/ɪ u/ʊ*, along with a lowering of original short *e* in closed syllables to *a*, resulting in the development of a series of contrastively palatalised velars. On the other hand, Nabit and Talni are probably the closest relatives of Kusaal. Material on Nabit and Talni is collected in the dictionaries on Tony Naden's website (see sources); the Nabit data show a particularly 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. She mentions Talni in passing, and 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 there are example sentences in the dictionaries on Tony Naden's website which suggest that Nabit and Talni may retain the final vowel at the end of negated clauses and of questions, just as with Kusaal Apocope 2.2:

Nabit	*La bi'imɛ.*	"It is ripe"
Toende	*La bɪˈɪ me.*	
Agolle	*Lì bìˈig nɛ̄.*	
	3INAN ripen **FOC**	

Nabit	*La na bu biigɛ.*	"It is not yet ripe."
Toende	*La nan bʊ bɪˈɪge.*	
Agolle	*Lì nàm pū bíˈigɛ̄ ⁺ø.*	
	3INAN still **NEG.IND** ripen **NEG**.	

Talni	*Bunpɔk dɔɣam pu bɔkəra, buraa dɔɣam m bɔkət.*
	"A woman's kindred is not divided, a man's kindred is divided."
Toende	*Bʊpɔk dɔgɪm bʊ bɔkɪra, bʊraa dɔgɪm bɔkɪt.*
Agolle	[*Pʊ̱'ā*] *dʊ́ˈàm pū bʊ̱ákìdā ⁺ø,* [*dāʊ̱*] *dʊ́ˈamì̱̱ ø bʊ̱ákìd.*
	Woman:**SG** kindred **NEG.IND** split:**DIPF** **NEG**, man:**SG** kindred **SER** split:**DIPF**.

The Toende forms are from Niggli's dictionary, with the inflected forms *bɔkɪra* and *bɪˈɪge* 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 *nɔ̄kᵋ/* "pick up" (Toende *nɔ̀k*) has a cognate in Nabit *nok* but not, as far as I have been able to discover, in any other Western Oti-Volta language. However, as with the loss of vowel distinctions in Mampruli-Dagbani-Hanga, the family tree model may misrepresent a historical reality where similarities may often be due to intensive contact between distinct languages in a milieu in which many people are multilingual.

 All the Western Oti-Volta languages are in any case closely related (as is evident to the speakers themselves), to roughly the same degree as the various Romance languages. Claims of mutual comprehension between the languages are frequently overstated or outright wrong, however; misunderstanding probably arises from underappreciation of the prevalence of multilingualism. A Kusaal speaker cannot, for example, follow a conversation in Mampruli unless he or she has learnt the language, close relation to Kusaal though it is. (I had abundant opportunity to observe degrees of mutual intelligibility in our highly polyglot outpatient clinics.)

Other groups within the broader Oti-Volta family are less close, but can still be seen to be related 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 (including 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:

Kusaal		Gurmanche	Buli
*sāan*ᵃ/	"stranger"	*càanō*	*nícháanoā* (*ní-* "person")
*wáaf*ᴼ	"snake"	*wà*	*wáab*
*nīf*ᴼ/	"eye"	*nùnbū*	*núm*

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

*mɔ̄ɔg*ᴼ	"grass"	*múagū*	*mūub* ("blade of grass")
*pu̩'ā*ᵃ	"woman"	*púa*	*nípōk* (*ní-* "person")
*tìɩg*ᵃ	"tree"	*tībū*	*tìib*
*dɔ̀ɔg*ᴼ	"room"	*dīelī*	*dòk*
(*dèegò*	Farefare *id*)		

Exceptions occur; tonal mismatches are bolded in

*sā'ab*ᵓ	"TZ"	**sāābū**	*sāāb*
*bīig*ᵃ	"child"	*bígā*	**bíik**
*tòbʊr*ᵋ	"ear"	*tūbīlī*	**tūrī**
ňwāaŋᵃ	"monkey"	*ŋmāāmō*	*wàaung*

Evidence from outside Oti-Volta suggests that it is languages with H tone corresponding to Pattern H (like Buli, Nawdm, and Western Oti-Volta) which have innovated: cf Chakali (Gurunsi) *tʃùòmó* "hare" = Kusaal *sú'ɵŋ*ᵃ (Pattern H), *váà* "dog" = Kusaal *bāa*⁼ (Pattern O); Proto-Bantu *-nùà* "mouth" = Kusaal *nɔɔr*ᵋ/ (Pattern H), *-tʊ́* "ear" = Kusaal *tòbʊr*ᵋ (Pattern L). If other innovations could be shown to correlate with this tonal inversion, it might form the basis of subgrouping within Oti-Volta, but a single phonological change seems insufficient. Moreover, it is not clear how the threefold tone pattern distinctions characteristic of Oti-Volta arose from a presumed Niger-Congo binary H/L opposition (for speculations see 7.1.)

Like Gurma, the Eastern Oti-Volta languages are distinctly different from Western Oti-Volta in both morphology and lexicon. Sambiéni 2005 provides considerable detail on the language group, which evidently shows much greater internal diversity than Western Oti-Volta. His work assumes that Eastern Oti-Volta is a valid node and attempts to reconstruct a protolanguage on that basis; it takes as given the validity of Manessy's subgrouping, which is apparently based on the shared initial-consonant developments *g → k, *gb → kp and *ɟ → y along with *v → f (also seen in Gurma.) The Eastern Oti-Volta languages in fact lack *v gb ɟ* altogether, while *g* occurs only word-internally as an allophone of /k/; this might suggest an areal development. Manessy has *gb → kw for the neighbouring language Bulba/Nõõtre, 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. Apart from this, all four languages have noun class systems which 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 seems to show mid tones for the most part where Western Oti-Volta has Pattern H; in verb flexion it opposes a perfective ending *-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 *wùm*^m, Buli *wom*) as against Byali *cèsì* or *yō*, Ditammari *kèè* or *yō*, Nateni *yēkà*, Gurmanche *céngì* "*écouter*"; Waama *cáárō* "*forgeron*" (= Kusaal *sāe̯ň*^+, Buli *chòa-bíik* [*chùōk* "forge"]), versus Byali *má-máárāū*, Ditammari *ōmáátà*, Nateni *málō*, Gurmanche *mááno*; Waama *yété* pl *yéyā* "*maison*" (= Kusaal *yīr*^ɛ/, Buli *yérí*), versus Byali *tápúú*, Ditammari *tācĩɛ̃tà*, Nateni *hɔ̃ɔ̃tā*. Waama also shares the change *ʎ → *y* with Western Oti-Volta and Buli over against Gurma and Nawdm: Waam *yɛ̌ní* "*deux*" (= Kusaal [*à*]*yí*^+, Buli [*ngà*]*yè*), versus Byali *dyā*, Ditammari *dīání*, Nateni *dɛ́ń*, 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 Kabiyè. 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" 35.3. 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 18.1 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 Fulɓe in the Kusaasi area, chiefly engaged in cattle-raising. Traditional cataract surgery ("couching") is a Fulɓe 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 *náafᵓ* (← *nāágfū*) plural *nīigí⁺*, 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 *níígā*.)

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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 [k͡p] [ɡ͡b].

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

The vowel symbols *a ɛ ɔ i u* have IPA values, while *ɪ ʋ* represent [ɪ] [ʋ] respectively. The allophony [ɪ]~[i] and [ʋ]~[u] seen in non-root syllables 4.3 is ignored, only *ɪ ʋ* being used. The symbols *e o* always represent [ɪ] [ʋ]; they are used instead of *ɪ ʋ* only as non-initial elements of diphthongs 4.2.3 and for the 3sg animate pronoun *o* [ʋ] along with the [ʋ] mora which precedes it in Liaison, which is written ·*o* 2.3.2.

	dɪ̈e	"receive"	[di̠ɪ]
	pāe	"reach"	[pʰaɪ]
	bɛ̄og	"tomorrow"	[bɛʋg]
	kpɪ̈oŋ	"strong"	[k͡pi̠ʋ̠ŋ]
but	*dāʋg*	"male"	[daʋg]
	ò bīig	"her child"	[ʋbi:g]
	zú·o	"steal him"	[zuʋ]
	dà'·o	"bought for him"	[da̠ʋ̠]

e̠ i̠ both represent [ɪ̠]; *i̠* is used before vowel symbols and after *u*. The symbol *u̠* is used for [ʋ̠].

gbàu̠ŋ	"book"	[g͡bau̠ŋ]
sɔ̄e̠ň	"witch"	[sɔ̃ɪ̠]
mùi̠	"rice"	[mũi̠]

Long vowels are written by doubling the vowel symbol.

bāa	"dog"	[ba:]

Glottalisation of vowels and diphthongs is marked by the symbol ' following the first/only vowel symbol (including *u̠*) *other* than *i̠*:

dà'	"buy"	[da̰]
dà'a	"market"	[da̰:]
kù'əm	"water"	[kʰu̯ə̰m]
pṵ'ā	"woman"	[pʰʊ̯a̰]
d̰ā'	"get dirty"	[dɪ̯a̰]

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

tɛ̄ɛňs	"lands"	[tʰɛ̃:s]
áňsìb	"mother's brother"	[ã́sɪb]
gɛ̄ň	"get tired"	[gɛ̃]
gɛ̄ň'	"get angry"	[gɛ̰̃]
gɛ̄ň'ɛd	*id* (dipf)	[gɛ̰̃:d]
āň·o	"be him/her"	[ãɞ̃]

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

ňwām	"calabash"	[w̃ãm]

The sequences [i̯a] [u̯a] [iə] [uɵ], with their nasalised and glottalised counterparts, arise from **Agolle Vowel Breaking**. *i̯a u̯a iə uɵ* are digraphs for *phonemic* monophthongs, though realised *phonetically* as diphthongs 4.1.1.

pìəlɪg	"white"	[pʰiəlɪg]
bū'əs	"ask"	[bu̯ə̰s]
t̰àk	"change"	[tʰɪ̯ak]
pṵāk	"female"	[pʰʊ̯ak]
kp̰à'	"shape wood"	[k͡pɪ̯a̰]
k̰ià	"cut"	[kʰɪ̯a]

Contrast the *phonemic* diphthongs in e.g.

kpì'a	"neighbour"	[k͡pi̯a̰]
sīa	"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 *ɛ ɔ*, *i* for both *i* and *ɩ*, *u* for both *u* and *ʋ* ; *e o* are sometimes also used unsystematically for *ɩ ʋ* as root vowels. The 2016 Bible uses the same basic conventions as this grammar except that it does not distinguish [i]~[ɪ]: *tiig = tìɩg* "tree", *biig = bīig* "child."

Word-final short *-ɩ* after *m n* is usually written *ɛ* in KB: *pɛbanɛ* for *pɛ̄'-bánì* "sheep which ..." Mk 6:34; so in all cases with the relative pronouns *onɛ kanɛ linɛ banɛ* 31.2.2 and with *anɔ'ɔnɛ* "who?" before Liaison.

The root-vowel is consistently written as *e* in KB in the words *ye* "that" *teŋ* "land" *keŋ* "go" (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 *ɩ* [ɪ]: compare Toende *tīŋ* "land", Mampruli *tiŋŋa* "land" versus Toende *meŋ*, Mampruli *maŋŋa = mɛ̄ŋ* "self."

The demonstrative and pronoun forms *ɔ̄n/ɔ́n/ɔ̀n ɔ̀ŋā* are written *on oŋa*.

As in this grammar, *e o* are used non-initially in diphthongs for [ɪ] [ʋ].

The phonemic monophthongs *iə uɵ* are written respectively as *ie uo*:

pielig	*pìəlɩg*	"white"	[pʰiəlɪg]
bu'os	*bū'ɵs*	"ask"	[bu̯ɵ̯s]

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

di'e	*dī'e*	"receive"	[di̯ɪ]
zu o	*zú·o*	"steal him"	[zuʋ]

The 2016 orthography writes *-ue* [uɪ] as *-uoe* and *-ʋe* [ʋɪ] as *-ʋoe* (similarly when nasalised and/or glottalised): *duoe = dūe* "raise, rise", *sʋ'oe = sʋ̄'e* "own."

The diphthong *io* [iʋ] is written *io* in the 1976 NT but *ieu* later: thus *kpī'oŋ* "strong" [k͡pi̯ʋ̯ŋ] is *kpi'oŋ* in the 1976 NT, *kpi'euŋ* in the 1996 NT and KB.

Traditional orthography uses *e i u* for non-moraic *e̞ i̞ u̞* and thus does not mark length in diphthongs consistently, but this is largely predictable <u>4.2.3</u>, and the most important distinction is expressed by writing *aae* (or *aaɛ*) for *ae* versus *ae* for *ae̞*:

paae	*pāe*	"reach"	[pʰaɪ]

Word-medially, ambiguity remains only with *au̞ŋ ~ aʊŋ*

gbauŋ	*gbāu̞ŋ*	"skin"	[g͡baʊ̞ŋ]
mangauŋ	*màngáʊŋ*	"crab"	[maŋgaʊŋ]

KB uses both *au* and *aʊ*, spelling each individual word consistently, but not as marking any length distinction: thus *yaʊg* "grave" for *yàʊg*, but *na'araug* "ox" for *nā'-dáʊ̀g*; *dau* for *dāu̞* "man" but *taʊn* for *tāu̞ň* "sibling of opposite sex."

ia ua do not occur medially, but ambiguity with *i̞a u̞a* is possible word-finally:

kia	*ki̞à*	"cut"	[kʰɪa]
sia	*sīa*	"waist"	[sia]
kua	*ku̞ā*	"hoe"	[kʰʊa]
sabua	*sàbùa*	"lover"	[sabua]

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

kpi'a	*kpì'a*⁺	"neighbour"	[k͡pi̞a̞]
kpia'	*kpi̞à'*⁺	"shape wood"	[k͡pɪa̞]

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

po'a or *pu'a*	*pu̞'ā*	"woman"	[pʰʊ̞a̞]
po'ab or *pu'ab*	*pū'ab*	"women"	[pʰʊ̞a̞b]

NT/KB write *-ey-* in Long Forms <u>2.2</u> corresponding to Short Forms where final -*y* has become -*e̞*: *vʊeya* = *vūyá* Long Form of *vūe̞* "be alive." Older NT versions also write *būn-vúyà* "living things" as *bunvoeya*, but KB has the expected *bʊnvʊya*.

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

sa(n)rega	*sārɪgá*	"prison"	[sarɪga]

The 2016 orthography writes *bieya* for *bi̯ēyá* "elder same-sex siblings" etc, but *suoya* for *su̯ēyá* "roads", *zuoya* for *zu̯ēya* "hills" etc by analogy with the singulars. *suor sūɵr* and *zuor zūɵr*. Older sources write *sueya*, *zueya*.

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

tεεns	*tɛ̄εňs*	"lands"	[tʰɛ̃ːs]
gεn'	*gɛ̄ň'*	"get angry"	[gɛ̃]
gεn'ɛd	*gɛ̄ň'ɛd*	*id* (dipf)	[gɛ̃ːd]
nwam	*ňwām*	"calabash"	[w̃ãm]

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*:

dunduug	*dùndùug*	"cobra"	[dunduːg]

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*:

kεn (older *kenn*)	*kɛ̄ň*	"come"	(base)	[kʰɛ̃]
kεn (older *ken*)	*kɛ̄n*	"coming"	(gerund)	[kʰɛn]

Some NT/KB spellings represent **variant forms** different from those used by my informants; the words in question are probably loans from Toende Kusaal 18.1.

NT/KB	WK's forms	Toende Kusaal	
Wina'am	*Wínnà'am*	*Wínā'am*	"God"
faangid	*fāaňd*	*fãagıt*	"saviour"
faangir	*fáaňr*	*fãagıt*	"salvation"

Wínà'am fāaňgíd fāaňgír are used when transliterating Bible verses. *Fāaňgíd fāaňgír* have become independent words, used to avoid the homophony with *fāaňd* "robber" and *fáaňr* "robbery."

NT versions prior to 2016 write *aaruŋ* for *àňrʋŋ* "boat" (cf Toende *ãarʋ̀ŋ*), and *malek* for *màli̯āk* "angel" (Toende *màlɛ́k*); KB has the expected *anrʋŋ* and *maliak* throughout, corresponding to the consistent usage of all my informants and of the audio 1996 version.

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

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

O anɛ biig.   "He/she's a child."
Ò   à   nɛ̄   bīig.
3AN COP FOC child:**SG**.

Bipuŋ la pʋ kpii, o gbisidnɛ.
Bī-púŋ   lā   pū   kpíi [+]ø, *ò   gbìsɩd   nɛ̄.*
Child-girl:**SG ART NEG.IND** die **NEG**, **3AN** sleep:**DIPF FOC**.
"The girl is not dead, she is sleeping." (Mt 9:24)

Nɛ̄ "with" is written solid after *wɛ̄n*[na/] "resemble":

Ka o nindaa wenne nintaŋ ne.
Kà   ò   nīn-dáa   wɛ̄n   nɛ̄   nīntāŋ nɛ̄.
And **3AN** eye-face:**SG** resemble with sun:**SG** like.
"His face is like the sun." (Rev 10:1, 1996)

In KB *wɛ̄n nɛ̄* appears as *nwɛnɛ*: *Ka o nindaa nwɛnɛ winnig nɛ.*
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 nyaŋe liebi m nya'andol la.
*Ò   kʋ̀   ňyāŋɪ̯_ ø   líəbì_   m̀   ňyà'an-dɔ̀llā   * [+]ø.
3AN NEG.IRR prevail **SER** become **1SG** after-follower:**SG NEG**.
"He cannot become my disciple." (Lk 14:26, 1996; 2016 *nya'andɔlla*.)

Arezana nɛ dunia gaadʋg pʋ tɔi yaa
*Àrazánà nɛ̄   dūnɪya gáadʋ̀g   pū   tɔ̄yá   * [+]ø.
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*	*nɛ̄*	*bīig.*		"He/she's a child."
3AN	**COP**	**FOC**	child:**SG**.		

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

Ò	*à*	*nɛ̄*	*bíigàa*	*+ø?*	"Is he/she a child?"
3AN	**COP**	**FOC**	child:**SG**	**PQ**?	

So too at the end of vocative phrases:

M̀	*bīiga*	*+ø!*		"My child!"
1SG	child:**SG**	**VOC**!		

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

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

Lì	*à*	*nɛ̄*	*gbīgɪm.*	"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 $^+\varnothing$, 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", *gbīgɩm*[nɛ] "lion", *kūk*[a] "chair", *dūk*[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

vīidɛ́   "owls"

usually appears with Apocope as the Short Form *vīid* with the same long vowel as *bīis* "children", shortened from *bīisɛ*, while the singular Long Form

vīugɔ́   "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

āañdɩga   "black plum tree"

has the default epenthetic vowel *ɩ* before the flexion, and appears as *āañdɩg* after Apocope, whereas

gàadʋgɔ   "passing" (gerund)

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

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:

M̀ pū̄ bɔ́ɔdā⁺ø.   "I don't want to."
1SG NEG.IND want   **NEG**.   Long Form *bɔ̀ɔdā* preceding Negative Clitic.

M̀ bɔ́ɔdī‿ bá.   "I love them."
1SG want   **3PL.OB**.   Modified Long Form *bɔ̀ɔdī* before Liaison.

M̀ pū̄ zábɛ̄ ⁺ø.   "I haven't fought."
1SG NEG.IND fight   **NEG**.   Long Form *zàbɛ̄* preceding Negative Clitic.

M̀ zábī‿ bá.   "I've fought them."
1SG fight   **3PL.OB**.   Modified Long Form *zàbī* before Liaison.

With interlinear glossing, Liaison is marked by ‿ , as above.

Apocope reduces several Liaison Words of the underlying form *CV* to a single consonant. Thus with *bɔ̀ɔd*[a] "wants, loves" and *f*[ɔ] "you (sg)":

M̀ pū̄ bɔ́ɔdī‿ fɔ́   ⁺ø.   "I don't love you."
1SG NEG.IND want   **2SG.OB NEG**.   Long Form *fɔ* of the pronoun "you (sg)"

M̀ bɔ́ɔdī‿ f.   "I love you."
1SG want   **2SG.OB**.   Short Form *f* of the pronoun "you (sg)"

The locative postposition *n*[ɛ] is another such word. It is conventionally written solid with the preceding host word, but hyphenated to it in this grammar:

Lì kā' kū̄ka   ⁺ø.   "It's not a chair."
3INAN NEG.BE chair**:SG NEG**.

Lì kā' kū̄kɪ-nɛ́   ⁺ø.   "It's not in a chair."
3INAN NEG.BE chair**:SG-LOC NEG**.

kū̄kɪ-n   "in a chair"
chair**:SG-LOC**

Lì kā' dū̄kɔ́ ⁺ø.   "It's not a pot."
3INAN NEG.BE pot**:SG NEG**.

Lì kā' dū̄kí-nɛ̄   ⁺ø.   "It's not in a pot."
3INAN NEG.BE pot**:SG-LOC NEG**.

dūkí-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)"

M̀ pū   bɔ́ɔdī‿ fɔ́   ⁺ø.   "I don't love you."
1SG NEG.IND want   **2SG.OB NEG**.

M̀ bɔ́ɔdī‿ f.   "I love you"
1SG want   **2SG.OB**.

with the forms with ᵒ "him/her":

M̀ pū   bɔ́ɔd·ó-o   ⁺ø.   "I don't love him/her."   [m̩pʰʊbɔːdʊː]
1SG NEG.IND want-**3AN.OB NEG**.   Long Form *o* of the pronoun "him/her"

M̀ bɔ́ɔd·ō‿ ø.   "I love him/her."   [m̩bɔːdʊ]
1SG want   **3AN.OB**.   Short Form *ø* 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:

Gɔ̀sɪm!   "Look!"
Look:**IMP**!

Gɔ̀sɪmī‿ ø!   "Look ye!" by Apocope from *gɔ̀sɪmī-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.

m̀ zūgʊ́‿ ø zàbɪd lā zúg
1SG head:**SG COMP** fight:**DIPF ART** upon
"because my head hurts" (Complementiser *ǹ*)

M̀ zūgʊ‿ ø zábìd.   "My head hurts." (Serialiser *n*)
1SG head:**SG SER** 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 *ɛ ɔ* vowels, still preserved as phonetic monophthongs in the Toende Dialect. This has produced four monophthongal phonemes *i̯a u̯a i̯ə u̯ɵ* 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** 22.6.1.1 affecting Verbal Predicators in main clauses, and pervasive **tone sandhi** phenomena, one only affecting nominals and

adverbs in certain Noun Phrase or postpositional constructions 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 5.3.1.

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.

dīʼəsídìb	"receivers"
bāŋɩdɪb	"wise men"
gbīgɩmnɛ	"lion" (longer form, as above)
áňsìb	"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 *pāmm* "a lot") where there has been loss of syllabicity in an originally syllabic final *m*. (On *kp gb ň* ' see the note on orthography above.)

Many nominal words have a **nominal prefix** beginning a stem which in other respects has just the same structure as an unprefixed stem. Nominal prefixes take the forms *CV-* or *CVn-*, less often *CVlɩn-* or *CVsɩn-*. Nominals with prefixes can thus contain *-nC-* clusters at the junction between the prefix and the rest of the stem:

pīpīrɩg	"desert"
dìndɛ̄og	"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/ɩ/ʋ*; 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, *ɩ ʋ* 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:

Gbīgım lā dāa kʋ̄ʋd   bún   lā.
Lion:**SG ART TNS** kill:**DIPF** donkey:**SG ART**.
"The lion (*gbīgım*ⁿᵋ) was killing (*kʋ̄ʋd*ᵃ/) the donkey (*bʋ̀ŋ*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. Nominal stem 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 16.2.1 17.

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:

bīig	"child"	*bīis*	"children"
bʋ̄ʋg	"goat"	*bʋ̄ʋs*	"goats"
sàbùa	"lover"	*sàbùɵs*	"lovers"
nūa	"hen"	*nɔ̄ɔs*	"hens"
kʋ̄k	"chair"	*kʋ̄gʋs*	"chairs"
zàk	"compound"	*zà'as*	"compounds"
dà'a	"market"	*dà'as*	"markets"
bʋ̀ŋ	"donkey"	*bʋ̀mıs*	"donkeys"
tɛ̄ŋ	"land"	*tɛ̄ɛňs*	"lands"

Nominal 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**:

*bʋ̄ʋg*ᵃ "goat"	+ *pìəlıg*ᵃ "white"	→ *bʋ̀-pìəlıg*ᵃ		"white goat"
*bʋ̄ʋg*ᵃ "goat"	+ *sī'a*⁺ "another"	→ *bʋ̀-sī'a*⁺		"another goat"
*kʋ̄k*ᵃ "chair"	+ *pìəlıg*ᵃ "white"	→ *kʋ̀g-pìəlıg*ᵃ		"white chair"
*kʋ̄k*ᵃ "chair"	+ *kàŋā*⁺/ "this"	→ *kʋ̀g-kàŋā*⁺/		"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 nominal 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:

kū̄[+]	perfective	"kill" ([+] means that the vowel is long in the LF)
kū̄ʋd[a/]	imperfective	
ňyɛ̄[+]	perfective	"see"
ňyɛ̄t[a/]	imperfective	
vū̄l[ɛ]	perfective	"swallow"
vū̄n[na/]	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:

Ò	*dìgɪ*	*nɛ̄.*	"She's lying down."
3AN	be.lying.down	**FOC**.	

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

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

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

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

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

Ò   kā'   bīiga   ⁺ø.   "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:

*kūʋb*ɔ/   "killing"
*kūʋd*ᵃ/   "killer"
*kūʋdíŋ*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:

 *gbìgɩm-kūʋd*ᵃ/   "lion-killer"

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

M̀   tís   du̧'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**, *nɛ̄* "with" and *wūʋ* "like" (*nɛ̄* 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:

m̀ bīig   "my child"
dāu̧ lā bîig   "the man's child"

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

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

The Liaison Word *n*ᵉ mentioned above is a very general locative postposition. It is hyphenated to the preceding word, and in its Short Form is reduced to *n*:

mʊ̀'arī-n   "in a lake" (*mʊ̀'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 28.2.3 for a marginal exception for some speakers]:

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

Gbīgɪm lā   dāa pʊ̄   kʊ̄ búŋ   láa ⁺ø.
Lion:**SG ART TNS   NEG.IND** kill donkey:**SG ART NEG**.
"The lion didn't kill the donkey."

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

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

M̀   dāa ňyɛ̄ gbīgɪm lā.   "I saw the lion."
1SG TNS see lion:**SG   ART**.

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

The **focus** particle *nɛ̄* 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**.

Nīdɩb   kpîid nɛ̄.   "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 *àe̯ñ* "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 to form **serial constructions**. Kusaal uses the linker particle *n* **SER** to
introduce an additional verb phrase; in this example *tìs* "give" is used, as very often,
simply as means of adding an indirect object:

M̀ dāa kúès bừŋυ‿   ø   tís du̯'átà.
1SG TNS sell   donkey:**SG SER** 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 22.6 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 du̯'átà.   "He's fought the doctor."
3AN fight doctor:**SG**.

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

with the verbs *zàb gɔ̀s* showing identical tones because of the overlay; contrast the
different tones on the verbs in

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

Kà   ò   gɔ̄s   du̯'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   gɔ̄s   du̱'átāa ⁺ø!*
> **NEG.IMP** look.at doctor:**SG NEG**!
> "Don't look at the doctor!" (Overlay absent with the negative)

but   *Gɔ̀sɪm   du̱'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' bɔ̀ɔd, m̀ ná tīsɪ‿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 complementiser particle *ǹ* (realised often as segmental *ø*) after the subject:

> *gbīgɪm lá‿ø   kū būŋ*   "the lion having killed the donkey"
> lion:**SG ART COMP** kill donkey:**SG ART**

Relative clauses show a number of interesting features. They are internally-headed; one type has the incorporated antecedent non-initially, e.g.

> [*Paul ǹ   sɔ̄b gbáu̱ŋ-sīʼa   n tís Efesus dím   lā*]‿ø ňwá.
> Paul **COMP** write letter-**INDF.INAN SER** give Ephesus one.**PL ART SER** this.
> "This is [the letter Paul wrote to the Ephesians]." (NT heading)

where *gbàu̱ŋ-sīʼa* is *gbàu̱ŋ* "book" compounded with the post-determining pronoun *sīʼa* which marks it as antecedent, and the entire sequence *Paul ... lā* is the relative clause. The "complementiser" is not the pronoun but the particle *ǹ* (tonally distinct from Serialiser *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 complementiser has fused with a preceding demonstrative to form a relative pronoun:

dàu̯-kànɪ   pʊ̠'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   nē̄ gbīgɪm lá kà   m̀ ňyɛ̄t.
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 a 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-Pū̄-zɔ́t-yɛ̄l   *dá à nɛ́ ò sàam   bîig   mà'aa.*
PERS-NEG.IND-fear:**DIPF**-thing:**SG** **TNS COP FOC 3AN** father:**SG** child:**SG** only.
Kà dāar yīnní kà bīig   lā nɛ́ ò sàam   zíň'i‿ø sɔ̄ňsɪd.
And day:**SG** one   and child:**SG ART** with **3AN** father:**SG** sit   **SER** converse:**DIPF**.
Kà bīig   lā tí   yɛ̀l ò sàam   yɛ̄ ...
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 *yɛ̄* "that." There are special **logophoric** uses of the contrastive free personal pronouns within Content Clauses.

*Ò   yèl   yɛ̄   **ɔ̄n**   ňyɛ́ gbīgɩm.*
3AN say that **3AN.CNTR** see lion:**SG**.
"He said that he (himself) saw a lion."

*Ò   yèl   yɛ́   **ò**   ňyɛ̀ gbīgɩm.*
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.*
Dāu̯   dá bɛ̀ ̠ ø   mɔ̄rí ̠ ò   pu̯'à-yīmmír, kà pu̯'ā   lā   yɛ́
Man:**SG TNS EXIST SER** have   **3AN** wife-single:**SG** and wife:**SG ART** say
ɔ̄n   pū   lɛ́m bɔ̀ɔd yɛ́ ò   sīd   lā dí pu̯'ā   yá'asɛ̄ ⁺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:

Gbīgɩmı ̠ø   kūʋd   búŋ   lā.
Lion:**SG**   **SER** kill:**DIPF** donkey:**SG ART**.
"A *lion* is killing the donkey."

M̀   zūgʋ ̠ø   zábìd.   "My head is hurting."
1SG head   **SER** fight:**DIPF**.   (Reply to "Where is the pain?")

Gbīgím kà m̀ dāa ňyɛ̄.   "It was a lion that I saw."
Lion:**SG** and **1SG TNS** see.

These patterns derive by ellipsis of *Lì à nɛ̄* "It is ..." before a serial-verb
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 *ànɔ́'ɔ̀n*
"who?" as subject even though it remains *in situ* before the verb.

Fʋ̀ bɔ́ɔ̀d bɔ́   ⁺ø?   "What do you want?"
2SG want what **CQ**?

Bɔ́   kà fʋ̀ ňyɛ̄tá ⁺ø?   "What can you see?"
What and **2SG** see:**DIPF CQ**?

Gbīgιma‿ álá   kà fʊ̀ ňyɛ̄tá   ⁺ø?
Lion:**PL**   **NUM**:how.many and **2SG** see:**IPVF CQ**?
"How many lions can you see?"

Ànɔ́'ɔnì‿ ø   kū búŋ   lā ⁺ø?
Who   **SER** kill donkey:**SG ART CQ**?
"Who has killed the donkey?"

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

Mām   bɛ́ nɛ̄ mɔ̄ɔgʊ-n.   "I'm in the bush." BNY p8
1SG.CNTR EXIST FOC grass:**SG-LOC**.

or   *Mɔ̄ɔgʊ́-n   kà mām   bɛ́.*   "I'm in the bush." BNY p10
Grass:**SG-LOC** and **1SG.CNTR EXIST**.

not   **Mɔ̄ɔgʊ́-n mām bɛ́.*   "I'm in the bush."

The particle *nɛ̄* seen in several of the above examples interacts with verb Aspect, but may also focus either VP constituents or the entire VP 33.1.2. 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 22.2.

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**. There are closed classes of **Quantifiers** and **Adverbs**, along with **Pronouns**, **Proquantifiers** and **Proadverbs**. 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 19.6. **Ideophones** are treated in 19.8.1.3.

All other words are **Particles**. Most particles are bound words; exceptions include *ɛ̄ɛň* "yes" and *áyìι* "no." Particles include the article *lā*$^{+/}$ and the deictic *ňwà*$^+$ "this", the locative marker *nī*$^{+/}$~*n*^{ɛ}, the prepositions *nɛ̄* "with" and *wōʋ* "like" 21, particle-verbs and markers of tense, aspect and mood in Verbal Predicators 22, the focus particle *nɛ̄*$^{+/}$, the clause linkers *kà* and *yɛ̄*, the complementiser *ǹ*, the serial-VP linker *n*, VP-final *nā*$^{+/}$ "hither" and *sà*$^+$ "hence", and a number of clause-level words such as Conjunctions 27.1.3 and Emphatics 33.6.

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 *bīig* 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   nɛ̄ bīig.*   "She's a child."
> **3AN COP FOC** child:**SG**.

> *Ò   dāa ňyɛ̄ bīig.*   "She saw a child."
> **3AN TNS** see child:**SG**.

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

The Long Form (here, *bīiga*) 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' bīiga   ⁺ø.   "He/she is not a child."
3AN NEG.BE child:**SG NEG**.

Ò dāa pū   ňyɛ̄ bīiga ⁺ø.
3AN TNS NEG.IND see child:**SG NEG**.
"He/she did not see a child."

Ànɔ́'ɔnì‿ø dāa ňyɛ̄ bíigà ⁺ø?
Who   **SER TNS** see child:**SG CQ**?
"Who saw a child?"

Ṁ̀ bīiga   ⁺ø!   "My child!"
1SG child:**SG VOC**!

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 30. Direct commands sometimes end in a LF 28.2.3.

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 ŋŋ* become *k t p ŋ* but are *written* single in any case 1.3)
  Word-final *y* becomes *e̥* after short back vowels and zero elsewhere

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

ia   → i̥a   ua   → u̥a   i̥a'a → i̥a'   u̥'aa → u̥'a
ae   → ae̥   aʋ   → au̥   ui   → ui̥
Vaa → Va   Vee → Ve   Vʋʋ → Vʋ

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:

Lì   à   nɛ̄ kʋ̄k.   "It's a chair."
3INAN COP FOC chair:**SG**.

Kʋ̄k   lā bɔ́dìg yā.   "The chair has got lost."
Chair:**SG ART** get.lost **PFV**.

Lì   kā'   kʋ̄ka.   ⁺ø.   "It's not a chair."
3INAN NEG.BE chair:**SG NEG**.

Lì   à   nɛ̄ kʋ́kàa   ⁺ø?   "Is it a chair?"
3INAN COP FOC chair:**SG PQ**?

Ànɔ́'ɔnì‿ø   ňyɛ̄ kʋ́kà   ⁺ø?   "Who saw a chair?"
Who   **SER** see chair:**SG CQ**?

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

Lì à nɛ̄ dʋ̄k.   "It's a cooking pot."
Dʋ̄k lā bɔ́dìg yā.   "The pot's got lost."
Lì kā' dʋ̄kɔ́.   "It's not a pot."   /kk/
Lì à nɛ̄ dʋ̄kɔ́ɔ?   "Is it a pot?"
Ànɔ́'ɔnì ňyɛ̄ dʋ̄kɔ́?   "Who saw a pot?"

Lì à nɛ̄ gbīgɪm.   "It's a lion."
Lì kā' gbīgɪmnɛ.   "It's not a lion."
Lì à nɛ̄ gbígìmnɛɛ?   "Is it a lion?"
Ànɔ́'ɔnì ňyɛ̄ gbígìmnɛ?   "Who saw a lion?"

Lì à nɛ̄ yáarìm.   "It's salt."
Lì kā' yáarīmm.   "It's not salt."
Lì à nɛ̄ yáarìmm?   "Is it salt?"
Ànɔ́'ɔnì ňyɛ̄ yáarìmm?   "Who saw salt?"

Bà à nē̄ gbīgıma.	"They're lions."
Bà kā' gbīgımaa.	"They're not lions."
Bà à nē̄ gbígımàa?	"Are they lions?"
Ànɔ́'ɔnì ňyē̄ gbígımà?	"Who saw lions?"

Ò à nē̄ dāʋ̥.	"He's a man."
Ò kā' dāʋ.	"He's not a man."
Ò à nē̄ dáʋ̀ʋ?	"Is he a man?"
Ànɔ́'ɔnì ňyē̄ dáʋ?	"Who saw a man?"

Ò à nē̄ sāē̥ň.	"He's a blacksmith."
Ò kā' sāeň.	"He's not a blacksmith."
Ò à nē̄ sáèeň?	"Is he a blacksmith?"
Ànɔ́'ɔnì ňyē̄ sáeň?	"Who saw a blacksmith?"

Lì à nē̄ múi̥.	"It's rice."
Lì kā' múī.	"It's not rice."
Lì à nē̄ múìi?	"Is it rice?"
Ànɔ́'ɔnì ňyē̄ múi?	"Who saw rice?"

With verbal forms:

Kà ò si̥ák.	"And he agreed."
And **3AN** agree.	

Ò pū̄ si̥ákē̄ ⁺ø.	"He didn't agree."
3AN NEG.IND agree **NEG**.	

Kà ò dīgı.	"And she's lying down."
And **3AN** be.lying.	

Ò pū̄ dīgıyá ⁺ø.	"She isn't lying down."
3AN NEG.IND be.lying **NEG**.	

Kà ò vū̄e̥.	"And she's alive."
Ò pū̄ vū̄yá.	"She's not alive."

Kà ò ku̥ā.	"And he farmed."
Ò pū̄ kūa.	"He hasn't farmed."

Kà ò kḭá.	"And she cut (it)."
Ò pū kía.	"She hasn't cut (it)."
Kà ò pāe.	"And he reached (it)."
Ò pū pāée.	"He hasn't reached (it)."

The derivational type of Long Form appears in many adverbs and quantifiers. Thus with the Adjective *bèdʋg* "big" and the Adverb *bèdʋgū* "a lot":

Lì   à   nɛ̄ būn-bɛ́dʋ̀g.   "It's a big thing."
3INAN COP FOC thing-big**:SG**.

Lì   kā' būn-bɛ́dʋgɔ̄ ⁺ø.   "It's not a big thing."
3INAN NEG.BE thing-big**:SG NEG**.

M̀   pʋ́'ʋ̀s yā bɛ́dʋgū.   "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 *ι ʋ* 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 *-ι -ʋ* as *-ɛ -ɔ*, **-mʋ *-mι* as *-mm -mm* and *-iə -uɵ* 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.

bīig[a]	"child"	*kūk*[a]	"chair"
dūk[ɔ/]	"pot"	*sḭàk*[ɛ]	"agree"
gbīgιm[nɛ]	"lion"	*yàarιm*[m]	"salt"
dīgι[ya/]	"be lying down"	*zì'e*[ya]	"be standing"

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

gbīgɩma$^+$	"lions"	SF *gbīgɩma*	LF *gbīgɩmaa*
mɔ̀lɩ$^+$	"gazelles"	SF *mɔ̀lɩ*	LF *mɔ̀līɩ*
gɔ̀ň$^+$	"hunt"	SF *gɔ̀ň*	LF *gɔ̄ɔň*
tìeň$^+$	"inform"	SF *tìeň*	LF *tìēeň*
ki̯à$^+$	"cut"	SF *ki̯à*	LF *kīa*
ku̯ā$^+$	"hoe"	SF *ku̯ā*	LF *kūa*
dāṷ$^+$	"man"	SF *dāṷ*	LF *dāʋ*
sāe̯ň$^+$	"blacksmith"	SF *sāe̯ň*	LF *sāeň*

(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} ^{ya}. Separate symbols are used for clarity.)

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

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

	kpi̯à'$^+$	"shape wood"	SF *kpi̯à'*	LF *kpī'a*
but	*di̯ā'*^{a}	"get dirty"	SF *di̯ā'*	LF *di̯ā'a*
	ku̯ā$^+$	"hoe"	SF *ku̯ā*	LF *kūa*
but	*pu̯'ā*^{a}	"woman"	SF *pu̯'ā*	LF *pu̯'āa*

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

vūe̯$^{a/}$	"be alive"	SF *vūe̯*	LF *vūyá*
tɔ̄e̯$^{a/}$	"be bitter"	SF *tɔ̄e̯*	LF *tɔ̄yá*

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 *pāmnɛ́* 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:

*fūug*ᵓ/	"shirt, clothes"	SF *fūug*	LF *fūugɔ́*
pāe⁺/	"reach"	SF *pāe*	LF *pāée*
nūa⁺/	"hen"	SF *nūa*	LF *nūáa*
yā⁺/	"houses"	SF *yā*	LF *yáa*
lā⁺/	article 19.3	SF *lā*	LF *láa*
bèdʋgū⁺/	"a lot"	SF *bèdʋgū*	LF *bèdʋgúʋ*
gāaň⁼/	"Nigerian ebony"	SF *gāaň*	LF *gáaň*
*dāam*ᵐ/	"millet beer"	SF *dāam*	LF *dáamm*
tāu̯ň⁺/	"opposite-sex sib"	SF *tāu̯ň*	LF *táʋň*
mɔ̀lɩ⁺	"gazelles"	SF *mɔ̀lɩ*	LF *mɔ̀līɩ*

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

	Lì kā' yáarīmm.	"It's not salt (*yàarɩm*ᵐ)."
	Lì ká' ò tīɩmm.	"It's not her medicine."
but	*Lì kā' tíɩmm.*	"It's not medicine (*tìɩm*ᵐ)."
	Lì ká' bà dā'a.	"It's not their market."
but	*Lì kā' dá'a.*	"It's not a market (*dà'a*⁼)."

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:

ňyɛ̄·ó⁻ᵒ	"see him/her"	SF *ňyɛ́·o*	LF *ňyɛ̄·ó-o*

Note that *kū·ó*⁼ "kill him/her" represents the identical SF and LF *kʋ́·o*.

Words like *náaf*ᵓ and *nú'ùg*ᵓ coincide tonally in the surface LF because of H Spreading 5.3.1; such words are written in Superscript Notation with the SF tonemes.

Lì	*kā'*	*nú'ugɔ̄*	⁺ø.		"It's not a hand."
3INAN	**NEG.BE**	hand:**SG**	**NEG**.		

Lì	*kā'*	*náafɔ̄*	⁺ø.		"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 5.3.1. 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 ɛ* 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 *-ɛ* 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 pʋ tʋmma*.)

The default LF ending corresponding to SFs ending in a consonant is *-ɛ*. Thus with loans like *tīlás*ᵉ "necessity", cf Hausa *tiilàs id*, and in e.g.

> *Li pu nar ye fu di fu ba'abiig po'a Herodiase.*
> *Lì   pū   nār   yɛ́ fʋ̀ dí fʋ̀ bā'-bîîg   pʋ̯'á   Herodiasɛ* ⁺ø.
> **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)

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 *i̯a i̯a'*, short *ι*, or a fronting diphthong, and many that do:

sīa⁺	"waist"	*sàbùa*⁺	"girlfriend"
bāa⁼	"dog" 8.1	*pāe*⁺ᐟ	"reach"
nìe⁺	"appear"	*dūe*⁺ᐟ	"raise/rise"
kūgá⁺	"stones"	*wìdι*⁺	"horses"
kū̠⁺	"kill"	*mà*⁺	"mother"
bɛ̀dʋgū̠⁺ᐟ	"a lot" 6.4		

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

di̯ā̠'ᵃ	"get dirty"	← *di̯agι* 6.1.1.1	Farefare	*dẽgɛ̀*
pi̯āň'ᵃ	"speak, praise"	← *pi̯ãgι*	Farefare	*pẽgɛ́*
*du̯'à*ᵃ	"bear, beget"	← *du̯agι*	Farefare	*dɔ̀gɛ̀*
zɔ̀⁺	"run"	6.1.1.1	Farefare	*zòè*
dāu̯⁺ LF *dāʋ*	"man"	← *dawa*	Mooré	*ráoa*
tāu̯ň⁺ᐟ LF *táʋň*	"opposite-sex sib"	← *tãwa*	Mooré	*tãoa*

A marginal exception to predictability is the fact that words ending in *i̯a*' may have LFs in *i̯a'a* like *di̯ā̠*'ᵃ "get dirty" or in *i'a* like *kpi̯à*'⁺ "shape wood with an axe."

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

sāe̠ň	"blacksmith"	LF *sāeň* or *sāňya*
sɔ̄e̠ň	"witch"	LF *sɔ̄eň* or *sɔ̄ňya*

All other cases involve **Invariable Verbs** 11.2, where LF -*ya* is regular except for a handful of bare root forms:

*dīgι*ʸᵃᐟ	"be lying down"	*wà'e*ʸᵃ	"be en route for"
*vū̠e̠*ᵃᐟ	"be alive"	*sū̠'e*ʸᵃᐟ	"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:

*sū̠'e*ʸᵃᐟ	"own"	+ *lι*⁺	"it"	→	*sʋ́'ʋ lī̠*⁺ᐟ	
*vū̠e̠*ᵃᐟ	"live"	+ *n*ᵋ	rem	→	*vū̠ʋ-n*ᵋᐟ	

Before Liaison 8.2.1 8.2.2 final affix-vowel quality is neutralised, but the same issues arise with verbs like *di̯ā̠*'ᵃ versus *kpi̯à*'⁺, gemination of *l m n*, and *mn ~ mm*:

*ya zuobid wʊsa **kalli** an si'em*

yà zūɵbíd wōsa kállì‿ ø àň sĩ'əm

2PL hair:**PL** all number:**SG COMP COP INDF.ADV**

"how much the number of all your hairs is" (Lk 12:7)

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

wɛ̄n nɛ̄ tīnámì‿ø kɛ́t bánì tʊ̀mmī‿ tí tàallì‿ ø

resemble with **1PL** **COMP** let:**DIPF** **REL.PL** work:**DIPF 1PL** fault:**SG SER**

básìd sĩ'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-bɛ́'ɛ̀d-nàm dáàmnī‿ bá dāa ňyɛ̄ láafìya

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 nyɛ 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 nominal 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 19.6. The first element is a nominal "Combining Form" (cb 9.1), part of the regular paradigm of the open class of nominals, 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

zīm-gbáñ'àd	"fisherman"	(*zíiŋ* "fish")
wāb-kúʋ̀d	"elephant-killer"	(*wābʋg* "elephant")
bì-fūug	"children's shirt"	(*bīig* "child")
	(i.e. suitable for children, child-sized)	

Specialised meanings are common:

pʋ̟'à-sāñ'am	"adulterer", literally "wife-spoiler"

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:

būʋg	"goat"
bʋ̀-pìəlɩg	"white goat"
bʋ̀-kàŋā	"this goat"
bʋ̀-pìəl-kàŋā	"this white goat"
wāb-píəlìg	"white elephant"
wāb-títā'ar	"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:

ziŋban'ad	*zīm-gbáñ'àd*	"fisherman"
bʋkaŋa	*bʋ̀-kàŋā*	"this goat"
yamug bipuŋ	*yàmmʋg-bī-púŋ*	"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 19.6.1:

[*ānzúrɩfà lá'-*]*mãan*	"silversmith" ("[silver goods]-maker")

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

kpʊ̀kpàrɩg	"palm tree"	*tītā'ar*	"big"
wāb-títā'ar	"big elephant"	*Ňwāmpūrɩl*	"Mampruli"
bʊ̀rkɩ̀n	"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 14.4.

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:

Fʊ bɔɔdi **ti**.	"You love us."	[fʊbɔːdɪtʰɪ]
Fʊ̀ bɔ́ɔdī‿ tí.		
2SG want **1PL.OB**.		

Ò yɛ̀lɩ‿ **àmɛ̄ŋá**.	"She spoke truly."
3AN say **ADV:**self**:ADV**.	

tì **bàtáň'**	"we three"
1PL NUM:three	

bīisá‿ **àyí**	"two children"
child**:PL NUM:**two	

So are all proclitic pronouns:

Bà gɔ̀sí‿ **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" 19.10.

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

The Serial VP linker *n* 8.2.2.1.2 and the complementiser *ǹ* 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 *ø* in interlinear glossing.

tīnámì‿ ø   zàb nà'ab lā   "our having fought the chief" (*ǹ*-Clause)
1PL   **COMP** fight chief:**SG** **ART**

Tīnámì‿ ø   záb nà'ab lā.   "*We* fought the chief." (*n*-focus)
1PL   **SER** fight chief:**SG** **ART**

m̀ zūgʋ́‿   ø   zàbɪd   lā zúg
1SG head:**SG** **COMP** fight:**DIPF** **ART** upon
"because my head hurts"

M̀ zūgʋ‿ ø zábìd.   "My head hurts."
1SG head:**SG** **SER** 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.

Fʋ bɔɔdim.   "You love me."   [fʋbɔːdɪm]
Fʋ̀ bɔ́ɔdī‿m.
2SG want   **1SG.OB**.

The 1sg Liaison Enclitic pronoun itself occurs before Liaison in

Fu noŋi mi n gat bamaa?
Fʋ̀ nɔ́ŋī‿mī‿ n gát   bámmáa ⁺ø?
2SG love **1SG.OB SER** 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 pʋ bɔɔdi fɔ.   "I don't love you."
* M̀ pʋ̄   bɔ́ɔdī‿ fɔ́   ⁺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."   [m̩bɔːdɪf]
1996 *M bood if.*
     M̀ bɔ́ɔdī‿ f.
     1SG want   **2SG.OB**.

1996 *M nye uf.*   "I've seen you."   [m̩ɲ̃ɛ̃ʊ̃f]
     M̀ ŋ̌yɛ́o‿ f.
     1SG see   **2SG.OB**.

1996 *M gban'e uf.*   "I've grabbed you."   [m̩ɡ͡bã̰ʊ̰̃f]
     M̀ gbáɲ̌'ʋ‿ f.   (See 8.5.3 for the *-e*)
     1SG seize   **2SG.OB**.

The 3sg animate object pronoun ᵒ [ʊ] "him/her" loses its entire segmental form when subject to Apocope 2.2, *after* causing the host final vowel mora to become [ʊ]; 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 [ʊ] in the Short Form; in the Long Form the rounded LF-final mora unites with the [ʊ] of the pronoun to form long [ʊː]. The LF will be written as ending in *·o-o*.

bɔ̀ɔdā	"wants"	+ ᵒ "him" →	*bɔ̀ɔd·ó-o*	(SF *bɔ̀ɔd·ō*)
kīa	"cut"	+ ᵒ "him" →	*kì·ō-o*	(SF *kì·o*)
ňyɛ̄ɛ	"see"	+ ᵒ "him" →	*ňyɛ̄·ó-o*	(SF *ňyɛ́·o*)

Fʋ bɔɔd o.   "You love her."   [fʋbɔ:dʋ]
Fʋ̀ bɔ́ɔd·ō‿ ø.
2SG want   **3AN.OB**.

Fʋ pʋ bɔɔd oo.   "You don't love her."   [fʋpʰʋbɔ:dʋ:]
Fʋ̀ pʋ̄ bɔ́ɔd·ó-o ⁺ø.
2SG NEG.IND want-**3AN.OB NEG**.

Fʋ nyɛ o.   "You've seen her."   [fʋjɛ̃ʋ̃]
Fʋ̀ ňyɛ́·o‿ ø.
2SG see   **3AN.OB**.

Fʋ pʋ nyɛ oo.   "You've not seen her."   [fʋpʰʋjɛ̃ʋ̃:]
Fʋ̀ pʋ̄ ňyɛ̄·ó-o ⁺ø.
2SG NEG.IND see-**3AN.OB NEG**.

The Locative enclitic *n*ᵋ, the Remoteness Marker *n*ᵋ, and the enclitic 2pl subject pronoun ʸᵃ after imperatives <u>8.2.1</u> are also reduced to vowellessness by Apocope. They are traditionally written solid with the preceding word, as if they were flexions. However, the segmental and tonal changes involved with the these particles are of the same nature as those seen with object pronouns, and they follow (allomorphs of) complete words. The enclitic 2pl subject ʸᵃ is in complementary distribution with the proclitic subject pronoun *yà* for my informants (though not for all speakers <u>28.2.3</u>) and the Locative Liaison Enclitic *n*ᵋ is in complementary distribution with the ordinary enclitic particle *nī*⁺/ <u>20.3</u>. Although the status of all Liaison Enclitics, including object pronouns, as separate *phonological* words is equivocal, as the evidence is entirely tonal <u>5.3.1</u>, morphosyntactically all these enclitics are clearly words, not flexions; accordingly, unless reduced to segmental zero by Apocope, they are hyphenated to the preceding word in this grammar.

*pʋ̄ʋgʋ-n*ᵋ/   "inside"
inside:**SG-LOC**

bɔ̀ɔdī-n   "might wish"
want-**REM**

The pronoun ʸᵃ loses its entire segmental form in the SF <u>2.2</u>, and its presence is revealed only by the word-final **-ɩ** on the preceding LF:

	*gɔ̀sɩm*ᵃ			"look!"	
SF	*gɔ̀sɩmī‿*	ø		"look ye!"	Traditional: *gosimi*
LF	*gɔ̀sɩmī‿*	*yá*		<u>28.2.3</u>	Traditional: *gosimiya*
	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'ɵŋ* SF "rabbit" has three morae, while the LF *sú'ɵŋā* 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 <u>5.2</u> <u>5.3.1</u>.

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 is has been deleted in the surface LF <u>8.1</u>.) 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 *mɛ̀* "build" (perfective) *bʊ̀ŋ* "donkey" *ɔ̄n* "he/she." Monosyllables with a long vowel, like *mɛ̀ɛd* "build" (dynamic imperfective) do have intrinsic stress.

Before pause, all intrinsically unstressed words acquire stress, including clitics like the article *lā⁺/*. Even Liaison Enclitics <u>8.2.1</u> 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 <u>5.3.2</u> 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:

*dìtʊ́ŋ*ᵓ	[ˈdɪt:ʊŋ]	"right hand", probably a derivative of *dì⁺* "eat"
*dàtìu̯ŋ*ᵓ	[daˈtʰɩʊ̯ŋ]	"right hand"

	būtıŋ[a]	['bʊt:ɪŋ]	"cup" (from *bʊ̀d*[ɛ] "plant seeds" via the semantic development "planting implement" → "seed cup" → "cup in general")
pl	*būtııs*[ɛ]	[bʊ't^hɪːs]	with a wholly exceptional apparent lengthening of an epenthetic vowel 6.2.1; probably reanalysis of the sg as prefix *bū* + stem *tīŋ*[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*[ɛ] ← **zagsı*, 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 ı̯a'a ʋ'a añ'a ı̯añ'a ʋñ'a* in the *r*[ɛ]|*a*[+] Class may still behave as consonant-final 9.3.4: *bà'ar*[ɛ] "idol" (Farefare *bàgrɛ̀*), 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 *ı̯a'a ʋ'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 22.6.1.1 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 Levelling within syllables 5.2 is the last in order of toneme-altering rules; it precedes the tone *realisation* rule H Spreading 5.3.1, which itself precedes the insertion of downsteps before H tonemes 5.3.2.

3 Consonants

3.1 Inventory and Symbols

The following consonant symbols are used:

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

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

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

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

tɔ́klàe[+]	"torch"	← English "torchlight"
sɔ́gi̯à[a]	"soldier"	(probably via Hausa *soojà*)

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:

kɔ̀bɩgā[=]	"hundred"	[qʷʰɔbɪɢa]

Underlying **g* is deleted after *aa iə ue aañ εεñ 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 i̯a u̯a*, 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 -*fᴼ*:

fūfūm[mε]	"envy"
náafᴼ	"cow"

z   is only found word initially and after prefixes.

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

Àláasìd (*dáar*[ε])	"Sunday"	← Hausa *Lahàdì* (← Arabic)
Dàsmáanì[+]	عبد الرحمن	*ʕAbdu-r-Raħma:n(i)*

h   as a phoneme *h* itself is marginal, occurring only syllable-initially in loanwords; however these include the very common word *hālí*[+] "as far as." In the personal name *Dàhamáanì*[+] عبد الرحمن *ʕAbdu-r-Raħma: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:

>   *nɔ̄-dáʊ̀gᵓ*   "cock"   [nɔɾaʊg]
>   *nā'-dáàdᵋ*   "oxen"   [na̤ɾa:d]
> but   *wìd-dāʊgᵓ*   "stallion"   [wɪd:aʊg]

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

>   *ɛ̀ñdɪgᵋ*   "unplug"
>   *ɛ̀ñrɪgᵋ*   "shift along"
>   *mɔ̄dᵋ*   "swell"
>   *mɔ̄rᵃ/*   "have"
>   *yàadᵋ*   "graves"
>   *yāarᵋ/*   "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:

>   *tīráànᵃ*   "neighbour"
>   *àrazàkᵃ*   "riches"
>   *àrazánà⁺*   "heaven, sky"

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

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 *ι*-vowels can be
           absorbed because of the potentially syllabic character of *m*:

>   *Gɔ̀sιmī m!*   "Look at me!"
>   *Gɔ̀sīm.*   "Look at me!" contrasting with
>   *Gɔ̀sιm!*   "Look!"
>   *Gɔ̀sιmí fʊ̀ nú'ùg!*   "Look at your hand!"
>   *Gɔ̀sím fʊ̀ nú'ùg!*   *id*

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 Serialiser particle *n* and the clause Complementiser *ǹ* are syllabic [ṇ] for some speakers but my informants have consonantal, denasalised or zero reflexes instead.

kp gb   are digraphs for the labiovelar double closures [k͡p] [ɡ͡b].
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 *kpòkpàrıg*ᵃ "palm tree" where other speakers have *kùkpàrıg*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.

*kūm*ᵐ	"death"	cf *kpì*⁺		"die"
kɔ̄ba⁺	"bones"	cf Gurmanche	*kpábá*	id
*kpàkūr*ᵋ/	"tortoise"	cf Dagbani	*kpàkpílí*	id

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

bákpàe̱⁺	"week" ← Hausa *bakwài* "seven"
	(also "week" in *Gaanancii* Hausa)

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

ŏyɛ̄⁺	"see"	[j̃ɛ̃]
*ŏwādıg*ᵃ/	"moon"	[w̃ãdɪg]
ŏwɛ̀'⁺	"beat"	[w̃ɛ̃]

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

Dagbani	Kusaal	
ŋariŋ	*àn̆rʋŋ*ᵓ	"boat"
nyá [ɲa]	*n̆yɛ̄*⁺	"see"
ŋme [ŋ͡me]	*n̆wɛ̀'*⁺	"beat"

Mooré shows the same developments as Kusaal. Niggli 2012 reports that some Toende speakers still have consonantal [ɲ] [ŋ͡m] phonetically in these cases, although he regards these as allophones of *y w* before nasalised vowels. Before *ɩ/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 the glides *i̯/e̯* and *u̯* 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 *i̯a u̯a* (*i̯e u̯e* 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: *wìəf*ᵓ "horse", *dàwān*ⁿᵋ/ "pigeon", but consonantal *y* occurs not only root-initially (*yáaŋ*ᵃ "grandchild", *dàyūug*ᵓ/ "rat") but also word-medially, before the vowel *a*: *nɔ̄yá*⁺ "mouths."

When Apocope leaves -*y*- as word-final after a short back vowel, it is replaced by *e̯* 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|*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 *dūnɩya*⁺ "world" and *láafɩya*⁺ "health" are written *dunia* and *laafia* although they end in [ɩja], 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*:

pāmm	"a lot"
dáamm	"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.

ňwād-bíl[a]	"star"

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 nominal 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].

kùndòŋ[a]	"jackal"	
gūmpūzɛ̄r[ɛ/]	"duck"	
dànkɔ̀ŋ[ɔ]	"measles"	[daŋkʰɔŋ]
zùnzɔ̀ŋ[a]	"blind"	[zʊŋzɔŋ]

Loanwords may include clusters not found elsewhere.

bùrkìn[a]	"honourable/free/honest person"

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 5.3.1 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 *dɔ̄ll·ó* "follow him" (written

dol o) clearly read as [dɔl:ʊ]. 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:

*kàrɪm*ᵐ	"read"	→	*kàrɪm*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 ⁺ø.
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 kìkīr-bɛ́'ɛd-nàm dáàmnī‿   bá   dāa ňyɛ̄ láafìya
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 *rᵋ|a*⁺ Class *m*-stems:

*gbīgɪm*ⁿᵋ	SB	*gbīgɪm*ᵐᵋ	WK	"lion"
*dūm*ⁿᵋ	SB	*dūm*ᵐᵋ	WK	"knee"

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

*ňwān*ⁿᵋ	SB	pl *ňwāna*⁺ (Lk 11:39, 1976)	"calabash"
*ňwām*ᵐᵋ	WK	pl *ňwāma*⁺ SB WK	

Cf 1976 NT *kobkennib* = *kɔ̀ñb-kīmmɪb*ᵃ ← **kɔ̃b-kɪmdɪba* "herdsmen."

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

pe'es bane ka' konbkemma
*pɛ̄'ɛs   bánì kā'   kóñb-kīmma   *⁺ø
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].

m̀ nāan kʋ́   āa-n   Kiristo túm-tūmna   ⁺ø.

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

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

The plurals usually show *-mn-*:

O tʋmtʋmnib pii nɛ ayi' la yʋda nwa.

Ò tʋ̀m-tūmnɩb   pīi nɛ́ àyí   lā yʋ́dà‿ ø ňwà.

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

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

All examples of Dynamic Deverbal Adjectives from *m*-stem verbs in my data show *-mm-* before epenthetic vowels:

*būn-túmmìr*ᵋ   "useful thing"; plural *tūmna*⁺ is cited by some informants.

*bʋ̀-sāň'ammɩr*ᵋ   "goat for destruction, scapegoat" WK

The great majority of cases *-mn-* within words precede high front vowels; compare Focus-*nɛ̄*⁺ᐟ, corresponding to *me* in Toende Kusaal, Mooré etc 33.1.2. KB has no word-internal or word-final *-mna-* or *-mnɛ-* at all; all examples so written involve separate words by the criteria of this grammar. Word-internal *-mni-* is common, however, in plurals like *tʋmtʋmnib* = *tʋ̀m-tūmnɩb* "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.

*tīntɔ̌ňríg*ᵃ   "mole" (animal)   ← *tīntɔ̌ňrrígā*

*píɩňf*ᴾ   "genet"   ← *pīínfʋ̄*

*níis*ᵋ   "birds"   ← *nīínsī*

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 *ι* and *ʋ* respectively; considering LFs alone even this distinction would be predictable.

Affix Vowels have a three-way contrast in quality *a ι ʋ* and also distinguish short and long vowels. Prosodic Clitics lower short *ι ʋ to ε ɔ*, which are here realised slightly closer than as root vowels 4.4.

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

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

e o always represent [ɪ] [ʊ]. They replace *ι ʋ* as non-initial components of diphthongs 4.2.3, except that [ʊ] is written *ʋ* after *a*. In addition, the 3sg animate pronoun [ʊ] is always written *o* 15.1. 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 *ň* represents emic nasalisation 4.2.1, while ' represents glottalisation 4.2.2.

e̯ i̯ u̯ represent non-moraic glides; *e̯* and *i̯* are equivalent symbols for [ɪ̯], and *u̯* represents [ʊ̯].

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

iə uɵ are *phonemic monophthongs* but are realised phonetically as [iə] [uɵ]. Similarly, *i̯a u̯a* represent short *monophthongs*, realised [ɪ̯a] [ʊ̯a], which appear as *i̯e u̯e* [ɪ̯ɪ] [ʊ̯ɪ] 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 uɵ i̯a u̯a i̯e u̯e* are regarded throughout as **digraphs representing monophthongs** 4.1.1. The letters *ə ɵ* are used only in these digraphs.

4.1.1 Agolle Vowel Breaking

The sequences *iə uɵ*, realised with the corresponding IPA values, pattern throughout as long *monophthongs*, with *i̯a u̯a* 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 ɛ ɔ ɛɛ ɔɔ*:

	Toende	Agolle	
	déɛ́m	*dìəm*ᵐᵃ	"man's parent-in-law"
	sɛ̄ɛ̄s	*sīəs*ᵋ	"waists"
but	*té'ét*	*tɛ̀'ɛd*ᵋ	"baobab fruits"
	pē'ēs	*pɛ̄'ɛs*ᵋ/	"sheep" plural
	bɔ́'ɔs	*bū'ɵs*ᵋ/	"ask"
	tɔ́ɔ̄n	*tùɵn*ⁿᵋ	"before, in front"
	kɔ́'ɔ̄m	*kù'ɵm* ᵐ	"water"
	sábɔ́ɔ	*sàbùa*⁺	"lover, girlfriend"
but	*póók*	*pɔ̄ɔg*ᵓ/	"farm, field"
	tōom	*tɔ̄ɔm*ᵐ/	"depart, disappear"
	zò	*zɔ̀*⁺	"run" (Mooré *zòe*)

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

bɔ̀ɔ̀t	*bɔ̀ɔd*ᵃ	"want, wish" (Mooré *bàoda*)

There are gaps in the distribution of Agolle long oral *ɛɛ ɔɔ* probably connected with their diphthongal origins. Some occurrences of *ɛɛ ɔɔ* seem, however, to be due to levelling within paradigms which feature a suffix ending in *ʊ*. The short vowels *ɛ ɔ* do not contrast underlyingly with *i̯a u̯a*, as explained below.

iə uɵ 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*:

pīə́ tī⁺/	"wash us"	(*pīe*⁺/ "wash")
dūɵ́ tī⁺/	"raise us"	(*dūe*⁺/"raise")

sīa lā	"the waist"	[siəla]
sàbùa lā	"the girlfriend"	[sabuɵla]

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

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

LF	*kīa*	"cut" base form	[kʰia]	cf *kìəd*ᵃ	dipf
LF	*kūa*	"hoe" base form	[kʰua]	cf *kūɵd*ᵃ/	dipf

Nasalised *iəň uɵň* occur only in the inflexion and gerund formation of Fusion Verbs 6.3.1. In all other contexts *iəň uɵň* and *εεň ɔɔň* have fallen together; this applies also to long vowels automatically nasalised after *m n* 4.2.1. The vowels were distinct historically: compare *nɔɔr* "times" (Mooré *náooré*) with *nɔɔr* "mouth" (Mooré *nóorè*) 16.2.5.

The 1-mora vowels corresponding to 2-mora *iə uɵ* are *i̯a u̯a* [ɪ̯a] [ʊ̯a].

These, too, pattern as simple vowels throughout: *si̯àk*ᵋ "agree" and *bu̯àk*ᵋ "split" do not violate the constraint that full words begin with at most one consonant.

Apocope shortens final *iə uɵ* to *i̯a u̯a*:

ki̯à	"cut"	SF of *kīa*
ku̯ā	"hoe"	SF of *kūa*

Short *ε ɔ* appear instead of *i̯a u̯a* 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 *bu̯àk*ᵋ "split" is due to the rounding change **u̯akkʋ → ɔkkʋ*, see 6.3.2, while *tēk*ᵋ/ "pull", contrasting with *ti̯àk*ᵋ "change" is due to shortening of a long vowel before an original plosive cluster (**tεεkkɪ*), see 6.3.3. Presumably *nɔ̄k*ᵋ/ "pick up" is similarly derived by shortening of **nɔɔkkɪ*; Toende Kusaal has *nɔ̀k*, with a variant form *nɔˈɔ* (for **nɔˈɔg*.)

i̯e u̯e [ɪ̯ɪ] [ʊ̯ɪ] appear in place of *i̯a u̯a* before -*y*-, which can occur only in the context of *r*ᵋ|*a*⁺ Class plurals of nominals with stems in *iə* and *uɵ* 6.1.1.1:

*bīər*ᵋ/	"elder same-sex sib"	pl *bi̯ēyá*⁺
*sūɵr*ᵋ/	"road"	pl *su̯ēyá*⁺	KB *suoya* 1.3.1

4.2 Root Vowels

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

ι is more central after velars and labials, and *ʋ* 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*: [ʒyg] 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:

| *mɛ̀ɛd*[a] | "build" dipf | [mɛ̃: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 *ŋ͡m*, or arises before underlying **ns *nf* 6.2.1.

Long vowels show the contrasts *iiñ*/*ιιñ uuñ*/*ʋʋñ* exclusively as a consequence of the change of **nf *ns* to *f s* with nasalisation of the preceding vowel 6.2.1:

	níiŋ[a]	"bird"		
but	*píιñ*[ɔ]	"genet"	cf plural	*pīιní*[+]

	zùuñd[ɛ]	"vultures"		
but	*zʋ́ʋñ*[ɔ]	"dawadawa seed"	cf plural	*zʋ̄ʋní*[+]
	tɛ̀ŋ-zʋ̀ʋñs[ɛ]	"foreign lands"	cf singular	*tɛ̀ŋ-zʋ̀ŋ*[ɔ]

Nasalised *iəñ uəñ* occur only in Fusion Verbs 6.3.1.

The vast majority of short nasalised vowels are *añ ɛñ i̯añ ɔñ u̯añ*. Shortening of *ιιñ iiñ ʋʋñ uuñ* by Apocope leads to *ιñ ιñ ʋñ ʋñ* respectively, with no tenseness distinctions:

sīīňꟼᵖ/	"bee"	cb	*sīň-*
zùuňgᵓ	"vulture"	cb	*zʊ̀ň-*

Short nasalised *ι* also appears in *ňyīn*ⁿᵋ/ "tooth", and *ʋň* in *sʊ̄ňꟼᵖ/* "heart" pl *sʊ̄ňyá⁺* cb *sʊ̄ň-*, but there may be no robust contrasts with *ɛň ɔň*.

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

4.2.2 Glottalisation

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

Glottalisation may be realised as a creaky-voiced glottal approximant [ʔ̞] 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 *e̯/i̯ u̯* versus *y w* below [4.2.3](#).) The flapping of initial *d* mentioned above [3.1](#) occurs after *V*ꞌ 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 i̯a u̯a* [6.3.1](#) does not differ phonetically from other types.

Tonal considerations confirm that ꞌ is not a consonant. Thus

	*Lì kā*ꞌ *mɔ́lɪfɔ̄.*	"It's not a gazelle."
but	*Lì kā*ꞌ ↓*nú*ꞌ*ugɔ̄.*	"It's not a hand."
like	*Lì kā*ꞌ ↓*tíɪgā.*	"It's not a tree."

differ in whether the H toneme is realised with a preceding downstep, because the sequence *-lɪ-* in *mɔ́lɪfɔ̄* is a separate unstressed syllable preceding the final stress on -*fɔ̄*, whereas the ꞌ in *nú*ꞌ*ugɔ̄* is not a consonant and does not begin a syllable [5.3.2](#).

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

	Kà bà gē̄ň.	"and they got tired"	is homophonous with
	*Kà bà gē̄ň*ꞌ*.*	"and they got angry"	

but	*Bà gɛ̀ň nɛ̄.*	"they're tired"	differs in realisation from
	*Bà gɛ̀ň*ꞌ *nɛ̄.*	"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	*yʊ́'ʊ́rɛ́*	"name"	Kusaal	*yʊ̄'ʊrᵉ/*
	Farefare	*kó'om*			
and	Talni	*kwoʔm*	"water"	Kusaal	*kù'əm*ᵐ
	Nabit	*kpa'uŋ*	"guinea fowl"	Kusaal	*kpá'ʊŋ*ᵓ
	Nabit	*nɔnya'aŋ*	"hen"	Kusaal	*nɔ̄-ñyá'àŋ*ᵃ

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; *ráʔm̄* "bile" = Kusaal *yā'm*ᵐ/ (WK), Farefare *yá'ám*. 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 <u>6.1.1.1</u>.

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

*kpɛ̀'ŋ*ᵋ	"strengthen"	*lā'ŋ*ᵋ/	"set alight"
*nī'm*ⁿᵋ/	"meat"	*kɔ̄'m*ᵐ/	"hunger"
*yā'm*ᵐ/	"gall bladder; sense"	*sʊ̀'ŋā*⁺	"well"
*sʊ̀'m*ᵐ	"goodness"		

The adjective *sʊ̀ŋ*ᵓ (pl *sʊ̀ma*⁺) "good" itself never has a glottalisation mark.

The vowels are written as if long in KB: *kpɛ'ɛŋ la'aŋ ni'im kɔ'ɔm ya'am sʊ'ʊŋa*. Toende Kusaal, Farefare, Nabit and Talni lack this phenomenon in all the cognate words, except Farefare *yá'ám* "bile." It has probably arisen from gemination of *m ŋ*; KB has 385 examples of *an sʊm* to 47 of *an sʊ'ʊm* (*àñ súm* "is good"), but 30 of *ka' sʊm* to 40 of *ka' sʊ'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 confiirm 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 <u>2.4</u>, are structurally extra-long diphthongs; they always have identical second and third mora vowel qualities.

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

i̯ and *e̯* are both realised [ɪ̯] except in *ui̯* and in the monophthong *i̯e*, where the realisation is [i̯]; [ʊ̯] is always written *u̯*.

1-Mora		2-Mora			3-Mora	
		ia	[ia]		*iaa*	[ia:]
		i̯a'a	[ɪa̰:]			
		ua	[ua]		*uaa*	[ua:]
		u̯'aa	[ʊa̰:]	word-finally		
	≡	*ʋ'a*	[ʊa̰]	before consonants		
ae̯	[aɪ̯]		*ae*	[aɪ]		*aee*	[aɪ:]
ɔe̯	[ɔɪ̯]					
ʋe̯	[ʊɪ̯]		*ʋe*	[ʊɪ]			
ui̯	[ui̯]		*ui*	[ui]		*uii*	[ui:]
			ie	[iɪ]		*iee*	[iɪ:]
			ue	[uɪ]		*uee*	[uɪ:]
au̯	[au̯]		*aʋ*	[aʊ]		*aʋʋ*	[aʊ:]
			iu	[iu]			
ɩu̯	[ɪʊ̯]		*ɩo*	[ɩʊ]			
ɛu̯	[ɛʊ̯]		*ɛo*	[ɛʊ]			
i̯au̯	[ɪ̯aʊ̯]						
			io	[iʊ]			

All diphthongs also occur nasalised; 2- and 3-mora diphthongs also occur glottalised. *i̯a'a u̯a'a ʋ'a* are always glottalised; Apocope shortens them to *i̯a' u̯a'*.

The diphthongs *ʋ'a ʋň'a* appear as *u̯'aa u̯ň'aa* respectively when LF-final.

The digraphs *i̯a u̯a* represent single segments phonemically, but are *realised* as written. Written *iə* [iə] and *uɵ* [uɵ], 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 (*aʋ aʋň ui i̯a'a i̯aň'a ʋ'a ʋň'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 ldiphthong, except with diphthongs resulting from fusion, fronting and rounding of *iə uɵ*, 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:

zū·ó-o	[zuʊ:]	"steal him"	LF
zú·o	[zuʊ]	"steal him"	SF

When the 2pl subject enclitic ʸᵃ is added to verb forms ending in -*ɛ* like *bɛ̀*⁺ "be somewhere, exist", it creates the diphthong *ɛι*, found only in this context:

bɛ̄ιyá	[bɛɪja]	"be ye!"	LF
bɛ̄ι	[bɛɪ]	"be ye!"	SF

e̯/i̯ u̯ contrast with *y w* in not forming syllable boundaries or consonant clusters, either as components of the digraphs *i̯a u̯a* representing single short vowel phonemes, or as the final glide components of short diphthongs:

*bi̯āu̯ňk*ᵓ	[bi̯ãu̯k]	"shoulder"	CVC
*bu̯àk*ᴱ	[bu̯ak]	"split"	CVC
dāu̯⁺	[dau̯]	"man"	CV
*gbàu̯ŋ*ᵓ	[g͡bau̯ŋ]	"book"	CVC
sɔ̄e̯ň	[sɔ̃ɪ̯]	"blacksmith" SF	CV
tɔ̄e̯	[tʰɔɪ̯]	"be bitter" SF	CV
mùi̯⁺	[mũi̯]	"rice"	CVCV

Word-final -*Ve̯* -*Vi̯* -*Vu̯* behave exactly like word-final short root vowels in being followed by [ʔ] before pause in statements 4.2.2:

Ò à nɛ̄ dāu̯.	[ʊanɛdau̯ʔ]	"He is a man"

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

i̯ā⁺	[ɪ̯a]	"seek"
yā⁺/	[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, discussing the Romanian contrast *ia/ea*, finds that a contrast *ua/oa* has no phonetic basis in Romanian, and hypothesises that this is not merely a language-specific matter but due to the cross-linguistic difficulty of maintaining a contrast between two back rounded glides [w] and [o̯]. Kusaal, too, has no contrast of initial *wa/u̯a*; historical initial *ue* has become *waa* in *wāad*ᴱ/ "cold" = Toende Kusaal *ɔɔt*, Farefare *ɔ́ɔrɔ́* and *wā*'⁺ "dance" = Toende Kusaal *wɔ*', for which Agolle **wu̯ā*⁺ would be expected.

Length in diphthongs is predictable, except with word-final *ae*/*ae̞* and with *aʊ*/*aʊ̞* before *ŋ*. All SF-final *unglottalised closing* diphthongs are 1-mora except *ae* (*àe̞ň* "be something", *pāe* "reach"); all glottalised and/or opening SF-final diphthongs are 2-mora; LFs have one more mora than the SF, but no more than two before Liaison. Word-internally, all glottalised diphthongs are 2-mora; non-glottalised diphthongs are 1-mora before *y* or *k*, and 2-mora elsewhere, except that 1-mora rounding diphthongs may occur before *ŋ*:

gbāʊ̞ŋ	"skin"	*màngáʊŋ*	"crab"

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 *ι*.

Before LF *-gɔ* *-ŋɔ* the epenthetic vowel is *ʊ*, remaining as such in the SF.

	āaňdιg[a]	← *ã̄ãdιga	"black plum tree"
but	*gàadʊg*ɔ	← *gaadιgʊ	"(sur)passing" (gerund)
pl	*mālιma*[+]	← *malιmaa	"sacrifices"
but	*mālʊŋ*ɔ	← *malιŋŋʊ	"sacrifice"

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

gbīgιm[nɛ]	[g͡bɪgɪm]	"lion"	
yūgʊ́m[nɛ]	[jʊgʊm]	"camel"	
kūgʊr[ɛ/]	[kʰugur]	"stone"	(ATR harmony, see below)
wābιd[ɛ/]	[wabɪd]	"elephants"	
dūgʊd[ɛ/]	[dʊgʊd]	"cooking pots"	
dūgʊdíb[a]	[dʊgʊdɪb]	"people who cook"	
pūʊgʊ-n[ɛ/]	[pʰʊ:gʊn]	"belly" (*pūʊg*[a])+ *n*[ɛ] 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:

nɔ̄bʊg[ɛ/]		"grow" (but *nɔ́bìr*[ɛ] "leg")
kɔ̄lʊg[a]		"river"
yàmmʊg[a]		"slave"
or	*yàmmʊg*ɔ	

There is significant variation between speakers with rounding of epenthetic vowels after rounded root vowels. NT, ILK and KED have *poogin* for *pūʊgʊ-n*ᵉ/ "inside", KB *pʊʊgin*. 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:

	*tēŋ*ᵃ	"land"	pl *tēɛňs*ᵋ	← *tɛnsɪ
but	*kʊ̀lɪŋ*ᵃ	"door"	pl *kʊ̀lɪs*ᵋ	← *kʊlɪnsɪ

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

	*tìsɪd*ᵃ	[tʰɪsɪd]	"gives"
but	*sīgɪd*ᵃ/	[sigid]	"lowers"
	*būgʊr*ᵋ	[bʊgʊr]	"spirit's dwelling"
but	*kūgʊr*ᵋ/	[kʰugur]	"stone"
	*yūgʊdɪr*ᵋ	[jugudɪr]	"hedgehog"
	*yūgúm*ⁿᵋ	[jʊgʊm]	"camel"

4.4 Affix Vowels

Except for nominal combining forms, and some Particle-Verbs 22.7.2, Post-Subject Particles 27.1.4, and Emphatics 33.6, 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 ɪ ʊ*, and three long *aa ɪɪ ʊʊ*.

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

When the long affix vowels *ɪɪ ʊʊ* are shortened by Apocope the resulting *ɪ ʊ* are realised exactly like epenthetic vowels. Both short and long affix *ɪ ʊ ɪɪ ʊʊ* are subject to **ATR harmony** under the same conditions as epenthetic vowels:

	mɔ̀līɪ	[mɔ̃lɪː]	LF	"gazelles"
	mɔ̀lɪ	[mɔ̃lɪ]	SF	
	wìdīɪ	[widiː]	LF	"horses"
	wìdɪ	[widi]	SF	
but	*nīigíɪ*	[nĩːgɪː]	LF	"cows"
	nīigí	[nĩːgɪ]	SF	(*long* root vowel)

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

*tītā'ar*ᵉ		"big"
*kʋ̀kɔ̄r*ᵉ/		"voice"
*kìkīrιg*ᵃ/	[kʰikʰirig]	"protective spirit"
*sìsì'əm*ᵐ	[sisi̯əm]	"wind"
*dʋ̀ndùug*ɔ	[dundu:g]	"cobra"
*sīlιnsíùŋg*ɔ	[siliŋsĩũg]	"spider"
*vʋ̀lιnvʋ̀uñl*ᵉ	[vuliŋvũ:l]	"mason wasp"

In *nìn-tāa*= "co-wife" [ninᵗʰa:] the tense vowel probably reflects ATR harmony not crossing word division with the "bleached" prefix/cb *nin* 14.4.

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

The vowel *ε* appears for expected *ι* in various particles realised *nɛ̄*, 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 ιι* appear in the *r*ᵉ|*a*⁺ and *fɔ*|*ι*⁺ Class plural flexions. The SF-final vowels *-a -ι* in these plurals behave like Apocope-Blocked forms before Liaison, with no prolongation of the vowel, except with *yáan*ᵉ, plural of *yín*ⁿᵉ "(at) home", the irregular locative of *yīr*ᵉ/ "house" 20.3.

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

The affix vowels *ι* and *ʋ* contrast consistently only after velars and word-initially: *ι* is the default after alveolars, and *ʋ* after labials, labiodentals and labiovelars. Prefixes, however, show *ʋ* rather than *ι* before root *u*/*ʋ* (*dʋ̀ndùug*ɔ "cobra") and *ι* instead of *ʋ* before root *i*/*ι* (*kpīkpīn*ⁿᵃ/ "merchant.") In flexions *-mm* appears in place of **-mʋ*; *ι* appears after labial consonants only in the base forms of Variable Verbs like *zàb*ᵉ "fight" where it is probably analogical. Velars followed by affix-vowel *ʋ* could be internally reconstructed throughout as labiovelars (with 3sg *ò* ← **ŋmʋ̀* 15.1 fn), but comparative evidence is against a historical origin of the Class suffix *-g*ɔ as **-gb*ɔ. In any case, contrasts of rounded and unrounded affix vowels are found after alveolars outside Southwestern Oti-Volta. In Mooré and Farefare the plural suffix corresponding to singular *-go* is *-do*; *-u* appears as an imperfective verbal flexion after alveolars in Byali and Waama and so on. The 1pl pronoun *tì* "we" has the contrastive form *tʋn* in Toende Kusaal; compare e.g. Swahili *tu-*.

5 Tones

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

There are great constraints on tone patterns for single words, with nominals showing only three distinct basic patterns, and verbs only two. Intrinsic tone patterns are frequently changed by tone sandhi 8.3 8.4 and tone overlay 22.6.1.1.

5.1 Tonemes

There are three tonemes:

H	High, marked with an acute:	*gɛ́l*ᶦᵋ	"egg"
M	Mid, marked with a macron:	*bāŋ*ᵃ	"ring"
L	Low, marked with a grave:	*bɔ̀k*ᵓ	"pit"

Every vocalic mora carries a toneme, except when this is delinked by Levelling 5.2 or H Spreading 5.3.1. When syllabic, *m n* bear L toneme, except for Serialiser-*n*, which is toneless.

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

Within a word, macrons (for M) and and graves (for L) apply not only to the mora they are written on, but to all following unmarked morae until the next tone mark or until the end of the word, e.g. *bēogʊ-n* for *bēōgū-n*, *púkɔɔ̌r* for *púkɔ̀ɔ̌r*. After an acute mark, however, an unmarked mora is *toneless*, and the H toneme extends over both morae 5.3.1:

> *Lì   kā'   mɔ́lɪf ɔ̄   ⁺ø.*   "It's not a gazelle."
> **3INAN NEG.BE** gazelle:**SG   NEG**.

Nominals with prefixes 14 are written with a tone mark on the root even if it is identical to that on the prefix: *zīnzāu̯ŋ* "bat", *kʊ̀kpàrɪg* "palm tree."

The H toneme is in certain circumstances realised with a preceding *phonetic* downstep, lowering it to M level 5.3.2, but this is entirely a question of surface realisation, and does not affect the relationship of the H to following tonemes.

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

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

	m̀ sáam	"my guests"
but	*m̀ gbɛ́ɛ̀m̌*	"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*ᵉ imposes M toneme on the second mora of a LL root vowel [8.2.3](#).

	*sáam*ᵐᵃ	← **sāámmā*	"guests"
LF	*dáamm*	← **dāámm*	"beer"
LF	*tīɪmm*	← **tìīmm*	"medicine"
	*mɛ̄ɛ-n*ᵉ/	← *mɛ̀ɛ̄-n*ᵉ/	"build" *mɛ̀*⁺ + rem *n*ᵉ

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

Dāṳ	*lā*	*mɛ́ɛ-n* (← *mɛ́ɛ̄-n*)		"The man built (earlier today.)"
Man:**SG ART**		build-**REM**		

5.3 Realisation Rules

These realisation rules apply after all toneme allocation by Tone Patterns [7.1](#), Insubordination Marking [22.6.1.1](#), external tone sandhi [8.3](#) [8.4](#), and Levelling [5.2](#). H Spreading precedes the insertion of downsteps before H tonemes.

5.3.1 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, the L is delinked, and the H is realised across both morae, *unless* the L mora precedes Liaison.

Lì	*kā'*	***mɔ́lɪfɔ̄***	⁺ø.	"It's not a gazelle."
3INAN NEG.BE		gazelle:**SG**	**NEG**.	

*Bà kā'   dɪ̄ˀə**sídɪ**bā ⁺ø.*   "They are not receivers."
3PL NEG.BE receiver**:PL NEG**.

The rule does not apply if either mora is closed:

*Lì   à   nɛ̄ **mɔ́lì**f.*   "It's a gazelle."
3INAN COP FOC gazelle**:SG**.

*Bà à   nɛ̄ dɪ̄ˀə**sídì**b.*   "They are receivers."
3PL COP FOC receiver**:PL**.

*Lì   kā'   bʊ̄n-**sábì**llɛ̄   ⁺ø.* "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 pʋ siakida.   "But you did not agree." (Lk 13:34)
*Kà   yà pʋ̄   **sḭ̄ákì**dā   ⁺ø.*
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"
*lìnɪ   kà bà pʋ̄   nār   yɛ́ bà **níŋì**dā ⁺ø*
or   *lìnɪ   kà bà pʋ̄   nār   yɛ́ bà **níŋ**ɪdā ⁺ø*
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 vowel or an affix
vowel; thus with the word *dàgɔ̀bɪg*ᵃ "left hand", where the *dà-* is a derivational prefix
before the root *gɔ̀b-* <u>14</u>:

*Lì   kā'   **dág**ɔ̀bɪgā ⁺ø.*   "It's not a left hand."
3INAN NEG.BE left.hand**:SG NEG**.

With *dìga*⁺ "dwarfs", where the *-a* is an affix vowel:

*Bà à   nɛ̄ **dígà**.*   "They are dwarfs."
3PL COP FOC dwarf**:PL**.

H Spreading does not apply to a L mora preceding Liaison; thus

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

shows the same final tones as

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

but   *Ò   pū   zábì‿ fɔ́   ⁺ø.*   "He didn't fight you."
3AN NEG.IND fight   **2SG.OB NEG**.

Lì   kā'   mɔ́lɪfɔ́   ⁺ø.   "It's not a gazelle."
3INAN NEG.BE gazelle:**SG NEG**.

As a consequence of H Spreading, the LF tones of words like *nú'ùgɔ* "hand" coincide completely with those of words with H toneme over a long vowel because of 3-Mora Reduction [7.2.1.1](#) like *náafɔ* "cow."

Lì   kā'   nú'ugɔ̄ ⁺ø.   "It's not a hand."
3INAN NEG.BE hand:**SG NEG**.

Lì   kā'   náafɔ̄ ⁺ø.   "It's not a cow."
3INAN NEG.BE cow:**SG NEG**.

Superscript Notation [2.2.1](#) writes such words with the SF tones: *náafɔ nú'ùgɔ*.
The syllable-based nature of the rule for downstepping before H [5.3.2](#) means there is no downstep when the H and L do not fall in the same syllable:

Lì   kā'   nɔ́bɪrɛ̄ ⁺ø.   "It's not a leg."
3INAN NEG.BE leg:**SG   NEG**.

Thus *nú'ùgɔ* matches *nɔ́bìrɛ* tonally in the SF but *náafɔ* in the LF:

Lì à nɛ̄ nɔ́bìr.	"It's a leg."
Lì à nɛ̄ nú'ùg.	"It's a hand."
Lì à nɛ̄ náaf.	"It's a cow."
Lì kā' nɔ́bɪrɛ̄.	"It's not a leg."
Lì kā' ↓nú'ugɔ̄.	"It's not a hand."
Lì kā' ↓náafɔ̄.	"It's not a cow."

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

The clusters *kk tt pp ŋŋ* 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 *ŋ* may reflect that the rule is in fact changing in this way. In Tone Patterns *kk tt pp ŋŋ* 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   pῡ   **zábὶ** ͜ fɔ̄   ⁺ø.*   "He didn't fight you."
> **3AN NEG.IND** fight   **2SG.OB NEG**.

but   *Lὶ   kā'   **mɔ́lɩ**fɔ̄   ⁺ø.*   "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 ŋŋ* 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 22.6.1.1 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 *náafʔ* "cow" do not become *náàf (contrast *nú'ùgʔ* "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 it avoids any need for multiple notations for identical surface tone patterns.

5.3.2 Downstepping before H

Downstep insertion applies after Levelling and H Spreading.

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Downstep is inserted before H after:
> H: always
> M: if the next syllable is stressed and no L toneme intervenes

</div>

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   m̀   gɔ̄s   ↓búŋ   **lā**.*
> And **1SG** look.at donkey**:SG ART**.
> "And I looked at the donkey."

but *Kà   m̀   gɔ̄s   búŋ   lā bɛ̄oɡʋ-n.*
> And **1SG** look.at donkey**:SG ART** morning-**LOC**.
> "And I looked at the donkey in the morning."

> *Bīig   lā   ↓sá   **mɛ̀ɛd**   yīr   lā.*
> Child**:SG ART   TNS** build**:DIPF** house**:SG ART**.
> "The child was building the house yesterday."

but *Bīig   lā   sá   mɛ̀   yīr   lā.*
> Child**:SG ART TNS** build house**:SG ART**.
> "The child built the house yesterday."

> *Mān   ↓bú-**pìəl**   kā'e   ⁺ø.*
> **1SG.CNTR** goat-white**:SG NEG.BE NEG**.
> "My white goat isn't there."

but   *Mān   bú-sừŋ   kā'e ⁺ø.*
       1SG.CNTR goat-good:**SG NEG.BE NEG**.
       "My good goat isn't there."

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

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

       No downstep when L toneme intervenes before the stressed syllable:

       *Lì   à   nɛ̄ ↓náaf   **lā**.*   "It's the cow."
       3INAN COP   FOC   cow:**SG ART**.

but   *Lì   à   nɛ̄ dɔ́ɔ̀g   **lā**.*   "It's the hut."
       3INAN COP FOC hut:**SG ART**.

       The tonemes of the following syllable itself are not relevant:

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

       Mān   kúkɔ̄r kā'e ⁺ø.   "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'   ňyī↓rí**fɔ̄** ⁺ø.*   "It's not an egusi seed."
       3INAN NEG.BE egusi:**SG   NEG**.

       *Lì   kā'   púkɔ̀ɔňr**ɛ̄** ⁺ø.*   "It's not a widow."
       3INAN NEG.BE widow:**SG   NEG**.

       *Ànɔ́'ɔnì‿ø   ňyɛ̄ púkɔ̀ɔň**rɛ** ⁺ø?*
       Who   **SER** see widow:**SG   CQ**?
       "Who saw a widow?"

but   *Lì   à   nɛ̄ ↓pú**kɔ̀ɔňr** 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   pū   yādɩ↓gí**dā** ⁺ø.*   "He isn't scattering."
      3AN NEG.IND scatter:**DIPF NEG**.

but   *Ànɔ́'ɔnì‿ø   yādɩgí**dà** ⁺ø?*   "Who is scattering?"
      Who   **SER** scatter:**DIPF CQ**?

      *Lì   kā'   bī-↓pʊ́**ŋā** ⁺ø.*   "It's not a girl."
      3INAN NEG.BE child-girl:**SG NEG**.

but   *Lì   kā'   bī-pʊ́**ŋàa**   ⁺ø?*   "Isn't it a girl?"
      3INAN NEG.BE child-girl:**SG PQ**?

      *Ò   pū   ňyɛ̄↓sʊ́'ʊ**gā** ⁺ø.*   "She didn't find a knife."
      3AN NEG.IND see knife:**SG NEG**.

but   *Ànɔ́'ɔnì‿ø   ňyɛ̄ sʊ́'ʊ**gà** ⁺ø?*   "Who found a knife?"
      Who   **SER** see knife:**SG CQ**.

and   *Ò   pū   dʊ́**gɛ̀ɛ** ⁺ø ⁺ø?*   "Didn't she cook?"
      3AN NEG.IND cook   **NEG PQ**.

Downstep is inserted between any two adjacent H tonemes:

      Kà   m̀   gɔ̄s   gɛ́l   lā bɛ̄ogʊ-n.
      And **1SG** look.at egg:**SG ART** morning-**LOC**.
      "And I looked at the egg in the morning."

but   *M̀ gɔ́s   ↓gɛ́l   lā bɛ̄ogʊ-n.*
      1SG look.at egg:**SG ART** morning-**LOC**.
      "I looked at the egg in the morning."

      Kà   m̀   gɔ̄s   náaf   lā bɛ̄ogʊ-n.
      And **1SG** look.at donkey:**SG ART** morning-**LOC**.
      "And I looked at the cow in the morning."

but   *M̀ gɔ́s   ↓náaf   lā bɛ̄ogʊ-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 33.6, Conjunctions 27.1.3, particle-verbs 22.7.2 and Post-Subject Particles 27.1.4.

Clause linker particles, Verbal Predicator 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 nominal cbs have not undergone Apocope; some end in long vowels impossible for SFs: *lɛ̀ɛ* "but" 22.7.1 *ňyɛ̄ɛ* "habitually" 22.7.2. 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:

sāan^a/	"stranger"	[sa:n]
úun^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

a	*i̯a/ɛ*	*u̯a/ɔ*			*i*	*u*	*ɪ*	*ʊ*
aa	*iə*	*uɵ*	*ɛɛ*	*ɔɔ*	*ii*	*uu*	*ɪɪ*	*ʊʊ*

The digraphs represent *monophthongs*, short or long, affected by Agolle Vowel Breaking 4.1.1. At this underlying level, short *i̯a u̯a* 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 uɵ ɪ ʊ ɪɪ ʊʊ*. Short *i u* only occur nasalised after *m n* and *ňy ňw ← ɲ ŋ͡m*, however 4.2.1.

A few words contain **Primary Diphthongs**, comprising *aʊ aʊň u̯i̯* 4.2.3 along with the *i̯a'a ʊ'a i̯aň'a ʊň'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*ᵉ⁼	"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 nominal derivatives from verb stems and frequently 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 CVn CVsɩn CVlɩn*. They only occur in nominal stems. Their vowels are limited to the short **affix vowels** *a ɩ ʋ* and show no contrastive glottalisation or nasalisation. A few stems have two successive prefixes.

*tītā'ar*ᵋ	"big"	*bʋ̀mbàrɩg*ᵃ	"ant"
*sīlɩnsíùňg*ᵓ	"spider"	*tàsɩntàl*ˡᵋ	"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 sɩ fʋ ɩɩ rɩ lɩ aa gʋ dɩ mm bʋ da ma na la*. These draw their vowels from the set of **affix vowels** *a ɩ ʋ* which here may be short or long:

a	*ɩ*	*ʋ*
aa	*ɩɩ*	*ʋʋ*

Affix vowels show no contrastive nasalisation or glottalisation.

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

LF-final short *ɩ ʋ* appear before Prosodic Clitics lowered to *ɛ ɔ*.

Stem	*bīi-*	"child"	sg *bīig*ᵃ	pl *bīis*ᵋ
	dɔ̀ɔ-	"hut"	sg *dɔ̀ɔg*ᵓ	pl *dɔ̀ɔd*ᵋ
	kù'ɵ-	"water"	sg *kù'ɵm*ᵐ	

Before vowel-initial flexions *CVV* root-stems become *CVC*; in productive forms always *CVy* or *CVd* 6.1.1.1:

Stem	*nɔ̄ɔ-*	"mouth"	sg *nɔ̄ɔrᵉ/*	pl *nɔ̄yá⁺*
	yʊ̄'ʊ-	"name"	sg *yʊ̄'ʊrᵉ/*	pl *yʊ̄dá⁺*

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

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

*kʊ̀ndʊ̀ŋ*ᵃ	"jackal"
*gʊ̄mpʊ̄zē̄r*ᵉ/	"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:

*ňwād-bíl*ᵃ	"star" (for the hyphen see above 2.3)
*bʊ̀rkìn*ᵃ	"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 *ι* by default but may be rounded to *ʊ* by adjacent consonants or after a short rounded root vowel 4.3.

Stem *ňwād-*	"month"	+ sg -*ga*	→	*ňwādιgá*	LF	*ňwādιg*	SF
		+ pl -*sι*	→	*ňwādιsέ*	LF	*ňwādιs*	SF
Stem *kʊ̄g-*	"chair"	+ sg -*ga*	→	*kʊ̄ka*	LF	*kʊ̄k*	SF
		+ pl -*sι*	→	*kʊ̄gʊsɛ*	LF	*kʊ̄gʊs*	SF
Stem *nɔ́b-*	"leg"	+ sg -*rι*	→	*nɔ́bιrē̄*	LF	*nɔ́bìr*	SF
Stem *dūm-*	"knee"	+ pl -*aa*	→	*dūmaa*	LF	*dūma*	SF
Stem *dūm-*	"knee"	+ sg -*rι*	→	*dūmnɛ*	LF	*dūm*	SF

Deletion of word-final -*ɔ* after velars by Apocope may lead to a contrast between round and unrounded epenthetic vowels 6.3.2:

	*āaňdιg*ᵃ	← *ãādιga*	"black plum tree"
but	*gàadʊg*ᵓ	← *gaadιgʊ*	"(sur)passing" (gerund)

6.1.1   Root Alternations

6.1.1.1   *CVV~CV~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 *kūʋd*ᵃ/.

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

*yīr*ᵋ/	"house"	*yā*⁺/	plural
zā⁺/	"millet"		
kī⁺/	"cereal, millet"		
mùi̯⁺	"rice"		
*bīl*ᵃ	"little"	*bībɩs*ᵋ	plural
*zūg*ᵓ/	"head"	*zūt*ᵋ/	plural

The cbs of such words may behave tonally like nominal 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.

When the long-vowel variant is **glottalised**, the vowel is always one of *a'a i̯a'a ʋ'a* or *a'aň i̯aň'a ʋň'a* (*ʋ'a ʋň'a* appear as *u̯'aa u̯'ňaa* 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*:

*zàk*ᵃ	"compound"	*zà'as*ᵋ	plural	(*g*ᵃ|*s*ᵋ Class)
*lāu̯k*ᵓ	"item of goods"	*lā'ad*ᵋ	plural	(*g*ᵓ|*d*ᵋ Class)
*yàk*ᵋ	"unhang"	*yà'al*ᵋ	"hang up"	
*pi̯àu̯ňk*ᵓ	"word"	*pi̯àň'ad*ᵋ	plural	(*g*ᵓ|*d*ᵋ Class)
*pu̯āk*ᵃ	"female" (adj)	*pō'as*ᵋ	plural	(*g*ᵃ|*s*ᵋ Class)
*pu̯'ā*ᵃ	"woman"	*pō'ab*ᵃ	plural	(ᵃ|*b*ᵃ Class)
*bɔ̀k*ᵓ	"pit"	*bʋ̀'ad*ᵋ	plural	(*g*ᵓ|*d*ᵋ Class)

With roots in *i̯a'a ʋ'a i̯aň'a ʋň'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 *aň'a* may either pattern like this or show the same behaviour as regular *aa aaň* roots, as a lexical matter in each case:

dà'a⁼	"market"	*dà'as*ᵋ	plural	(*g*ᵃ|*s*ᵋ Class)

Comparative evidence shows that the glottalisation in the alternating root-stems is secondary to the deletion of an 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 uɵ aaň ɛɛň ɔɔň* (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:

*pi̯āň'*ᵃ   "speak" base form   *pi̯āň'ad*ᵃ/   dipf

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

kā'e̯⁺   "not be"

Non-glottalised roots of this kind show the long vowel before suffixes beginning with *g and the short vowel elsewhere. The explanation is probably again to be sought in deletion of root-final consonants, but in this case the process has occurred much earlier in the history of the Western Oti-Volta family, and the forms have been subject to considerable analogical levelling within paradigms.

Suffixes beginning with *d change this to *tt*, and *b changes to *pp*, but before suffixes beginning with *g the long vowel remains:

*fūug*ᵓ/	"clothing"		pl *fūt*ᵋ/		
*pɔ̄ɔg*ᵓ/	"field"		pl *pɔ̄t*ᵋ/		
*dɔ̀ɔg*ᵓ	"hut"		pl *dɔ̀t*ᵋ		
*dāʋg*ᵓ	"male"	cf	*dāp*ᵃ		"men"
*tɔ̄ɔg*ᵓ	"bitter"	cf	*tɔ̄e̯*ᵃ/		"be bitter"
gāaň⁼/	"ebony tree"	cf	*gāňr*ᵋ/		"ebony fruit"
	(← *gã̄ãga)				

Idiosyncratic singular forms are seen in the two ᵃ|bᵃ Class nouns 2.2.2

dāu̯⁺	"man"	pl *dāp*ᵃ	
tāu̯ň⁺/	"opposite-sex sib"	pl *tāňp*ᵃ/	

The long vowel before a nominal singular suffix -*g*ᵃ or -*g*ᵓ is usually generalised throughout the flexional paradigm. Thus the alternative plural forms occur

*fūug*ᵓ/	"clothing"	pl *fūud*ᵋ/	
*pɔ̄ɔg*ᵓ/	"field"	pl *pɔ̄ɔd*ᵋ/	
*dɔ̀ɔg*ᵓ	"hut"	pl *dɔ̀ɔd*ᵋ	

and the plurals *always* show long vowels in

dāʋgɔ	"male"	pl *dāadᵋ*
tɔ̄ɔgɔ	"bitter"	pl *tɔ̄ɔdᵋ*
gāaň⁼ᐟ	"ebony tree"	pl *gāaňsᵋᐟ*

Variable Verbs which show a short vowel before dynamic imperfective -*t*ᵃ invariably introduce it into the -*m*ᵃ imperative, with gemination of the *m*; from a historical point of view this too is due to analogical levelling:

ňyɛ̄⁺	"see"	dipf *ňyɛ̄t*ᵃᐟ	imp *ňyɛ̀m*ᵃ
dū⁺	"rise"	dipf *dūt*ᵃᐟ	imp *dʋ̀m*ᵃ
lʋ̀⁺ or *lì⁺*	"fall"	dipf *lʋ̀t*ᵃ or *lìt*ᵃ	imp *lʋ̀m*ᵃ or *lìm*ᵃ
zɔ̀⁺	"run"	dipf *zɔ̀t*ᵃ	imp *zɔ̀m*ᵃ
dì⁺	"eat"	dipf *dìt*ᵃ	imp *dìm*ᵃ
yī⁺	"emerge"	dipf *yīt*ᵃᐟ	imp *yìm*ᵃ

The irregular verb

kɛ̄⁺	"allow"	dipf *kɛ̄t*ᵃᐟ	imp *kɛ̀l*ᵃ

does not show gemination of the initial of the unique suffix -*l*ᵃ.
Before *derivational* suffixes the vowel is usually long:

dìɪsᵋ	"feed"	cf	*dì⁺*	"eat"
vū'ʋgᵋᐟ	"come alive"	cf	*vūrᵋᐟ*	"alive"
			*vūe̯*ᵃᐟ	"be alive"
			*vūm*ᵐᐟ	"life"
*dàalɪm*ᵐ	"masculinity"	cf	*dāp*ᵃ	"men"

There are exceptions with -*s*-:

gɔ̄sᵋ	"look"	dipf *gɔ̄t*ᵃᐟ	imp *gɔ̀m*ᵐᵃ
		or *gɔ̄sɪd*ᵃᐟ	or *gɔ̀sɪm*ᵃ
tìsᵋ	"give"	dipf *tìt*ᵃ	
		or *tìsɪd*ᵃ	
yīsᵋ	"make go/come out"	*yī⁺*	"emerge"

The causative *yīs*ᵋ has a by-form *yīis*ᵋᐟ; this is clearly shown to be analogical by its gerund *yīisíb*ᵓ, the unique 3-mora stem in the *b*ᵓ Class.

Regularly formed *gerunds* show long vowels: *dīɪbↄ* "food", *ňyɛ̄ɛbↄ/* "seeing."

nↄ̄-lↄ́ↄ̀rᵋ	"fasting" ("mouth-tying")
fū-yέɛ̀rᵋ	"shirt-wearing" (WK, nonce-form)

There are two instances of a short vowel before *-rᵋ*:

nā'-lↄ́rᵋ	"place in the compound for tying up cows" WK
wɩ̀d-lↄ̄rᵋ/	"place in the compound for tying up horses" WK

As with *glottalised* alternating *CVV~CV* types, the explanation of these phenomena 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, Mooré evidence suggests that such roots originally had the form **CVy* or **CVw*, where **y *w* are the reflexes of original palatal (or alveolar) and labial (or labiovelar) consonants of some kind. In assimilation, **y* behaves like an alveolar and **w* behaves like a labial consonant. Like the initial consonant of the **ya* of Dynamic Invariable Verbs, this **y* may have originated in **ʎ* 6.2.1.1; compare also the sporadic **y/*d* alternations described below.

Mooré	Kusaal	
zòe	*zↄ̀⁺*	"run"
kóɛɛgà	*kùkↄ̄rᵋ/*	"voice"
lùi	*lù⁺* or *lì⁺*	"fall"
ráoa	*dāu̯⁺*	"man"
rápa	*dāpᵃ*	"men"
tão	*tↄ̀ň⁺*	"shoot"
tã́po ["bow"]	*tāňpↄ*	"war"

Allomorphs with a short vowel and a following geminate consonant may have originated from assimilation of root-final **y* with following alveolars and root-final **w* with following labials. The *CVV* allomorphs seen before velars would result via a sequence of epenthetic vowel insertion, lenition of **y/*w* and development of a long vowel by Fusion. The monophthongs in verb base forms can be accounted for by levelling: SFs ending in a vowel correspond to LFs with the vowel lengthened in all cases except Invariable Verbs 2.2.2. Plurals corresponding to singulars with suffixes beginning with velars have generally aquired long vowels by levelling, and Variable Verbs with a short vowel preceding *-tᵃ* in the dipf also show a short vowel in the *-mᵃ* imperative (with gemination of *m*) in accordance with the strongly marked tendency to levelling within verb paradigms.

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

dāu̯⁺	"man" 2.2.2	pl *dāp*ᵃ
tāu̯ň⁺/	"sib of opposite sex"	pl *tāňp*ᵃ/
sāe̯ň⁺	"blacksmith"	pl *sāaňb*ᵃ
or *sāe̯ň*ᵃ		
sɔ̄e̯ň⁺	"witch"	pl *sɔ̄ɔňb*ᵃ
or *sɔ̄e̯ň*ᵃ		

Similarly, root-final *y is preserved as *y* before the flexion *-a* of the Invariable Verbs *tɔ̄e̯*ᵃ/ "be bitter" and *vʋ̄e̯*ᵃ/ "be alive, *àe̯ň*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*⁺:

*kùkɔ̄r*ᵋ/	"voice"	pl *kùkɔ̄yá*⁺
*gāňr*ᵋ/	"fruit of Nigerian ebony"	pl *gāňyá*⁺
*bàlàar*ᵋ	"stick, club"	pl *bàlàya*⁺
*nɔ̄ɔr*ᵋ/	"mouth"	pl *nɔ̄yá*⁺
*zʋ̄ʋr*ᵋ	"tail"	pl *zʋ̄ya*⁺

The words with sg *CVr*ᵋ show the expected assimilation of *yr → *rr → *r*. The singulars in *CVVr*ᵋ would represent the expected outcome for *CVw* root-stems; this implies that the plurals are the result of levelling of *CVwa*⁺ to *CVya*⁺; there is comparative evidence that this has in fact taken place historically (cf Mooré *náooré* "leg", plural *náoa*.) In current Kusaal, consonantal /w/ only occurs root-initially. Some singulars may in fact now owe their short vowels to the analogy of the plurals: possible candidates are *gāňr*ᵋ/ "fruit of Nigerian ebony" (above) and *gbɛ̄r*ᵋ/ "thigh."

Synchronically, all these are simply *CV* or *CVV* stems, and the rule is for any long final root vowel to be shortened in the plural; this is clear from the changes in

*bīər*ᵋ/	"elder same-sex sibling"	pl *bi̯ēyá*⁺
*sūər*ᵋ/	"road"	pl *su̯ēyá*⁺
*zūər*ᵋ	"hill"	pl *zu̯ēya*⁺

where the plurals show *i̯e u̯e* vowels [i̯ɪ] [u̯ɪ] found only in this one context.

Taking the *-y-* of these *r*ᵋ|*a*⁺ Class plurals as originally root-final *y accounts for its different patterning from the *-y-* of Invariable Verbs, which originated as a derivational suffix 11.2; before that *y*, glottalised vowels remain long and glottalised and no *-d-* appears (see below): *sʋ̄'e*ʸᵃ/ "own", cf *sʋ̄'ʋlím*ᵐ "possession" 13.1.1.4.

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

*yū'ʋr*ᵉ/	"name"	pl *yūdá*⁺
*pɔ̀ñ'ɔr*ᵋ	"cripple"	pl *pɔ̀ňda*⁺
*tītā'ar*ᵋ	"big"	pl *tītāda*⁺
*yū'ɵr*ᵋ	"penis"	pl *yu̯āda*⁺

Toneme allocation reveals that surface *r* after a short root vowel frequently represents an original consonant cluster 7.2.1.1, and the exceptions can mostly be explained as due to analogy. "Epenthetic *d*" can be accounted for by supposing that original single *r was deleted after short root vowels, with glottalisation and lengthening of the vowel, unless it was followed by an affix vowel or by *y; subsequently single *r became *d* before *a*, and the cluster *ry gave rise to a new geminate *rr. Current *CVr-* stems in the *r*ᵋ|*a*⁺ Class may all reflect *ry: they comprise deverbal nominals from Invariable Verbs in *-r*ᵃ 13.1.1.1, along with the adjective in *yī-pɔ́ñrà*⁺ "nearby houses" and the noun *kʋ̀kpàr*ᵋ "palm fruit."

Cognates in languages without glottalised vowels show no *-d-* or *-r-*: Mooré *yʋ́yà* = Kusaal *yūdá*⁺ "names." This is most straightforwardly taken as levelling on the basis of *CVy/*CVw root-stems. Evidence that the languages without glottalisation did share the development *ra → *da* appears in the cognate words for "young woman"

Agolle Kusaal	sg *pu̯'à-sādɪr*ᵉ/	pl *pu̯'à-sādá*⁺ (but *pɛ̄'-sá'a*⁼ "ewe lamb")
Toende Kusaal	sg *pɔ'ɔ-sa'a*	pl *pɔ'ɔ-sa'as*
Farefare	sg *pug-sarga*	pl *pug-sarsɪ*
Mooré	sg *pʋ̀gsádà*	pl *pʋ̀gsádbà*
Mampruli	sg *pɔ'asariga*	pl *pɔ'asara* [sic, *r*ᵋ|*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 *pʋ̀gsádà*.

This loss of *r cannot account for all remaining cases of Kusaal glottalisation beside those due to loss of *g after short low vowels (above). For example, the Toende Kusaal word *nɔ̄'ɔt* "leg" pl *nɔba* (where the Agolle sg *nɔ́bɪr*ᵋ is remodelled on the pl) suggests that Kusaal glottalisation can also reflect lenition of historical labial or labiovelar consonants of some kind, and not just alveolars.

Stems in historical **-ag-* **-i̯ag-* **-u̯ag-* (see above) may still inflect as *CVC*-stems, or may show analogical forms with *-d-*:

*si̯à'ar*ᵋ	"forest"	pl *si̯à'a*⁺
*bà'ar*ᵋ	"idol"	pl *bà'a*⁺ or *bàda*⁺ *bagrɪ; Farefare *bàgrɛ̀*

*bi̯āň'ar*ᵋ/	"mud, riverbed"	pl *bi̯áň'a*⁺
*mʊ̀'ar*ᵋ	"reservoir, dam"	pl *mʊ̠'àa*⁺ or *mʊ̀'ada*⁺
*zànkʊ̀'ar*ᵋ	"jackal"	pl *zànkʊ̠'àa*⁺ or *zànkʊ̀'ada*⁺

Other cases of *CVV* roots alternating with *CVC* are unsystematic. Most involve alternations between *d* and *b* respectively and the root-final **y* and **w* hypothesised above:

y/*d*:	*lɔ̄*⁺	"tie"		*lɔ̄dɪg*ᵋ/	"untie"	
	cf *lɔ*	"tie"	(Dagbani)	*lɔrgi*	"untie"	(Dagbani)
	lóe	"tie"	(Mooré)	*lókè* or *lódgè*	"untie"	(Mooré)

| *y*/*d*: | *pʊ̄*⁺ | "divide" | | *pʊ̄dɪg*ᵋ/ | "divide" |
| | cf *pʊ́i* | "divide" | (Mooré) | | |

y/*d*:				*bɔ̀dɪg*ᵋ	"lose, get lost":
	cf *bòɪ*	"*perdre, disparaître*"		*bóríg*	"*fondre, disparaître*"
		(Toende)			(Toende)

w/*b*:	*dāʊ̠*⁺	"man"		*bī-díbìŋ*ᵃ	"boy"
			cf *bìríblá*		"boy" (Mooré)
			with *bìpúglá*		"girl" (Mooré)
			and *pʊ̠'ā*		"woman" (**pʊ̠ag*-)

w/*b*:	*nɔ̄*⁺	"tread"		*nɔ́bìr*ᵋ	"foot"
	cf *nao*	"tread" (Mooré)			
	náooré	"foot" (Mooré)			

| -/*g*: | *wìid*ᵃ | "draw water" dipf | *wìk*ᵋ | base form (← **wiggɪ*) |
| | *vī̠'*⁺ | "uproot" | *vīk*ᵋ/ | "uproot" (← **viggɪ*) |

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:

*zíiŋ*ᵃ (← **zīímgā*)	*zīmí*⁺	*zīm*-	"fish"
*náaʔ*ᵓ (← **nāágfʊ̄*)	*nīigí*⁺	*nā'*- (← **nāg*-)	"cow"
*wáaʔ*ᵓ(← **wāágfʊ̄*)	*wīigí*⁺	*wā'*- (← **wāg*-)	"snake"
*pīim*ᵐ/	*pīmá*⁺		"arrow"
*yʊ̀ʊm*ᵐᵋ	*yʊ̀ma*⁺		"year"

The alternation also appears in derivation:

tʊ̄ʊma[+]	"work" noun		*tʊ̀m*[m]	"work" verb
yɛ̄óŋ	"one"		*yīu̯ŋ*[ɔ/]	"single"
kāal[ɛ/]	"count"		*kāl*[lɛ/]	"number"
màal[ɛ]	"sacrifice" verb		*mālʊŋ*[ɔ]	"sacrifice" noun
tʊ̄ʊlúg[ɔ]	"hot"		*tʊ̄l*[la/]	"be hot"

The alternation in *yīis*[ɛ/]/*yīs*[ɛ] "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:

pìəlıg[a]	"white"		*pɛ̀lıg*[ɛ]	"whiten"
kpī'oŋ[ɔ]	"strong"		*kpɛ̀'ŋ*[ɛ]	"strengthen"
lìəb[ɛ]	"become"		*lɛ̀bıg*[ɛ]	"turn over"
tʊ̄ʊlúg[ɔ]	"hot"		*tʊ̄lıg*[ɛ/]	"heat"
yāar[ɛ/]	"scatter"		*yādıg*[ɛ/]	"scatter"
dɛ̄εŋ[a]	"first"		*dɛ̀ŋ*[ɛ]	"go first"
pìəb[ɛ]	"blow" (flute)		*pɛ̀bıs*[ɛ]	"blow" (wind)
yùul[ɛ]	"swing" intrans		*yùlıg*[ɛ]	"swing" transitive
cf *ɛ̄εn̆b*[ɛ/]	"lay a foundation"		cf Mooré *yɛ̆bgè id*	

The only derivational suffix found after a *CVVC* allomorph is *-l-* in *-lım-* "-ness/-hood" 13.1.2:

sáannìm[m]	"strangerhood"	(**saanlımmʊ*)	

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.

6.1.1.3 Glottalisation before Derivational Suffixes

Vowel-final roots become glottalised before derivational **g* and **s* in

kɔ̀[+]	"break" intrans		*kɔ̀'ɔg*[ɛ]	"break" trans/intrans
kɔ̀ɔlʊ́ŋ[ɔ]	"broken"		*kɔ̀'ɔs*[ɛ]	"break several times"
pɔ̀ɔd[a]	"be few"		*pɔ̀'ɔg*[ɛ]	"diminish"
vʊ̄e̯[a/]	"be alive"		*vʊ̄'ʊg*[ɛ/]	"make, come alive"

6.2 Consonant Changes

For deletion of underlying *g* after *aa iə uɵ aaǎ ɛɛǎ ɔɔǎ* see 6.3.1; for a historical process of deletion of *g* after *a ı̣a ụa aǎ ı̣aǎ ụaǎ* 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** (*ı* 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.

1ˢᵗ↓ 2ⁿᵈ→	*g*	*d*	*b*	*m*	*r*	*s*	*l*	*f*
g	*kk*	*ə*	*ə*	*ə*	*ə*	*ə*		
d	*ə*	*tt*	*ə*	*ə*	*ə*	*ə*		
b	*ə*	*ə*	*pp*	[*mm*]	*ə*	*ə*		
m	*ŋŋ*	*mn*	*mm*	*mm*	*mn*	[*ı̃s*]	*nn*	
n	*ŋŋ*	*nn*	*mm*	*ə*	*nn*	*ı̃s*	*nn*	*˜f*
r	*ə*	*ə*	*ə*	*ə*	*r*	*ə*	*tt*	*ə*
s	*ə*	*ə*	*ə*	*ə*	*ə*	*ə*		
l	*ə*	*nn*	*ə*	*ə*	*ll*	*ə*	*ll*	*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 → ı̃s   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:

*tɛ̄ŋ*ᵃ	"land"	pl	*tɛ̃ɛñs*ᵋ	← *tɛnsɩ
*kʋ̀lɩŋ*ᵃ	"door"	pl	*kʋ̀lɩs*ᵋ	← *kʋlɩnsɩ

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

*bʋ̄tɩŋ*ᵃ	"cup"	pl	*bʋ̄tɩɩs*ᵋ

This probably reflects a reanalysis of the form as nominal prefix *bʋ̄* + *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:

nīfᴼ/	"eye"	pl	*nīní⁺*
píɩñfᴼ	"genet"	pl	*pīɩní⁺*

rr becomes *r* in e.g.

*kʋ̀kpàr*ᵋ	"palm fruit"	pl	*kʋ̀kpàra⁺*

The few stems in *-r-* in the *r*ᵋ|*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

*pūsɩg*ᵃ/	*pūsɩs*ᵋ/	*pūs-*	"tamarind"

However, all other examples of *g*ᵃ|*s*ᵋ plurals ending in *-sɩs*ᵋ in my materials are for *-sɩnsɩ, from stems in *m. A plural *pūs*ᵋ/ 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*ᵋ Class and of their fruits with the *r*ᵋ|*a*⁺ and *g*ᴼ|*d*ᵋ 35.6; *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 Deverbal Adjectives 13.1.1.2.1 never undergo assimilation with the following initial consonant of a suffix:

*kìm*ᵐ	"tend flock"	→	*kɔ̀ñb-kīm*ⁿᵃ	"shepherd"
			*kɔ̀ñb-kīmmɩb*ᵃ	
		or	*kɔ̀ñb-kīmnɩb*ᵃ	

*bùn*ᵋ	"reap"	→	*bū̄n-búnnɩr*ᵋ	"thing for reaping"
*tʊ̀m*ᵐ	"work"	→	*bū̄n-túmmɩr*ᵋ	"useful thing"
			*tʊ̄mmɩr*ᵋ DK WK	"useful"
		pl	*tʊ̄mna*⁺ DK	
			tʊ̄mma⁺ WK	
*gīlɩg*ᵋ/	"go around"	→	*pʊ̰'à-gīnníg*ᵃ	"prostitute"
*kēŋ*ᵋ/	"go"	→	*bʊ̀ŋ-kēnnír*ᵋ	"moving donkey"
*vʊ̄l*ᵋ	"swallow"	→	*tì-vʊ̄nním*ᵐ	"oral medication"
*tʊ̀m*ᵐ	"work"	→	*tʊ̀mmím-tāa*⁼	"co-worker"

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

*sɔ̄nnɩr*ᵋ	*sɔ̄nna*⁺	*sɔ̀n-*	"inner *zàk* wall"
*sāngʊ́nnìr*ᵋ	*sāngʊ́nnà*⁺	*sāngʊ́n-*	"millipede"
*sūmmɩr*ᵋ	*sūmma*⁺	*sùm-*	"groundnut"
*yīmmír*ᵋ	*yīmmá*⁺	*yīm-*	"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 *lɛ̀m*ᵐ "sip, taste" are -*mm*- stems: in KB their dipfs are always written *tammɩd zammɩd dammɩd lɛmmɩd*, and they form 3-mora-stem type gerunds: *tàmmʊgᵓ zàmmʊgᵓ dàmmʊgᵓ lɛ̀mmʊgᵓ*. The *mm* has probably arisen by assimilation of **bm* → *mm*. Mooré has -*mb*-: *zãmbe* "*tricher*", *rãmbe* "*remuer*", *lèmbe* "*goûter*". 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*ᵋ. This has led to reanalysis of the SF forms with the sg suffix ᵃ as being the result of attachment of *r*ᵋ, with new LFs and analogical plurals in -*a*⁺ 9.3.1.1. The sg tones of the deverbal adjective in *kʊ̀g-dēl*⁽ᵋ/ "chair for leaning on" (not **kʊ̀g-dɛ́l*⁽ᵋ) 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.

*dìgɩn*ᵋ	*dìgɩnɩd*ᵃ	*dìgɩnɩm*ᵃ	"lie down"
*dìgɩnʊg*ᵓ			gerund
*gɔ̀'ɔn*ᵋ	*gɔ̀'ɔnɩd*ᵃ	*gɔ̀'ɔnɩm*ᵃ	"extend neck"

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

bùn^ɛ	*bùn*^na	*bùnɪm*^a	"reap"
būnɪb^ɔ			gerund

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

tɔ̄ɔm^m/	*tɔ́ɔm*^ma	*tɔ̀ɔm*^ma	"depart"
or *tɔ̄ɔmíd*^a			
tɔ́ɔŋ^ɔ			gerund
or *tɔ̄ɔmʊ́g*^ɔ			
kàrɪm^m	*kàrɪm*^m	*kàrɪm*^ma	"read"
or *kàrɪmɪd*^a			
kàrʊŋ^ɔ			gerund
or *kàrɪmʊg*^ɔ			

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 *nɛ̄*^+/, and require forms with epenthesis everywhere else:

M̀ pū kárìmmā.	"I'm not reading."
M̀ kárìm nɛ̄.	"I'm reading."
Kà bà kárɪmìd.	"And they were reading."
Kà bà kárìm.	only "And they read."

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

tùm^m	*tùm*^ma	*tùm*^ma	"work"
wùm^m	*wùm*^ma	*wùm*^ma	"hear"

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

Lin wusa ka ya tumid, tumi li …
Lìn   wūsa kà   yà tùmɪd, tùmmī‿ ø…
DEM.INAN all   and **2PL** do:**DIPF**, do:**IMP**   **2PL.SUB** …
"Everything you do, do it…" (Col 3:23, 1996)

ka nan kpɛn wʊmid ye m bɛɛ li pʊʊgin nannanna la.
kà   nán kpɛ̀n wùmɪd   yɛ́   m̀   bɛ́ɛ‿ lì   pū̄ʊgʊ-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 <u>9</u> <u>10</u> <u>11.1</u>):

*gg → kk		gìgısᵉ	"dumb people"	sg	gìkᵃ	
	cf	kɔ̄lɪsᵉ	"river"	sg	kɔ̄lɪgᵃ	
*dd → tt		bʊ̀dᵉ	"plant"	dipf	bʊ̀tᵃ	
	cf	dʊ̄gᵉ	"cook"	dipf	dʊ̄gʊdᵃ/	
*bb→ pp		sɔ̄bᵉ	"write"	ger	sɔ̄pᵓ/	
	cf	kpàrᵉ	"lock"	ger	kpārɪbᵓ	
*ld → nn		kɔ̀lʊgᵓ	"bag"	pl	kɔ̀nⁿᵉ	
	cf	zūɵbúgᵓ	"hair"	pl	zūɵbídᵉ	
*mg → ŋŋ		bʊ̀mɪsᵉ	"donkeys"	sg	bʊ̀ŋᵃ	
	cf	ňwādɪsᵉ/	"months"	sg	ňwādɪgᵃ/	
*ng → ŋŋ		gbàna⁺	"books"	sg	gbàṵ̈ŋᵓ	
	cf	wābɪdᵉ/	"elephants"	sg	wābʊgᵓ/	
*nr → nn		tāna⁺	"earths"	sg	tānⁿᵉ	
	cf	dìga⁺	"dwarfs"	sg	dìgɪrᵉ	
*mr → mn		dūma⁺	"knees"	sg	dūmⁿᵉ	
	cf	nɔ̄bá⁺	"legs"	sg	nɔ́bìrᵉ	
*lr → ll		gēlá⁺	"eggs"	sg	gέlˡᵉ	
	cf	kūgá⁺	"stones"	sg	kūgʊrᵉ/	
*nb → mm		sāanᵃ/	"stranger"	pl	sáamᵐᵃ	
	cf	nīdᵃ/	"person"	pl	nīdɪbᵃ/	
*mb → mm		kìmᵐ	"tend flock"	ger	kīmᵐᵓ	
	cf	kàdᵉ	"drive away"	ger	kādɪbᵓ	

Language names <u>9.3.4.1</u>:

*ll → ll		Bùlˡᵉ	"Buli"	cf	Bùlɪsᵉ	"Bulsa"
		Àgɔ̀lˡᵉ	"Agolle Kusaal"	cf	Àgɔ̀lˡᵉ	"Agolle area"

*rl → tt	*Bāt*ᵉ/	"Bisa language"	cf	*Bārɪs*ᵉ/	"Bisa people"	
	*Yāt*ᵉ/	"Yarsi language"	cf	*Yārɪs*ᵉ/	"Yarsi people"	

*rl → tt   *Bāt*ᵉ/   "Bisa language"   cf   *Bārɪs*ᵉ/   "Bisa people"
             *Yāt*ᵉ/   "Yarsi language"   cf   *Yārɪs*ᵉ/   "Yarsi people"

*ml → nn   *Dàgbān*ⁿᵉ/ "Dagbani"   cf   *Dàgbām*ᵐᵃ/   "Dagomba"
             *Yàan*ⁿᵉ   "Yansi language"   cf   *Yàamɪs*ᵉ   "Yansi people"

*nl → nn   *Gūrín*ⁿᵉ   "Farefare   cf   *Gūrís*ᵉ   "Farefare
                           language"   people"

Unexpected epenthesis is seen in

*Ňwāmpūrɪl*ᵉ/ "Mampruli"   cf   *Ňwāmpūrɪs*ᵉ/"Mamprussi"
*Kàmbʋnɪr*ᵉ   "Twi"   cf   *Kàmbʋmɪs*ᵉ "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*ᵉ "put (hat etc) on someone":

	*pìd*ᵉ	"put (hat etc) on"
	*pìdɪg*ᵉ	"take (hat etc) off"
	*pìl*ᵉ	"put (hat etc) on someone"
	*pìlɪg*ᵉ	"take (hat etc) off someone"
cf	*yè*⁺	"dress oneself"
	*yèɛg*ᵉ	"undress oneself"
	*yèɛl*ᵉ	"dress another"

Single *-s-* may also represent an earlier cluster in some words. The Agent Nouns *sɔ̀s*ᵃ "beggar" and *tìs*ᵃ "giver" drop the formant *-d-* in the sg and have Tone Pattern L like 3-mora stems 9.3.1; in *tìs*ᵉ "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 *gɔ̄s*ᵉ "look" makes a Pattern HL gerund 12.1.1.1.1 like *kīr*ᵉ "hurry" above; so too does *sɔ̄ňs*ᵉ "converse" 12.1.1.1.1.

Single *-n-* may represent an original cluster after an epenthetic vowel within a stem. The word *pībɪn*ⁿᵉ pl *pībɪna*⁺ "covering" 12.1.2 has single *-n-* for my informants, but the corresponding Mooré word has *-nd-*: *pìbíndgà* "*couvercle*." The Mooré equivalent of the assume-stance suffix *-n-* 13.2.1.1 is *-nd-*: *zĭ* "*être assis*", *zĭndi* "*s'asseoir*"; *gãe* "*être couché*", *gãandè* "*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 <u>11.2</u> 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-** <u>6.3.2</u> and *CVV* roots adopt the allomorph *CYy* before **-a** <u>6.1.1.1</u>:

sū'e^ya/	"own"	cf *sū'ʋlím*^m	"possession"
tɔ̄ę^a/	"be bitter"	cf *tɔ̄ɔgɔ*	"bitter"

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

dīgɩ^ya/	"be lying down"
vābɩ^ya/	"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:

dɔ̄l^la/	"be with someone in a subordinate rôle"	
nɛ̄n^na/	"envy"	
mɔ̄r^a/	"have"	cf gerund *mɔ̄rím*^m showing **rr*

These forms can all be attributed to a suffix **-ya*. Historically, the **y* is probably derived from **ʎ*, becoming *y* before *a* but *-l-* elsewhere (cf **ɲ* <u>8.2.1.2</u>.) In Imperfective Gerunds of Relational Verbs <u>13.1.1.4</u>, verbs with SFs ending in vowels show *-l-*, parallel to *-d-* in Variable Verbs:

sū'e^ya/	"own"	→	*sū'ʋlím*^m
bɔ̀ɔd^a	"like, want"	→	*bɔ̀ɔdɩm*^m

Proto-Oti-Volta had palatal **c *ɟ *ɲ*, which appear in Kusaal as *s z ňy* respectively. Evidence for palatal **ʎ* is provided by the Gurma correspondences of Western Oti-Volta *y-*, which may be either *y-* or *l-*; thus with the Moba words

yommg	"slave"	Kusaal:	*yàmmɩg*^a
yaalim	"salt"		*yàarɩm*^m
nlwob	"six"		*ǹyúə̀b*
nle	"two"		*ǹyí*
lwot	"open"		*yɔ̀'ɔg*^ɛ
lwo	"close"		*yɔ̀*^+

Cf also the ancient loanword *yūgúm*ⁿᵋ "camel" (Farefare *yúgnέ*, pl *yʋgma*, Mooré *yúgémdè*) ultimately from Berber **a-ləqəm* (Souag 2016); Koromfe *logomde*. (Many languages have borrowed the word via Hausa *ràaƙumii* instead.)

If the primary adjective formant *-l-* 13.1.2 represents this same **ʎ*, it would explain the absence of any Adjectival Verbs like **sābıl*ᵃ/, because **sabıʎa* would result instead in **sābı*ʸᵃ/; Manessy's Dagbani *sabla* "be black" seems to be a ghost form.

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

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

*gūr*ᵃ/	"guard"
*gū'ul*ᵋ/	"put on guard"
*gū'us*ᵋ/	"take care,watch out"
*gū'ud*ᵃ/	agent noun

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

*gɔ̄r*ᵃ/	DK	"have neck extended"
*gɔ̄dıg*ᵋ/	DK	"look up, extend neck"
*yāar*ᵋ/		"scatter"
*yādıg*ᵋ/		"scatter" (for the shortening see 6.1.1.2)
(but *èňrıg*ᵋ		"shift along")

The sequence *-rıd-* does occur with Agent Nouns involving the suffix *-d-* but variant forms occur, suggesting that the *-rıd-* 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:

*kpārıd*ᵃ	"lock-er"
*gūrıd*ᵃ/	"guard"
*gū'ud*ᵃ/	"guard"

The gerund *kīrıb*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 *pɔ̄ňrıb*ᵓ from the Adjectival Verb *pɔ̀ňr*ᵃ "be near."

The tonemes do not support a geminate origin of *r* in the ethnonyms *Yārıs*ᵋ/ *Bārıs*ᵋ/ 35.5.

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 ḭa ṵa aň ḭaň ṵaň* 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 uɵ aaň ɛɛň ɔɔň*, along with their glottalised counterparts, whenever an *affix* vowel *a* or *ι* (not an epenthetic vowel or *ʋ*) follows the *g. Vowel Fusion then creates three-mora vowel sequences:

*aaga	→ *aa* 8.1	*aagι	→ *aee*
*iəga	→ *iaa*	*iəgι	→ *iee*
*uɵga	→ *uaa*	*uɵgι	→ *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:

	*būʋg*ᵃ		"goat"	pl *būʋs*ᵋ
but	*bāa*⁼	← *baaga	"dog" 8.1	pl *bāas*ᵋ
	sīa⁺	← *siəga	"waist"	pl *sīəs*ᵋ
	sàbùa⁺	← *sabuɵga	"lover"	pl *sàbùɵs*ᵋ

The diphthongs *aee iee uee* appear in Variable Verbs with stems in *Caag *Ciəg *Cuɵg* and their glottalised counterparts (see below on the nasalised equivalents); compare the forms with the suffix *-g- "become, make" seen in

	kpì'e⁺	← *kpi'əgι	"approach"
	*kpì'əs*ᵋ	← *kpi'əsι	"neighbours"
cf	*tēbιg*ᵋ/		"get/make heavy"
	*tēbιsír*ᵋ		"heavy"

There are many such "Fusion Verbs", showing base forms ending in the diphthongs *-ae -ie -ue* <u>11.1</u>, e.g.

pāe⁺ᐟ	← **paagɩ*	"reach"
dūe⁺ᐟ	← **duɵgɩ*	"raise, rise"

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

There are no underlying nasalised *iəň uɵň*; instead *ɛɛň ɔɔň* appear <u>6.1</u>. However, **g* is deleted after nasal *ɛɛň ɔɔň* (unlike their oral equivalents *ɛɛ ɔɔ*) in the same contexts as after *iə uɵ* (i.e. before an affix vowel *a* or *ɩ*), and the resulting diphthongs coincide in vowel quality with those produced with *iə uɵ*:

*ããga	→ *aaň* <u>8.1</u>		**ããgɩ*	→ *aeeň*	
*ɛ̃ɛ̃ga	→ *iaaň*		**ɛ̃ɛ̃gɩ*	→ *ieeň*	
*ɔ̃ɔ̃ga	→ *uaaň*		**ɔ̃ɔ̃gɩ*	→ *ueeň*	

and likewise with the corresponding glottalised vowels.

The rule gives rise to alternations in nominals from the *gᵃ|sᵋ* Class between SF-final *iaň uaň* and word-internal *ɛɛň ɔɔň* before a consonant:

zìň'a⁺	← **zɛ̃'ɛ̃ga*	"red"	*gᵃ|sᵋ* Class sg
*zèň'ɛs*ᵋ	← **zɛ̃'ɛ̃sɩ*	"red"	*gᵃ|sᵋ* Class pl
*zèň'ɛd*ᵋ	← **zɛ̃'ɛ̃dɩ*	"red"	*gᵓ|dᵋ* Class pl
dùaň⁺	← **dɔ̃ɔ̃ga*	"dawadawa" sg	
*dɔ̀ɔňs*ᵋ	← **dɔ̃ɔ̃sɩ*	"dawadawa" pl	
nūa⁺ᐟ	← **nɔ̃ɔ̃ga*	"hen"	
*nɔ̄ɔs*ᵋᐟ	← **nɔ̃ɔ̃sɩ*	"hens"	
Mùa⁺	← **Mɔ̃ɔ̃ga*	"Mossi person"	
*Mɔ̀ɔs*ᵋ	← **Mɔ̃ɔ̃sɩ*	"Mossi people"	
*Mɔ̀ɔg*ᵓ	← **Mɔ̃ɔ̃gʊ*	"Mossi country"	
*Mɔ̀ɔl*ᵋ	← **Mɔ̃ɔ̃lɩ*	"Mooré language"	

In derivation the rule causes alternation between Fusion Verb forms from historical **-gɩ*, ending in SF *ieň ueň*, and cognate forms with *ɛɛň ɔɔň*:

nìe⁺	← **nɛ̃ɛ̃gɩ*	"appear"
*nὲɛl*ᵋ	← **nɛ̃ɛ̃lɩ*	"reveal"
pūň'e⁺ᐟ	← **pɔ̃'ɔ̃gɩ*	"rot"
*pɔ̄ň'ɔl*ᵋᐟ	← **pɔ̃'ɔ̃lɩ*	"cause to rot"
ňyū'e⁺ᐟ	← **yɔ̃'ɔ̃gɩ*	"set alight"

ňyɔ̄'ɔsᵉ/	← *yɔ̃'ɔ̃sɪ*	"smoke" (noun)	
sūeň⁺/	← *sɔ̃ɔ̃gɪ*	"anoint"	
sɔ̄ň⁺	← *sɔ̃ɔ̃*	"rub"	
zìň'a⁺	← *zɛ̃'ɛ̃ga*	"red" *gᵃ|sᵉ* Class sg	
zèň'ogᵓ	← *zɛ̃'ɛ̃gʊ* 6.3.2	"red" *gᵓ|dᵉ* Class sg	

The fronting effect of *-gɪ* differs from the fronting caused by *-y- 6.3.2:

sūň'e⁺/	← *sɔ̃'ɔ̃gɪ*	"become better than" WK	
sɔ̄ň'eʸᵃ/	← *sɔ̃'ɔ̃ya*	"be better than"	

> When *aa iə ue aaň* 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.

náafᵓ	← *nāágfʊ̄* "cow"	pl *nīigɪ́⁺*	cb *nā'* -	
dí'ərᵉ	← *dīꞌə́grī* "receiving"	cf *dīꞌe⁺/*	"get" ← *dīꞌə́gí*	
vúørᵉ	← *vūǿgrī* fruit of *vúøŋᵃ* tree	pl *vūáa⁼*		

Surface *iəň uøň* appear in just one context: Fusion Verbs with nasal vowels introduce *iəň uøň* into the Dynamic Imperfective, imperative and gerund forms:

	nèɛrᵉ	"empty" (← "clear")
but	*nìərᵉ*	gerund of *nìe⁺* "appear"
	pɔ̄ň'ɔlᵉ/ ← *pɔ̃'ɔ̃lɪ*	"cause to rot"
but	*púň'ørᵉ*	gerund of *pūň'e⁺/* "rot"
	pūň'ødᵃ/	dipf

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

	pūň'e⁺/	base	*pūň'ødᵃ/*	dipf	*púň'ørᵉ*	ger	"rot"
cf	*dūe⁺/*	base	*dūødᵃ/*	dipf	*dúørᵉ*	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 *púň'ørᵉ* "rotting" or *nìərᵉ* "appearing", but dipfs like *pon'od pɔ̄ň'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: *pūň'ødᵃ/* not **púň'ødᵃ* "rot." This too might be the result of levelling; however, comparative

evidence and irregularities in Variable Verbs <u>11.1.1</u> 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 pɔ̌ň'ɔd*[a/] also reflect this. The *iəň uəň* of gerunds correlate with *tones* showing underlying *g: *púň'ər*[ɛ] "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 *iəň uəň* resulted in sequences which, unlike other *iəň uəň*, did not merge with *εεň ɔɔň*, either as extra-long, or as already diphthongised *phonologically*.

6.3.2 Before *-ya *-gʋ *-kkʋ *-ŋŋʋ

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 * e̞* <u>2.2</u>:

SF	*vū̞e̞*	LF	*vūyá*		"be alive"
SF	*tɔ̄e̞*	LF	*tɔ̄yá*		"be bitter"
SF	*sāe̞ň*	LF	*sāňya*		"blacksmith"
SF	*sɔ̄e̞ň*	LF	*sɔ̄ňya*		"witch"

Before *y*, long vowels undergo fronting of a back second mora to *e* [ɪ]:

SF	*sʋ̄'e*	LF	*sʋ̄'eyá*		"own" *sʋ̄'e*[ya/]
cf	*sʋ̄'ʋlím*[m]				"property"
SF	*sɔ̄ň'e*	LF	*sɔ̄ň'eyá*		"be better than" *sɔ̄ň'e*[ya/]

Rounding: Short unrounded root vowels become diphthongs in *u̞* before LF *kkʋ *ŋŋʋ*:

gbàu̞ŋ[ɔ]	← *gbaŋŋʋ		"book"	pl *gbàna*[+]
lāu̞k[ɔ]	← *lakkʋ		"goods item"	pl *lā'ad*[ɛ]
yīu̞ŋ[ɔ/]	← *yιŋŋʋ		"single"	pl *yīná*[+]
sàbùa[+]	← *sabuθga		"lover"	pl *sàbùəs*[ɛ]

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

nìn-gbīŋ[ɔ/]			"body"	pl *nìn-gbīná*[+]

The vowel may simply be taken from the alternative singular *nìn-gbīn*ᵉ/.
Short *i̯a* becomes the short diphthong *i̯au̯*:

*bi̯āu̯ňk*ɔ	← *bi̯ãkkʋ	"shoulder"	pl *bi̯āň'ad*ᵋ

Short *u̯a* becomes ɔ: ***u̯akkʋ → ɔkkʋ***

*bɔ̀k*ɔ	← *bu̯akkʋ	"pit"	pl *bʋ̀'ad*ᵋ

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

	*dàad*ᵋ		"logs"
but	*dàʋg*ɔ	← *daagʋ	"log"
	*fɛ̄ň'ɛd*ᵋ/		"ulcers"
but	*fɛ̄ň'og*ɔ/	← *fɛ̃'ɛ̃gʋ	"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 [ʊ], giving *io* [iʊ]:

	*vīug*ɔ/	← *viigʋ	"owl"	pl *vīid*ᵋ/
but	*dàbīog*ɔ	← *dabiəgʋ	"coward"	pl *dàbīəd*ᵋ
	*kpi̯'oŋ*ɔ	← *kpi'əŋŋʋ	"strong"	pl *kpi̯'əma*⁺

A parallel case with *uu*/*uʋ* does not occur, because of the rule ***ueɡʋ → ɔɔɡʋ***:

	*Sà'dàbɔ̀ɔg*ɔ	← *Sa'dabueɡʋ	"place of the Sarabose clan"
cf	*Sà'dàbùəs*ᵋ		"Sarabose clan members"
	*lām-fɔ́ɔg*ɔ	← *lam-fueɡʋ	"toothless"
			(*lām*ᵐᵉ/ "gum" *fùe*+ "draw out")

The **epenthetic vowel** *ι* is rounded to *ʋ* before LF *-gʋ *-ŋʋ:

	*āaňdιg*ᵃ	← *ã̃ãdιga	"black plum tree"
but	*gàadʋg*ɔ	← *gaadιgʋ	"(sur)passing" (gerund)
pl	*mālιma*⁺	← *malιmaa	"sacrifices"
but	*mālʋŋ*ɔ	← *malιŋŋʋ	"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 *dāu̯* "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*:

*gàad*ᵋ	"pass"		*gàt*ᵃ	"pass" dipf
*tɛ̄ɛg*ᵋ/	"drag" ILK		*tɛ̄k*ᵋ/	"pull" (*tɛɛkkɩ)

Hausa loanwords show this to be phonological, not morphophonemic:

*àtìu̯k*ᵓ	"sea"	←	*tèeku*	"sea"	
kɔ́tʋ̀⁺	"court"	←	*kootù*	"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:

vūáa=		←	*vuɵgaa*	"fruits of the *vúɵŋ*ᵃ tree"

A 3-mora *monophthong* appears with Apocope Blocking in *mà'aa* "only" (but LF *mà'anɛ̄* 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 *ɩ ʋ* to *ɛ 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 19.8.1.2:

bɛ̀dʋgū	"a lot"	*gɔ|dᵋ*	Class sg
sʋ̀ŋā	"well"	*gª|sᵋ*	Class sg
yīnní	"one"	*rᵋ|a⁺*	Class sg
ànāasí	"four"	*gª|sᵋ*	Class pl
pāmm	"a lot"	*mᵐ*	Class

A number of nouns ending in *-ɩ⁺* or *-ʋ⁺* 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 *-mʋ* to *-mm*: *pāmm* "a lot."

Apocope-blocked words make secondary LFs before Prosodic Clitics by prolonging a short final vowel. Compare:

	Lì à nē dɔ́ɔ̀g.	"It's a hut."
	Lì kā' dɔ́ɔgɔ̄.	"It's not a hut."
with	*Lì à nē bɛ́dʋgū̄.*	"It's a lot."
	Lì kā' bɛ́dʋgʋ́ʋ.	"It's not a lot."

Before Prosodic Clitics which neutralise preceding length distinctions, the final vowels of such LFs contrast in quality alone with *ɛ ɔ* 8.1.

Forms not ending in a short vowel add *-nɛ* to make the secondary LF:

pāmm SF *pāmnɛ́* LF	"a lot"	*mà'aa* SF *mà'anɛ̄* LF	"only"
*gʋ̀llɩm*ⁿᵋ	"only"	*kɔ̀tàa*ⁿᵋ	"at all"

The LF of *ňyāe*ⁿᵋ⁄ "brightly, clearly" 20.4 is *ňyāenɛ́* [j̃ãĩnɛ̃].

Cf also *mɛ̀* DK KT SB NT *mɛ̀n* WK; clause finally (all sources) *mɛ̀n*ᵋ "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 <u>8.4</u>.

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 <u>7.5</u>.

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 <u>6.2.1</u> and deletion of **g* <u>6.3.1</u>) and which disrupt the surface distribution of tonemes <u>7.2.1.1</u>. For example, these two Pattern H nouns show different tonemes in the singular:

sīiňf^{ρ/} sg	*sīiňs*^{ε/} pl	*sīň-* cb	"bee"
píιňf^ρ	*pīιní*⁺	*pīιn-*	"genet"

The difference is due to the fact that "bee" has a 2-mora *CVV* stem *sīiň-*, whereas "genet" has a 3-mora *CVVC* stem *pīιn-*, 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:

pʋ̀'ʋs^a	*pʋ̄'ʋsιdιb*^a	*pʋ̀'ʋs-*	"worshipper"

Only with 2-mora Pattern H and O stems are the SF tonemes alone insufficient to predict LF-final tonemes:

O	*Lì à nē kūk.*	"It's a chair."
O	*Lì kā' kūka.*	"It's not a chair."
H	*Lì à nē dūk.*	"It's a cooking pot."
H	*Lì kā' dūkɔ́.*	"It's not a cooking pot."

With SFs like *kʊ̄k* "chair" and *dʊ̄k* "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 *náaʔ* "cow" versus *nú'ùgʔ* "hand", but this can be accounted for by a late tone realisation rule 5.3.1. 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 *yā*   LF *yáa*   "houses"   *yā*[+/]
SF *bèdʊgʊ̄*   LF *bèdʊgúʊ*   "a lot"   *bèdʊgʊ̄*[+/]

Superscript Notation writes *yā*[+/] *bèdʊgʊ̄*[+/] by the usual convention 2.2.1. The only exception among free words is *kɔ̀bɪgā*[=] "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 *-ι*[+] 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:

Pattern Name	Intrinsic Stem Tonemes	Surface Tonemes in Nominals
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:

nááb	"cow"		cf Kusaal *náaf*ᵓ	*id*
tììb	"tree"		cf Kusaal *tìʊg*ᵃ	*id*
būūk	"goat"		cf Kusaal *bōʊg*ᵃ	*id*

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 5.3.1; 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 tonemes[5].

7.2 Nominals

Prefixed nominals differ in tones only in that the cbs of nominals with M nominal prefixes always have H toneme; sg and pl are unchanged. L nominal prefixes do not affect the stem tone pattern at all 7.2.4.

The tones of compounds are determined by external tone sandhi 8.4 8.3.

Nominals have three flexional forms 9.1. The combining form, which is the bare stem, is always affected by Apocope because it cannot be clause final.

Nominal examples will be given as sg, pl, cb.

Stem morae are counted exclusive of nominal prefixes.

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.

*vūr*ᵉ/	*vūyá*⁺	*vūr-*	"alive"
*yīr*ᵉ/	*yā*⁺/	*yī-*	"house"
*fūug*ᵓ/	*fūud*ᵉ/	*fū-*	"shirt, clothes"
*dūk*ᵓ/	*dūgʋd*ᵉ/	*dūg-*	"cooking pot"
*nīd*ᵃ/	*nīdɩb*ᵃ/	*nīn-*	"person"
*nīf*ᵓ/	*nīní*⁺	*nīn-* or *nīf-*	"eye"
*kūgʋr*ᵉ/	*kūgá*⁺	*kūg-*	"stone

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5) Toende Kusaal shows word-internal H after L in words where Agolle does not, such as *zìlím* "*langue*", Agolle SF *zìlɩm* 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 *bὺŋ́* LF *bὺŋá* "*âne*", Agolle LF *bὺŋā*.

*gɔ̄t*ᵃ/	*gɔ̄tíb*ᵃ /tt/	*gɔ̄t-*	"seer, prophet"
*sābɩlíg*ᵃ	*sābɩlís*ᵋ	*sābɩl-*	"black"
*yūgʊ́m*ᵐᵋ	*yūgʊmá*⁺	*yūgʊm-*	"camel
*sābíl*ˡᵋ	*sābɩlá*⁺	*sābɩl-*	"black"
*súʼəŋ*ᵃ /ŋŋ/	*sūʼəmís*ᵋ	*sūʼəŋ-*	"rabbit"
*sāan*ᵃ/	*sáam*ᵐᵃ	*sāan-*	"stranger, guest"
*dīʼəs*ᵃ/	*dīʼəsídìb*ᵃ	*dīʼəs-*	"receiver"
*sūgʊríd*ᵃ	*sūgʊrídìb*ᵃ	*sūgʊríd-*	"forgiver, forbearer"
*kʋ̄ʼalíŋ*ᵃ	*kʋ̄ʼalís*ᵋ	*kʋ̄ʼalíŋ-*	traditional smock
*sáannìm*ᵐ			"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:

nūa⁺/	SF *nūa*	LF *nūáa*	"hen"
*dāam*ᵐ/	SF *dāam*	LF *dáamm*	"millet beer"
*vʋ̄m*ᵐ/	SF *vʋ̄m*	LF *vʋ́mm*	"life"
tāʊ̯ň⁺/	SF *tāʊ̯ň*	LF *táʊň*	"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

*níiŋ*ᵃ /ŋŋ/	*níis*ᵋ *ns	*nīiŋ-*	"bird"
*píɩňꟼ *nf	*pīɩní*⁺	*pīɩn-*	"genet"
*ňyīríꟼ *rr	*ňyīrí*⁺		"egusi seed"

With a nominal prefix 7.2.4 *tīn-*:

*tīntɔ̄ňríg*ᵃ *rr	*tīntɔ̄ňrís*ᵋ	*tīntɔ́ňr-*	"mole" (animal)

So too with deletion of **g* when no affix vowel follows 6.3.1:

náaʔ 5.2	← *nāágfʊ̄*	(cf pl *nīigí*+)	"cow"
wáaʔ	← *wāágfʊ̄*	(cf pl *wīigí*+)	"snake"
*yáab*ᵃ	← *yāágbā*		"grandparent"
*vúər*ᵋ	← *vūɵ́grī*		fruit of the *vúəŋ*ᵃ tree

Here belong all regular gerunds in *-r*ᵋ formed from Pattern H Fusion Verbs 11.1 which have phonologically-deleted **g* in the base form:

	*náar*ᵋ 5.2	← *nāágrī*		"end"
from	*nāe*+/	← *nāagí*		"finish"
	*díˈər*ᵋ	← *dīˈɵ́grī*		"receiving"
from	*dīˈe*+/	← *dīˈəgí*		"get"
	*púňˈər*ᵋ	← *pɔ̄ˈɔ̌grī*	6.3.1	"rotting"
from	*pūňˈe*+/	← *pɔ̄ˈɔ̌gí*		"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:

| *nāad*ᵃ/ | "finish" dipf |
| *nāad*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.

*núˈùg*ɔ	*núˈùs*ᵋ	*nū́-*	"hand, arm"
*à-gáʋ̀ňg*ɔ	*à-gáàňd*ᵋ	*à-gāň-*	"pied crow"
*nɔ́bìr*ᵋ	*nɔ̄bá*+	*nɔ̄b-*	"foot, leg"
*gɛ́l*ᵋ	*gɛ̄lá*+	*gɛ̄l-*	"egg"
*gbɛ́ɛ̀ňm*ᵐ	no pl	*gbɛ̄ň-*	"sleep"
*kísùg*ɔ	*kīsá*+	*kīs-*	"hateful, taboo" (adj)
*áňsìb*ᵃ	*āňs-nám*ᵃ	*āňs-*	"mother's brother"

Here belong the irregularly formed gerunds 12.1.1.1.1:

*sɔ́ňsìg*ᵃ	"conversing"
*gɔ́sìg*ᵃ	"looking"
*kìkírʋ̀g*ɔ	"hurrying" (L prefix)

Olawsky treats words like Dagbani *gállì* "egg" (Kusaal *gél*ˡᵉ) 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" *gãoobgó* "pied crow", *gõoém* "sleep."
*Nú'ùg*ᵓ "hand" has cognates in the ᵓ|ᵉ Class in Nawdm *nú?ú* pl *ní?í* and Gurmanche
nùu pl *nìi*; Kusaal has probably added further class suffixes to the original sg/pl forms.

7.2.2 Pattern L

Pattern L comprises all nominals 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.

*sʊ̀'ʊg*ᵃ	*sʊ̀'ʊs*ᵉ	*sʊ̀'-*	"knife"
*zàk*ᵃ	*zà'as*ᵉ	*zà'-*	"dwelling-compound"
*dìgɪr*ᵉ	*dìga*⁺	*dìg-*	"dwarf"
*mɔ̀lɪʔ*ᵓ	*mɔ̀lɪ*⁺	*mɔ̀l-*	"gazelle"
*kù'əm*ᵐ	no pl	*ku̠'à-*	"water"
mà⁺	*mà nám*ᵃ	*mà-*	"mother"
*mɛ̀ɛŋ*ᵃ	*mɛ̀ɛmɪs*ᵉ	*mɛ̀ɛŋ-*	"turtle"
*pʊ̀gʊdɪb*ᵃ	*pʊ̀gʊd-nàm*ᵃ	*pʊ̀gʊd-*	"father's sister"
*sàam*ᵐᵃ	*sàam-nàm*ᵃ	*sàam-*	"father"
*dìəm*ᵐᵃ	*dìəm-nàm*ᵃ	*dìəm-*	"man's parent-in-law"
*àňrʊŋ*ᵓ	*àňrɪma*⁺	*àňrʊŋ-*	"boat"
*kàrʊŋ*ᵓ or *kàrɪmʊg*ᵓ			"reading" (gerund)
*zùlʊŋ*ᵓ	*zùlɪma*⁺	*zùlʊŋ-*	"deep"
*yàlʊŋ*ᵓ	*yàlɪma*⁺	*yàlʊŋ-*	"wide"
*zìlɪm*ᵐᵉ	*zìlɪma*⁺	*zìlɪm-*	"tongue"
*nɔ̀ŋɪd*ᵃ			"lover"
*sìilíŋ*ᵃ	*sìilímìs*ᵉ		
	*sìilís*ᵉ		
	sìilímà⁺	*sìilíŋ-*	"proverb"
*zàaňsúŋ*ᵓ	*zàaňsímà*⁺	*zàaňsúŋ-*	"dream"
*nɔ̀ŋɪlím*ᵐ		*nɔ̀ŋɪlím-*	"love"
nɔ̀ŋɪdím-tāa⁼	13.1.1.4		"fellow lover" WK
sʊ̀ŋɪdím-tāa⁼			"fellow-helper"
*dàalím*ᵐ	*dàalímìs*ᵉ	*dàalím-*	"male sex organs"
*pʊ̀'alím*ᵐ	*pʊ̀'alímìs*ᵉ	*pʊ̀'alím-*	"female sex organs"
*bì'isím*ᵐ			"milk"

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

*bɔ̀ɔdɩm*ᵐ	no pl	*bɔ̀ɔdɩm-* 9.2.2	"will"
*zɔ̀tɩm*ᵐ	no pl		"fear"
*dàalɩm*ᵐ	no pl		"maleness"
*pʊ̀'alɩm*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):

*sàal*ᵃ	*sàalɩb*ᵃ	*sàal-*	"human"

Tonally exceptional in showing H before stem *m* on the *second* mora is

*bùgʊ́m*ᵐ	no pl	*bùgʊ́m-* or *bùgʊ̄m-* "fire"

These forms in *-mís*ᵋ perhaps derive from **-mɩmsɩ*:

no sg	*tàdɩmís*ᵋ	"weakness"
no sg	*bùdɩmís*ᵋ	"confusion"

7.2.3 Pattern O

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

*būʊg*ᵃ	*būʊs*ᵋ	*bù-*	"goat"
*tān*ⁿᵋ	*tāna*⁺	*tàn-*	"earth"
*sīd*ᵃ	*sīdɩb*ᵃ	*sìd-*	"husband"
*pʊ̥'ā*ᵃ	*pʊ̄'ab*ᵃ	*pʊ̥'à-*	"woman, wife"
*sā'ab*ᵓ	no pl	*sà'-*	"millet porridge"
*gbīgɩm*ⁿᵋ	*gbīgɩma*⁺	*gbìgɩm-*	"lion"
*ňwāaŋ*ᵃ	*ňwāamɩs*ᵋ	*ňwàaŋ-*	"monkey"
*mɛ̄ɛd*ᵃ	*mɛ̄ɛdɩb*ᵃ	*mɛ̀ɛd-*	"builder"
*sɩ̥ākɩd*ᵃ	*sɩ̥ākɩdɩb*ᵃ	*sɩ̥àkɩd-*	"believer"
*būtɩŋ*ᵃ	*būtɩɪs*ᵋ	*bùtɩŋ-*	"cup"
*mɛ̄ɛdɩŋ*ᵃ	*mɛ̄ɛdɩs*ᵋ	*mɛ̀ɛdɩŋ-*	"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:

| *pʊ̀'ʊs*[a] | *pʊ̄'ʊsɪdɪb*[a] | *pʊ̀'ʊs-* | "worshipper" |
| *kùɵs*[a] | *kūɵsɪdɪb*[a] | *kùɵs-* | "seller" |

Pattern O nominals 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 *gīŋɪlím*[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 *gīɪňlím*[m] *id*.

Pattern O all-M LFs become all-L at the end of questions 8.1:

  Lì kā' gbígìmmɛɛ?   "Isn't it a lion?"

Certain Pattern O words show **LF-final H** instead of the expected M toneme before Prosodic Clitics, but not before Liaison Words. For WK this occurs when the LF has > 3 *vocalic* morae and ends in *-VCV*, where *C* is a *single* consonant (i.e. not *ŋ*):

yūgʊdɪr[ɛ/]	*yūgʊda*[+]	*yùgʊd-*	"hedgehog"
ňwāaŋ[a]	*ňwāamɪs*[ɛ/]	*ňwàaŋ-*	"monkey"
bāŋɪd[a]	*bāŋɪdɪb*[a/]	*bàŋɪd-*	"wise man"
kpārɪdɪŋ[a]	*kpārɪdɪs*[ɛ/]	*kpàrɪdɪŋ-*	"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 *-mmʊ*):

gbīgɪm[mɛ/]	*gbīgɪma*[+]	*gbìgɪm-*	"lion"
zɔ̄ɔm[mɛ/]	*zɔ̄ɔma*[+]	*zɔ̀ɔm-*	"fugitive"
tādɪm[m/]	*tādɪmɪs*[ɛ/]	*tàdɪm-*	"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:

  Lì à nɛ̄ gbīgɪmmɛ́ɛ?   "Is it a lion?" WK only; rejected by DK
  Lì à nɛ̄ gbígìmmɛɛ?   "Is it a lion?" both WK and DK

7.2.4 Nominals with Prefixes

On nominal prefixes generally see <u>14</u>. Tonally they are either M or L.
L nominal prefixes do not affect the rest of the tone pattern of the prefixed nominal:

H	*dàyūug^{ɔ/}*	*dàyūud^{ɛ/}*	*dàyū-*	"rat"
H	*Bùsáŋ^a*	*Bùsáàŏs^ɛ*	*Bùsāŋ-*	"Bisa person" <u>7.2.1.2</u>
L	*kòkpàrɪg^a*	*kòkpàrɪs^ɛ*	*kòkpàr-*	"palm tree"
O	*dàkīig^a*	*dàkīis^ɛ*	*dàkì-*	"sib-in-law via wife"

M toneme nominal 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	*zīnzāu̯ŋ^{ɔ/}*	*zīnzāná⁺*	*zīnzáu̯ŋ-*	"bat"
H	*Ňwāmpūrɪg^{a/}*	*Ňwāmpūrɪs^{ɛ/}*	*Ňwāmpúr-*	"Mamprussi person"
H	*gūmpūzɛ̄r^{ɛ/}*	*gūmpūzɛ̄yá⁺*	*gūmpūzér-*	"duck"
H	*tīntɔ̌ňríg^a*	*tīntɔ̌ňrís^ɛ*	*tīntɔ́ňr-*	"mole" <u>6.2.1</u>
H	*pīpīrɪg^{a/}*	*pīpīrɪs^{ɛ/}*	*pīpír-*	"desert"
H	*bālɛ̄rʋg^{ɔ/}*	*bālɛ̄rɪd^{ɛ/}*	*bālɛ́r-*	"ugly person"
H	*pūkpāad^{a/}*	*pūkpāadíb^a*	*pūkpá-*	"farmer" <u>14.4</u>
O	*fūfūm^{mɛ}*	*fūfūma⁺*	*fūfúm-*	"envy; stye in the eye"
L	*sāmán^{nɛ}*	*sāmánà⁺*	*sāmán-*	"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 <u>7.2.3</u>. There may be a limit on how many successive M morae can be tolerated within a word; cf <u>8.4</u> fn. With *zīnzāná⁺ gūmpūzɛ̄yá⁺* compare WK's forms sg *wālɪg^a*, pl *wālɪs^ɛ* 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:

zūg-kūgʋr^{ɛ/}	*zūg-kūga⁺*	*zūg-kúg-*	"pillow" <u>9.2.2</u>
kā-wɛ̄nnɪr^{ɛ/}	*kā-wɛ̄nna⁺*	*kā-wɛ́n-*	"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 22.6.1.1 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. Nominal 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*ᵋ "hurry, tremble": *kìkírʊ̀g*ᵓ and *kīrɩb*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 -ʸᵃ 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 *zàaň̆sɩm*ᵐ and dipfs like *zàaň̆sɩm*ᵐᵃ "dream" from Pattern L nouns like *zàaň̆sʊ́ŋ*ᵓ "dream" cb *zàaň̆sʊ́ŋ-* 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 nominals, 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:

dūgí lī	"cooked it"
Ò pū dūgɛ.	"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:

Ò pū gɔ̄sɛ.	"She didn't look"
Ò pū gɔ́sɛ̀ɛ?	"Didn't she look?"
Ò pū dūgɛ.	"She didn't cook."
Ò pū dúgɛ̀ɛ?	"Didn't she cook?"

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

ňyɛ̄[+]	*ňyɛ̄t*[a/]		"see"
kū[+]	*kūʋd*[a/]		"kill"
dūg[ɛ]	*dūgʋd*[a/]		"cook"
pi̯āň'[a]	*pi̯āň'ad*[a/]		"speak", "praise"
kūl[ɛ]	*kūn*[na/]		"go home"
yādıg[ɛ/]	*yādıgíd*[a]		"scatter"
mɔ̄ɔl[ɛ/]	*mɔ́ɔn*[na]		"proclaim"
dīgıl[ɛ/]	*dīgín*[na]		"lay down"
nɔ̄k[ɛ/] /kk/	*nɔ̄kíd*[a] /kk/		"take"
lāŋím[m] /ŋŋ/	*lāŋím*[ma] /ŋŋ/		"wander searching"
	dīgı[ya/]		"be lying down"
	tī̓i[ya/]		"be leaning" (objects)
	zāň l[la/]		"be holding"
	gɔ̄l[la/]		"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.

tɔ̄ɔm^m/   *tɔ́ɔm*^ma or *tɔ̄ɔmíd*^a   "disappear"
SF *tɔ̄ɔm* LF *tɔ́ɔmm*

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"
dī'e^+/   *dī'əd*^a/   not **dí'əd*^a   "get"
pūň'e^+/   *pūň'əd*^a/   not **púň'əd*^a   "rot" WK

Contrast the corresponding gerunds in *-r*^ε: *páar*^ε *dí'ər*^ε *púň'ər*^ε.

7.3.2 Pattern LO

All stem tonemes are L in the Indicative and Imperative, and M in the Irrealis.

bʊ̀d^ε   *bʊ̀t*^a   "plant"
dì^+   *dìt*^a   "eat"
mὲ^+   *mὲɛd*^a   "build"
zàb^ε   *zàbɩd*^a   "fight, hurt"
bʊ̀əl^ε   *bʊ̀ən*^na   "call"
bɔ̀dɩg^ε   *bɔ̀dɩgɩd*^a   "get lost, lose"
nìŋ^ε   *nìŋɩd*^a   "do"
màal^ε   *màan*^na   "sacrifice"
dìgɩn^ε   *dìgɩnɩd*^a   "lie down"
wàŋɩm^m   *wàŋɩm*^ma   "waste away"
sìilɩm^m   *sìilɩm*^ma   "cite proverbs"
zàaňsɩm^m   *zàaňsɩm*^ma   "dream"
                   zìň'i^ya   "be sitting down"
                   tàbɩ^ya   "be stuck to"
                   tὲňr^a   "remember"

In the Irrealis, as with nominal Pattern O, the last toneme of the LF is M:

Ò nà bɔ̄dɪg.	"He'll get lost."
Ò kʊ̀ zābɛ.	"She won't fight."
Ò kʊ̀ bɔ̄dɪgɛ.	"He won't get lost."
Ò kʊ̀ bɔ̄dɪgɪda.	"She won't be getting lost."
Ò kʊ̀ būɵnna.	"She won't be calling."
Ò nà bɔ̄dɪgɪ m.	"He will lose me."
Ò kʊ̀ bɔ̄dɪgɪ má.	"He will not lose me."
Ò nà bɔ̄dɪgɪ bá.	"She will lose them."
Ò kʊ̀ bɔ̄dɪgɪ báa.	"She won't lose them."
Ò kʊ̀ bɔ̄dɪgɪdɪ má.	"He won't be losing me."
Ò kʊ̀ zābɪdɪ má.	"He won't be fighting me."
Ò kʊ̀ zābɪdɪnɛ́.	"He wouldn't have been fighting."
Ò kʊ̀ sīilɪmm.	"She won't cite proverbs" WK
but *Ò kʊ̀ lāŋímm.*	"She won't wander about searching (*lāŋím*ᵐ)."

Such forms always cause L Raising:

Ò nà zāb ná'àb lā.	"He'll fight the chief."
Ò nà gɔ̄s ná'àb lā.	"He'll look at the chief."

The LF with the enclitic pronoun ᵒ can here show either M or H (all WK):

Ò kʊ̀ zāb·ó-o.	"He won't fight him."
or *Ò kʊ̀ zāb·o-o.*	"He won't fight him."
Ò kʊ̀ kād·ó-o.	"He won't drive him away."
or *Ò kʊ̀ kād·o-o.*	"He won't drive him away."

In questions, clause-final M...M become L...L just as with Pattern O nominals:

M̀ ná bɔ̀dɪgɛɛ?	"Will I get lost?"

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	*wɔ̄kɔ/*	"long, tall"	*wā'am*ᵐᵃ/	"be long,tall"
	*būgʊsír*ᵋ	"soft"	*būgʊs*ᵃ/	"be soft"
	*vūr*ᵋ/	"alive"	*vūe̯*ᵃ/	"be alive"
	*zēmmúg*ɔ	"equal"	*zēm*ᵐᵃ/	"be equal"
	*kísʊg*ɔ	"hateful, taboo"	*kīs*ᵃ/	"hate"
L	*vὲnnɪg*ᵃ	"beautiful"	*vὲn*ⁿᵃ	"be beautiful"
	*zùlʊŋ*ɔ	"deep"	*zùlɪm*ᵐᵃ	"be deep"
	*pɔ̀ɔdɪg*ᵃ	"small"	*pɔ̀ɔd*ᵃ	"be few, small"
O	*tɔ̄ɔg*ɔ	"bitter"	*tɔ̄e̯*ᵃ/	"be bitter"
	*gīŋ*ᵃ	"short"	*gīm*ᵐᵃ/	"be short"
	*kpĩ'oŋ*ɔ	"strong"	*kpĩ'əm*ᵐᵃ/	"be strong"
	*kpɛ̄ɛňm*ᵐ	"elder"	*kpɛ̄ɛňm*ᵐᵃ/	"be older than"
	*wɛ̄nnɪr*ᵋ	"resembling"	*wɛ̄n*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 dipfs 7.3:

Ò nà vɛ̄n.   "She'll be beautiful."

7.4 Quantifiers, Adverbs and Particles

Quantifiers and Adverbs resemble nominals in segmental and tonal structure, often with Apocope Blocking 6.4. Some particles also have the segmental and tonal structure of nominals 6.

Proclitic Liaison Words all have a single mora with a Fixed L toneme 8.3.1. Serialiser *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 *ňwà*⁺ "this" 19.3 and *sà*⁺ "hence, ago" 23.7; Pattern O is the Independent Perfective marker *yā*⁺ 22.6.2.1.

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 dɔ́ɔ̀g lā.	"It's the hut."
Lì kā' dɔ́ɔ̀g láa.	"It's not the hut."

but *Ka o ba' nɛ o ma pʋ baŋ ye o kpɛlim yaa.*

Kà ò bā'   nɛ́ ò mà   pʋ̄ báŋ yɛ́ ò kpɛ̀lɪm yāa [+]*ø.*

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 bɔ̀dɪg nē.	"It's lost."
Lì bɔ̀dɪg nɛ́ɛ?	"Is it lost?"
but *Lì bɔ̀dɪg yā.*	"It's got lost."
Lì bɔ̀dɪg 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 nominals 7.2.1.2 fall together with regular Pattern H in all other derived or cognate words:

áňsìb[a]	"maternal uncle"	*āňsíŋ*[a]	"sister's child"
kísʋ̀g[ɔ]	"hateful"	*kīs*[a/]	"hate"
gɔ́sìg[a]	"looking"	*gɔ̄s*[ɛ]	"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 *l or *s as the final derivational suffix <u>13.1</u> 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 <u>7.5.1</u>: 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: *pʊ̀'ʊs*ᵃ "worshipper", plural *pʊ̄'ʊsɪdɪb*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 <u>13.1.1.2.1</u> 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" <u>13.1.1.1</u>: forms with a suffix restored before -d- probably preserve their original tone patterns despite segmental remodelling.

Imperfective Gerunds <u>13.1.1.4</u> with *d from Pattern LO verbs are Pattern L, as in *bɔ̀ɔdɪm*ᵐ "will" and *mɛ̀ɛdím-tāa*⁼ "fellow-builder" versus Pattern O *bɔ̄ɔdɪr*ᵋ "desirable" and *mɛ̄ɛdɪŋ*ᵃ "building implement." Here *d must have M toneme, as it does in the finite forms <u>7.3</u>.

Considerations like these, along with the levelling of Tone Patterns that has taken place in Variable Verbs <u>7.3</u>, and the segmental, but not tonal, remodelling of cbs <u>9.2.2</u>, 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 <u>13.2.1.1</u>.

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

   *gbāu̯ŋ*ᵓ/   "skin", "book" DK   *gbàu̯ŋ*ᵓ   "book" WK

7.5.1 Tones of Deverbal Nominals

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

*dūg*ᵋ	"cook"	→	*dūgʋb*ᵓ⁄	
*nɔ̄k*ᵋ⁄	"take"	→	*nɔ̄kír*ᵋ	
*dīgɪl*ᵋ⁄	"lay down"	→	*dīgɪlúg*ᵓ	
mɛ̀⁺	"build"	→	*mɛ̄ɛb*ᵓ	
		→	*mɛ̀ɛdím-tāa*⁼	"fellow-builder"
*sʋ̀ŋ*ᵋ	"help"	→	*sʋ̀ŋɪr*ᵋ	
*dìgɪn*ᵋ	"lie down"	→	*dìgɪnʋg*ᵓ	
*zàaňsɪm*ᵐ	"dream"	→	*zàaňsʋ́ŋ*ᵓ	

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 *-d-*	Pattern O
otherwise	Pattern L

 -d- is not always present, being omitted regularly after certain longer verb stems. With nominals 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:

*pʋ̀'ʋs*ᵃ	*pʋ̄'ʋsɪdɪb*ᵃ	*pʋ̀'ʋs-*	"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⁺ᐟ*:

sāẹ̌ň lā	"the blacksmith"		
sàň-kàŋā	"this blacksmith"		
Ò sʋ̀'ʋ lɔ́r.	"She owns a lorry."	*sʋ̄'e*ʸᵃᐟ	"own"
Lì nàa nɛ̄.	"It is finished."	*nāe⁺ᐟ*	"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. Complementiser *ǹ* and Serialiser *n* may be realised as [ŋ̩], but more often also appear only as segmental zero preceded by Liaison 8.2.2.1. In interlinear glosses Prosodic Clitics are written as ⁺ø, while these Liaison Enclitics are written ‿ø.

8.1 Prosodic Clitics

All three Prosodic Clitics[6] cause lowering of short LF-final *ι υ* to *ε ɔ* respectively, which are realised slightly closer in this case than as root vowels.

Before Prosodic Clitics and in forms with Apocope Blocking, final *-mι* and *-mυ* become *-mm* whenever the *m* is not geminated. The final *m* was presumably once syllabic, but the current realisation of *-mm* is [m:].

tìιm^m	"medicine"	SF *tìιm*	LF *tīιmm*	← *tìιmū*
dāam^m/	"millet beer"	SF *dāam*	LF *dáamm*	← *dāamú*
vūm^m/	"life"	SF *vūm*	LF *vúmm*	← *vūmmú*

Word-final *iə uө* 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:

	sīa^+	"waist"	SF *sīa*	LF *sīaa*	← *sīəga*
but	*dà'a*^=	"market"	SF *dà'a*	LF *dā'a*	← *dà'agā*
	bāa^=	"dog"	SF *bāa*	LF *bāa*	← *bāaga*

kū·ó^=	"kill him"	←	*kū*^+ "kill" + ^o "him/her"	SF/LF [kʰʊ:]

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6) The concept of Prosodic Clitics is also useful in describing the syntax of negation 32.3 and in determining the structure of complex clauses 27.2. 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 Phillippson 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 22.5. Superscript Notation 2.2.1 represents LFs as they appear before the Negative Prosodic Clitic, both segmentally and tonally.

Lì à nɛ̄ nɔ́bìr. "It's a leg."
3INAN COP FOC leg:**SG**.

Lì kā' nɔ́bɪrɛ̄ ⁺ø. "It's not a leg."
3INAN NEG.BE leg:**SG NEG**.

Lì à nɛ̄ dūk. "It's a cooking pot."
3INAN COP FOC pot:**SG**.

Lì kā' dūkɔ́ ⁺ø. "It's not a pot."
3INAN NEG.BE pot:**SG NEG**.

Unlike short *ɪ ʋ*, long final *ɪɪ ʋʋ* are not lowered:

Bà à nɛ̄ mɔ́lì. "They are gazelles."
3PL COP FOC gazelle:**PL**.

Bà kā' mɔ́līɪ ⁺ø. "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, Jaggar p18.)

M̀ bīiga ⁺ø! "My child!"
1SG child:**SG VOC**!

M̀ bīisɛ ⁺ø! "My children!"
1SG child:**PL VOC**!

Pu'aa, bɔ ka fʋ kaasida?
Pṵ'āa ⁺ø, *bɔ́ kà fʋ̀ kāasídà* ⁺ø?
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 onɛ an yadda niŋida
dāṳ   ɔ́nì   àň yàddā-níŋìdā ⁺*ø*
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   nɛ̄ nɔ́bìr.   "It's a leg (*nɔ́bιr*$^{\varepsilon}$)."
3INAN COP FOC leg:**SG**.

Ànɔ́'ɔnì‿ø   ňyɛ̄ nɔ́bιrὲ ⁺*ø?*   "Who saw a leg?"
Who   **SER** see leg:**SG** **CQ**?

Lì   à   nɛ̄ nɔ́bιrὲɛ ⁺*ø?*   "Is it a leg?"
3INAN COP FOC leg:**SG**   **PQ**?

Lì à nɛ̄ dūk.   "It's a cooking pot (*dūk*$^{ɔ/}$)."
Ànɔ́'ɔnì ňyɛ̄ dūkɔ́?   "Who saw a pot?"
Lì à nɛ̄ dūkɔ́ɔ̀?   "Is it a pot?"

Lì à nɛ̄ kūk.   "It's a chair (*kūk*^{a})."
Ànɔ́'ɔnì ňyɛ̄ kúkà?   "Who saw a chair?"
Lì à nɛ̄ kúkàa?   "Is it a chair?"

Lì à nɛ̄ gbīgιm.   "It's a lion (*gbīgιm*^{nɛ})."
Ànɔ́'ɔnì ňyɛ̄ gbígìmnɛ?   "Who saw a lion?"
Lì à nɛ̄ gbígìmnɛɛ?   "Is it a lion?"

The length neutralisation results in a five-way *a ɛ ɔ ι ʊ* contrast in LF-final vowels by quality alone in this context:

Ànɔ́'ɔnì ňyɛ̄ kúkà?   "Who saw a chair(*kūk*^{a})?"
Ànɔ́'ɔnì ňyɛ̄ yīrɛ́?   "Who saw a house(*yīr*$^{\varepsilon/}$)?"
Ànɔ́'ɔnì ňyɛ̄ dɔ́ɔgɔ̀?   "Who saw a hut (*dɔ̀ɔg*^{ɔ})?"
Ànɔ́'ɔnì ňyɛ̄ mɔ́lì?   "Who saw gazelles(*mɔ̀lι*⁺)?"
Ànɔ́'ɔnì ňyɛ̄ bédʊgú?   "Who saw a lot (*bὲdʊgū*⁺/)?"

The Interrogative Prosodic Clitic induces a tonal change in the preceding LF. Kusaal is cross-linguistically unusual[7] 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** 5.3.2.

> *Ànɔ́'ɔnì ‿ø   ñyɛ́ bà bìiga   ⁺ø?*
> Who   **SER** see **3PL** child:**SG CQ**?
> "Who saw their child (*bīig*ᵃ)?"

Ànɔ́'ɔnì ñyɛ̄ bíigà?	"Who saw a child?" tonally identical to
Ànɔ́'ɔnì ñyɛ̄ sʋ́'ʋgà?	"Who saw a knife (*sʋ̀'ʋg*ᵃ)?"
Fʋ̀ bɔ́ɔd bɔ́?	"What (*bɔ̄*⁺) do you want?"
Ànɔ́'ɔnì ñyɛ̄ zu̠éyà?	"Who saw hills (*zu̠ēya*⁺)?"

Similarly with Pattern LO verbs in the Irrealis Mood:

M̀ ná bɔ̄dɩg.	"I will get lost."
M̀ ná bɔ̀dɩgɛɛ?	"Will I get lost?"

With 2-mora stem Pattern H verb base forms:

Ò pʋ̄ gɔ̄sɛ.	"She didn't look"
Ò pʋ̄ gɔ́sɛ̀ɛ?	"Didn't she look?"
Ò pʋ̄ dūgɛ.	"She didn't cook."
Ò pʋ̄ dúgɛ̀ɛ?	"Didn't she cook?"

---

7) This is not uncommon in West Africa, however: see, for example, Jaggar 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:

> *Fʊ̀ ná kūl   bɛ̄og.*   "You'll go home tomorrow."
> **2SG IRR** go.home tomorrow.

but *Bɛ̄ogʊ́‿   fʊ̀ ná kūl.*   "You're going home tomorrow." SB
> Tomorrow **2SG IRR** go.home.

All the examples in my materials of a LF ending a *yà'*-clause <u>30.1</u> seem
potentially explicable as Liaison before a subject pronoun:

> *Buŋ ya'a kpi **be'ede**, ba siido ne be'ed.*
> *Bʊ̀ŋ   yá' kpì bɛ̄'ɛdɛ [?bɛ̄'ɛdɪ], bà sìɪd·ō‿ ø   nɛ̄ bɛ̄'ɛd.*
> 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

However, several conjunctions <u>27.1.3</u> have forms ending in LFs which resemble
LFs preceding the Negative Prosodic Clitic rather than Liaison; thus KB consistently
shows final -ʊ in the Apocope-blocked <u>6.4</u> form *bɛdegʊ* for *bèdʊgū̄*^{+/} "a lot", and
equally consistently has final -ɔ in *bɔzugɔ* for *bɔ̄ zúgɔ̄* "because", *dinzugɔ* for *dìn zúgɔ̄*
"therefore" and *alazugɔ* for *àlá zùgɔ̄* "therefore." This phenomenon is thus best
regarded as an idiosyncratic derivational formation for conjunctions.

> *Ka o kaas bɛdegʊ.*   "And he wept greatly." (Genesis 27:38)
> *Kà   ò   kāas bɛ́dʊgū̄.*
> And **3AN** weep great:**ADV**.

> *bɔzugɔ ba zi' onɛ tʊmi m la naa.*
> *bɔ̄ zúgɔ̄, bà zī'   ɔ́nì   tʊ̀mɪ‿ m   lā náa ⁺ø.*
> 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 the Serialiser *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*ᵋ	20.3
Remoteness Marker	*n*ᵋ	30.1.1
Postposed 2pl subject pronoun	ʸᵃ	28.2.3

The Locative enclitic attaches directly to nominal 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		15.1

	Singular	Plural
1st	*m*ᵃ	*tɩ*⁺
2nd	*ʔ*ᵓ	*ya*⁺
3rd an	ᵒ [ʊ]	*ba*⁺
3rd inan	*lɩ*⁺	

The pronouns either attach directly to a verb word or after either of the Position 1 clitics, Remoteness Marker *n*ᵋ 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 ·*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:

*dùm*ᵐ	"bite"				
	+ *ba*⁺ "them"	→	*dùmɩ bā*	"bite them"
but	+ suffix *-b*ɔ	→	*dūm*ᵐɔ	gerund "biting"

If the host word LF ends in a short vowel, this is downranked to *ɩ* 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:

*tòm*ᵐ	"send"	+ *tɩ*⁺ "us"	→	*tòmɩ tī*⁺ᐟ
		+ ᵒ "him/her"	→	*tòm·o*⁻ᵒ
*dāam*ᵐᐟ	"beer"	+ *n*ᵋ "at, in"	→	*dāamín*ᵋ

LF-final *-iə -uθ* 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:

*kūk*ᵃ	"chair"	+ *n*ᵋ "at, in"	→	*kūkɩ-n*ᵋᐟ
*dūk*ᵓᐟ	"pot"	+ *n*ᵋ "at, in"	→	*dūkí-n*ᵋ
*bɔ̀ɔd*ᵃ	"want"	+ *tɩ*⁺ "us"	→	*bɔ̀ɔdī tí*⁺
		+ * f*ᵓ "you"	→	*bɔ̀ɔdī f*ᵓᐟ
		+ ᵒ "him/her"	→	*bɔ̀ɔd·ō*⁻ᵒᐟ
*gɔ̀sɩm*ᵃ	"look!"	+ ʸᵃ "ye"	→	*gɔ̀sɩmī*⁻ʸᵃᐟ
*pūʊg*ᵃ	"inside"	+ *n*ᵋ "at"	→	*pūʊgʊ-n*ᵋᐟ
*pɔ̄ɔg*ᵓᐟ	"field"	+ *n*ᵋ "at"	→	*pɔ̄ɔgʉ́-n*ᵋ
*yàʊg*ᵓ	"grave"	+ *n*ᵋ "at"	→	*yàʊgū-n*ᵋᐟ
*kù'əm*ᵐ	"water"	+ *n*ᵋ "in"	→	*kù'əmī-n*ᵋᐟ
*tòm*ᵐ	"send"	+ *lɩ*⁺ "it"	→	*tòmɩ lī*⁺ᐟ
*tòm*ᵐ	"send"	+ ᵒ "him/her"	→	*tòm·o*⁻ᵒ

Bà bɔ̀ɔdī m.	"They love me."	
Bà pū bɔ́ɔdī má.	"They don't love me."	
M̀ bɔ́ɔdī f.	"I love you."	
M̀ pū bɔ́ɔdī fɔ́.	"I don't love you."	
M̀ bɔ́ɔd·ō.	"I love him/her."	[m̩bɔ:dʊ]
M̀ pū bɔ́ɔd·ó-o.	"I don't love him/her."	[m̩pʰʊbɔ:dʊ:]
Bà bɔ̀ɔdī lí.	"They want it."	
Bà pū bɔ́ɔdī líι.	"They don't want it."	
Bà bɔ̀ɔdī tí.	"They love us."	
Bà pū bɔ́ɔdī tíι.	"They don't love us."	
Bà bɔ̀ɔdī yá.	"They love you."	
Bà pū bɔ́ɔdī yáa.	"They don't love you."	
Bà bɔ̀ɔdī bá.	"They love them."	
Bà pū bɔ́ɔdī báa.	"They don't love them."	

Gɔ̀sιm!	"Look!" (to one person)

Gɔ̀sιmī‿ ø!	"Look!" (to several people)

Look:**IMP 2PL.SUB**!

Examples with host LFs ending in long vowels:
After *CVV* base forms:

kʊ̄⁺	"kill"

Kà bà kʊ́ʊ m.		"And they killed me."
Kà bà pū kʊ́ʊ mā.		"And they didn't kill me."
Kà bà kʊ́ʊ f.		"And they killed you."
Kà bà pū kʊ́ʊ fɔ́.		"And they didn't kill you."
Kà bà kʊ́·o.	[kʰʊ:]	"And they killed him."
Kà bà pū kʊ́·o.	8.1	"And they didn't kill him."
Kà bà kʊ́ʊ bā.		"And they killed them."
Kà bà pū kʊ́ʊ báa.		"And they didn't kill them."

kι̯à⁺	"cut"

Kà bà kíə m.	"And they cut me."
Kà bà pū kíə mā.	"And they didn't cut me."
Kà bà kíə f.	"And they cut you."
Kà bà pū kíə fɔ́.	"And they didn't cut you."

Kà bà kíə lī.		"And they cut it."
Kà bà pū kíə líι.		"And they didn't cut it."
Kà bà kí·o.	[kʰiʊ]	"And they cut him."
Kà bà pū kí·ō-o.	[kʰiʊ:]	"And they didn't cut him."
Kà bà kíə tī.		"And they cut us."
Kà bà pū kíə tíι.		"And they didn't cut us."

ňyɛ̄⁺	"see"

Kà bà ňyɛ́ɛ m.	"And they saw me."
Kà bà pū ňyɛ́ɛ mā.	"And they didn't see me."
Kà bà ňyɛ́ɛ f.	"And they saw you."
Kà bà pū ňyɛ́ɛ fɔ.	"And they didn't see you."
Kà bà ňyɛ́·o.	"And they saw her."
Kà bà pū ňyɛ̄·ó-o.	"And they didn't see her."
Kà bà ňyɛ́ɛ bā.	"And they saw them."
Kà bà pū ňyɛ́ɛ báa.	"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:

zú·o	"steal him"	SF	[zuʊ]
zū·ó-o	"steal him"	LF	[zuʊ:]

Three-mora vowel sequences reduce to two before Liaison:

dà'a⁼	"market"	+ *nᵉ*	"at, in"	→	*dā'anᵉ⁄*	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):

pāe⁺⁄	"reach"	+ *tι⁺*	"us"	→	*páa tī⁺⁄*
		+ *fᵓ*	"you"	→	*páa fᵓ*
		+ ᵒ	"him/her"	→	*pā·ó⁻ᵒ*
		+ ʸᵃ	"ye"	→	*pāe⁻ʸᵃ⁄*
pīe⁺⁄	"wash"	+ *tι⁺*	"us"	→	*píə tī⁺⁄*
		+ *fᵓ*	"you"	→	*píə fᵓ*
		+ ᵒ	"him/her"	→	*pī·ó⁻ᵒ*
		+ ʸᵃ	"ye"	→	*pīe⁻ʸᵃ⁄*

dūe+/	"raise"	+ *tι*+ "us"	→	*dúɵ tī*+/
		+ *ƒ*ᵓ "you"	→	*dúɵ ƒ*ᵓ
		+ ᵒ "him/her"	→	*dū·ó*-ᵒ
		+ ʸᵃ "ye"	→	*dūe*-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):

| *sū'e*ʸᵃ/ | "own" | + *lι*+ "it" | → | *sʊ́'ʊ lī*+/ |
| *vūẹ̆*ᵃ/ | "live" | + *n*ᵋ rem | → | *vʊ̄ʊ-n*ᵋ/ |

Similarly, the form

| *àẹ̆ň̆*ᵃ | "be" | + ᵒ "him/her" | → | *àň·o*-ᵒ |

occurs in

Mane a o.	"I am he." (Jn 18:5, 1976)
Mānι‿ ø áň·o‿ ø.	
1SG.CNTR SER 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 *ι*.

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:

kū̠⁺		"kill"
Kà bà kúe yā.	[kʰʊɪja]	"And they killed you (pl)."
Kà bà pū kúe yáa.		"And they didn't kill you (pl)."
ki̠à⁺		"cut"
Kà bà kíe yā.	[kʰiɪja]	"And they cut you (pl)."
Kà bà pū kíe yáa.		"And they didn't cut you (pl)."
ňyɛ̄⁺		"see"
Kà bà ňyέɛ yā.		"And they saw you (pl)."
Kà bà pū ňyέɛ yáa.		"And they didn't see you (pl)."
pāe⁺/		"reach"
Kà bà páe yā.		"And they reached you (pl)."
Kà bà pū páe yáa.		"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:

kū̠⁺	"kill"	+ ʸᵃ	"ye"	→	*kūe*-ʸᵃ/	[kʰʊɪ]
ki̠à⁺	"cut"	+ ʸᵃ	"ye"	→	*kīē*-ʸᵃ/	[kʰiɪ]
pāe⁺/	"reach"	+ ʸᵃ	"ye"	→	*pāe*-ʸᵃ/	

However, the replacement also affects front vowels:

bὲ⁺	"be"	+ ʸᵃ	"ye"	→	*bɛ̄e*-ʸᵃ/	[bɛɪ] written *bei*

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 *ι* also becomes [ʊ], written *·o* 2.3.

The rule for second morae differs from the word-internal rounding rule operative in the LF before **kkʋ *ŋŋʋ* 6.3.2: the second mora is invariably replaced by [ʊ], even if it was rounded and/or tense: there is no ATR harmony.

zū[+]	"steal"	+ [o]	"him/her"	→	*zū·ó*[-o]	SF [zuʊ]	LF [zuʊ:]
ŉyɛ̄[+]	"see"	+ [o]	"him/her"	→	*ŉyɛ̄·ó*[-o]	SF [ɉɛ̃ʊ]	LF [ɉɛ̃ʊ:]
dì[+]	"eat"	+ [o]	"him/her"	→	*dì·o*[-o]	SF [dɪʊ]	LF [dɪʊ:]
ki̜à[+]	"cut"	+ [o]	"him/her"	→	*kì·o*[-o]	SF [kʰiʊ]	LF [kʰiʊ:]
pāe[+/]	"reach"	+ [o]	"him/her"	→	*pā·ó*[-o]		
pīe[+/]	"wash"	+ [o]	"him/her"	→	*pī·ó*[-o]		
dūe[+/]	"raise"	+ [o]	"him/her"	→	*dū·ó*[-o]		

After a consonant a LF-final short *ι* becomes [ʊ], also written *·o*, before [o]; when the pronoun itself appears in its LF the two [ʊ] vowels combine as long [ʊ:]:

bɔ̀ɔd[a]   "want"

The LF long vowel behaves as one syllable tonally with regard to Levelling 5.2:

M̀ bɔ́ɔd·ō.   "I love him/her."   [m̩bɔ:dʊ]
M̀ pū bɔ́ɔd·ó-o.   "I don't love him/her."   [m̩pʰʊbɔ:dʊ:]

Thus the SFs of both [ya] and [o], 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 *ι* takes place also before the 2 sg object pronoun *f*[ʔ] "you":

Kà bà kíə f.   "And they cut you (sg)."
or *Kà bà kío f.*

Kà bà ŉyɛ́ɛ f.   "And they saw you (sg)."
or *Kà bà ŉyɛ́o f.*

Kà bà páa f.   "And they reached you (sg)."
or *Kà bà páʊ f.*

M̀ gbáŉ'a f.   "I've grabbed you (sg)."
or *M̀ gbáŉ'ʊ 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*[ʔ]|*ι*[+] Class singular suffix.

8.2.1.2 Allomorphy of the Subject Pronoun ᵞᵃ

The enclitic 2nd Person Plural Subject pronoun ᵞᵃ adopts the allomorph *-ní-* before Liaison, both before pronoun objects and before *àlá*⁺ "thus" <u>22.4</u>. The pronoun was historically **na*, which regularly became **yã* <u>3.1</u> with subsequent loss of emic nasalisation, as always with affix vowels <u>4.4</u>. When the *-a* is deleted by Apocope, *y* is also deleted <u>2.2</u>. When followed by a Liaison word, the vowel *a* was not deleted but became *ι*, before which *ɲ* became *n-*. (A similar development has occurred with the initial consonants of *nìŋ*ᵋ "do" = Toende Kusaal *ẽ̀ŋ*, the locative enclitic *n*ᵋ ~ *nī*⁺ᐟ = Toende *-ι*, and *nìe*⁺ "appear" = Toende *yẽe*.)

Dā	*dɔllι*‿	*yá*	⁺*ø!*		"Follow ye not!"
NEG.IMP	follow	**2PL.SUB**	**NEG**!		

Dì'əmī‿	*ø!*	"Receive ye!"
receive:**IMP**	**2PL.SUB**!	

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.**	

Sidiba, nɔngimini ya pu'ab.
Sīdιba ⁺*ø*, *nɔ̀ŋιmī-ní*‿ *yà pū'ab.*
Husband:**PL VOC**, love:**IMP-2PL.SUB 2PL** wife:**PL**.
"Husbands, love your wives!" (Eph 5:25)

Biisɛ, siakimini ya du'adib nɔya.
Bīisɛ ⁺*ø*, *sι̣àkιmī-ní*‿ *yà dū'adιb nɔ́yà.*
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'əmī-ní‿	*àlá!*	"keep ye on receiving!"
receive:**IMP-2PL.SUB ADV:**thus!		

Dì'əmī-ní lá /dì'əmī-n álá!	"keep ye on receiving!" See <u>8.2.2</u>

8.2.2 Non-Enclitic Liaison Words

Non-enclitic Liaison Words comprise

proclitic personal pronouns	* m̀ fʋ̀ ò lì tì yà bà*	15.1
personifier clitics	*à ǹ m̀*	19.10
ànɔ́ɔ̀nᴱ "who?"		15.4

along with all words beginning with

number prefixes	*à bà bʋ̀*	16.2.1
manner-adverb prefix	*à*	20.4

All these words have an initial Fixed L Toneme 8.3.1.
Two other particles of the underlying form *n* are also Liaison Words:

Complementiser	*ǹ*	31
Serialiser	*n*	26.1

Clause Complementiser *ǹ* is Fixed-L, but VP Serialiser *n* has no toneme. The Complementiser is bound to the left as well as right, but Serialiser *n* may follow a pause, though 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*, *yɛ̄* 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 *ʋ* 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 Complementiser *ǹ* and with the VP Serialiser *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 gɔ̀sí‿ bà bīis.   "We looked at their children."
1PL look.at **3PL** child:**PL**.   (Liason before *bà* "their")

Older written sources show the phenomenon more widely, though always within a phrase:

bane na yel Zugsobi ba tuuma a si'em la
bànɩ nà yēl Zūg-sɔ́b   bà tūʋmá‿ø   àň sī'əm lā
REL.PL IRR say head-one:**SG 3PL** deed:**PL** **COMP 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 tūʋma*.)
The <u>audio version</u> has ...*Zūg-sɔ́bí 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" <u>19.10</u> KSS p20
... n lɔ́ɔ‿ À-Bāa   zúʋ̀r
...**SER** 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 *ànɔ́'ɔ̀n*ᵋ "who?" <u>15.4</u>, the Manner-Adverb prefix and the Personifier Clitic the LF-final vowel is *ɩ* (*ʋ* after a velar preceded by a rounded vowel):

Ò   nìŋí‿ àlá.   "She did thus."
3AN do   **ADV**:thus   (contrast *àlá* "how many?" below)

yeli Abaa   "said to Dog" KSS p20
yɛ̀lɩ‿ À-Bāa
say   **PERS**-dog:**SG**

Fusion Verbs <u>11.1</u> show forms in final *e* [ɪ] in these two cases, instead of the monophthongs *aa iə uə* usual before another word in the VP <u>8.5.3</u>:

ka ba gban'e Adayuug   "and they seized Rat" KSS p20
kà   bà gbáň'e‿ À-Dàyūug
and **3PL** seize   **PERS**-rat:**SG**

However, the verb *àe̯ň*ᵃ "be something" always appears as *àaň*, not *àeň*.

Ka fʋ aan anɔ'ɔnɛ?   "And who are you?" (Jn 1:19)
Kà   fʋ̀ áaň ànɔ́'ɔnɛ̀ ⁺ø?
And **2SG COP** who   **CQ**?

Before the Number Prefix *a-* the pre-Liaison vowel is instead *-a*:

M̀ mɔ́r nē̄ bīīsá‿ àtáň'.   "I have three children."
1SG have **FOC** child:**PL NUM:**three.

Pɛ̀ɛdá‿ àlá   ⁺ø?   "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 fʋ̀ ňyē̄tá ⁺ø?
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.

gɔ̀sɪmí lá or *gɔ̀sɪm álá*   "Keep on looking!"

WK and DK both always round the LF-final vowel before *ò* "his/her":

Bà gɔ̀sʋ́‿ ò   bīíg.   "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. *-ι* [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 *rᵋ|a⁺* Class agreement <u>16.2.1</u>. 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 (*ŋariŋ* "boat", Kusaal *àňrʋŋᵓ*.) 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 Complementiser within *ǹ*-Clauses 31, and the VP Serialiser particle 26.1. 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 Complementiser and zero for the Serialiser.

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.

Complementiser *ǹ* is bound to the left as well as right, but Serialiser *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 ø 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 wʊsa **kalli** an si'em*
yà zūəbíd wūsa kállì‿   ø   àň sī'əm
2PL hair:**PL** all   number:**SG COMP COP INDF.ADV**
"how much the number of all your hairs is" (Lk 12:7)

*tʊʊm kanɛ ka m **tʊmmi** tisid Wina'am la.*
tʊ̀ʊm-kànı   kà m̀ túmmī‿ ø   tísìd   Wínà'am lā
work-**REL.SG** and **1SG** work:**DIPF SER** give:**DIPF** God   **ART**
"The work which I do for God" (Rom 15:17)

8.2.2.1.1 Complementiser *ǹ*

The post-subject complementiser *ǹ* 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 marker combines with a preceding pronoun
subject to produce a special set of pronouns 15.1.

Note the contrasts in

mán   zàb nà'ab   lā   "I having fought the chief." (*ǹ*-Clause)
1SG:COMP fight chief:**SG ART**

Mānı‿   ø záb nà'ab   lā.   "*I* have fought the chief." (*n*-focus)
1SG.CNTR SER fight chief:**SG ART**

tīnámì‿ ø   zàb nà'ab   lā "we having fought the chief" (*ǹ*-Clause)
1PL   COMP fight chief:**SG ART**

Tīnámì‿ ø záb nà'ab   lā. "We have fought the chief." (*n*-focus)
1PL   SER fight chief:**SG ART**

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:

Dāu̯   lā záb ná'àb lā.   "The man has fought the chief."
man:**SG ART** fight chief:**SG ART**

Dāu̯   lā gɔ́s   ná'àb lā.   "The man has looked at the chief."
man:**SG ART** look.at chief:**SG ART**

but   *dāu̯   lá‿* ø   *zàb nà'ab   lā*
       man:**SG ART COMP** fight chief:**SG ART**
       "the man having fought the chief"

       dāu̯   lá‿ ø   *gɔ̄s   ná'àb   lā*
       man:**SG ART COMP** look.at chief:**SG ART**
       "the man having looked at the chief"

8.2.2.1.2 Serialiser *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   zɔ́ɔ‿ ø   *kɛ̄ŋ   nā.*   "And he came running"
       And **3AN** run   **SER** come hither.

After a final short vowel which is not a non-clitic word root vowel, WK has 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"; probably some or all "particle-verbs" 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 25 is identical to the VP Serialiser *n* phonologically, and will be regarded as a specialised use of the same particle:

       Bɔ̄ɔ‿ ø   *lá*   [+]ø?   "What's that?"
       What **SER** 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:

	M̀ zábī bá.	"I've fought them."
	Kà m̀ zábì bā.	"And I've fought them."
	M̀ pū bɔ́ɔdī báa.	"I don't love them."
cf	*M̀ pū bɔ́ɔdī fɔ́.*	"I don't love you."
	Kà m̀ pū zábì báa.	"And I didn't fight them."
cf	*Kà m̀ pū zábì fɔ̄.*	"And I didn't fight you."
	Ànɔ́'ɔnì kúʋ bá?	"Who has killed them?" SF *kúʋ bā*

The Locative Enclitic *n*ᵋ does not alter the preceding toneme:

*pūʋg*ᵃ	"inside"	+ *n*ᵋ "at"	→ *pūʋgʋ-n*ᵋ/	(Pattern O)
*bīig*ᵃ	"child"	+ *n*ᵋ "at"	→ *bīigɪ-n*ᵋ/	WK
*mʋ̀'ar*ᵋ	"dam, lake"	+ *n*ᵋ "at"	→ *mʋ̀'arī-n*ᵋ/	
*pɔ̄ɔg*ɔ/	"field"	+ *n*ᵋ "at"	→ *pɔ̄ɔgʋ́-n*ᵋ	
*yàad*ᵋ	"graves"	+ *n*ᵋ "at"	→ *yàadī-n*ᵋ/	WK
*kūʋdíb*ᵃ	"killers"	+ *n*ᵋ "at"	→ *kūʋdíbī-n*ᵋ/	WK
dà'a⁼	"market"	+ *n*ᵋ "at"	→ *dā'a-n*ᵋ/ for *dà'ā-n*ᵋ/ 5.2	

Note that in *dūk lā púʋgū-n*ᵋ "inside the pot", *pūʋg*ᵃ "inside" shows the normal LF-final M after L/H despite being changed by M Raising 8.4.

The Remoteness Marker *n*ᵋ and the Postposed 2pl *ʸ*ᵃ both impose M tone on the preceding LF-final mora, regardless of its intrinsic toneme:

	*dūg*ᵋ	"cook"	+ *n*ᵋ rem	→ *dūgʋ-n*ᵋ/	
	*bɔ̀dɪg*ᵋ	"lose"	+ *n*ᵋ rem	→ *bɔ̀dɪgī-n*ᵋ/	
	*yādɪg*ᵋ/	"scatter"	+ *n*ᵋ rem	→ *yādɪgɪ-n*ᵋ/	
dipf	*kūʋd*ᵃ/	"kill"	+ *n*ᵋ rem	→ *kūʋdɪ-n*ᵋ/	
dipf	*yādɪgíd*ᵃ	"scatter"	+ *n*ᵋ rem	→ *yādɪgídī-n*ᵋ/	

Dā dɔ̀llɪ-yá!	"Follow ye not!"

mɛ̀⁺	"build"	+ *n*ᵋ rem	→ *mɛ̄ɛ-n*ᵋ/ for *mɛ̀ɛ̄-n*ᵋ/ 5.2	

Dāʉ̄ lā mɛ́ɛ-n	"The man built (earlier today.)"
Man:ꜱɢ ᴀʀᴛ build-ʀᴇᴍ	

Before enclitic object pronouns, all Indicative Base Forms without the Independency Marking tone overlay 22.6.1.1 **change LF-final LM to LL and LF-final MM to MH.**

Verb base forms without tone overlay:

bɔ̀dɪgᵋ	"lose"	+ *mᵃ* "me"	→ *bɔ̀dɪgɪ mᵃ*	
dì⁺	"eat"	+ *lɪ⁺* "it"	→ *dìɪ lī⁺ᐟ*	
yādɪgᵋᐟ	"scatter"	+ *mᵃ* "me"	→ *yādɪgí mᵃ*	
dūgᵋ	"cook"	+ *lɪ⁺* "it"	→ *dūgí lī⁺ᐟ*	
gɔ̄sᵋ	"look"	+ *ᵒ* "him/her"	→ *gɔ̄s·ó⁻ᵒ*	
kū⁺	"kill"	+ *mᵃ* "me"	→ *kʊ́ʊ mᵃ* for *kūʊ́ mᵃ* 5.2	

Pattern H Fusion verb Base Forms behave exactly like *CVV*-stems:

pāe⁺ᐟ	"reach"	+ *mᵃ* "me"	→ *páa mᵃ*
dìꞌe⁺ᐟ	"get"	+ *ba⁺* "them"	→ *díꞌə bā⁺ᐟ*

After other verb forms, the object pronouns do not alter the host tonemes:

zàbɪdᵃ	"fights"	+ *mᵃ* "me"	→ *zàbɪdī mᵃᐟ*
dìtᵃ	"eats"	+ *lɪ⁺* "it"	→ *dìtī lí⁺*
yādɪgídᵃ	"scatters"	+ *ba⁺* "them"	→ *yādɪgídī bá⁺*
kūʊdᵃᐟ	"kills"	+ *mᵃ* "me"	→ *kūʊdí mᵃ*
sūꞌeʸᵃᐟ	"own"	+ *lɪ⁺* "it"	→ *sūꞌʊ́ lī⁺ᐟ*

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:

* M̀ bɔ́ɔd·ō.*	"I love him/her."	[m̩bɔːdʊ]
M̀ pū bɔ́ɔd·ó-o.	"I don't love him/her."	[m̩pʰʊbɔːdʊː]

Irrealis Mood forms of Pattern LO Verbs:

Ò nà bɔ̄dɪgɪ m.	"He will lose me."
Ò kʊ̀ bɔ̄dɪgɪ má.	"He will not lose me."
Ò nà bɔ̄dɪgɪ bá.	"She will lose them."
Ò kʊ̀ bɔ̄dɪgɪ báa.	"She won't lose them."
Ò kʊ̀ bɔ̄dɪgɪdɪ má.	"He won't be losing me."
Ò kʊ̀ zābɪdɪ má.	"He won't be fighting me."
Ò kʊ̀ zāb·ó-o.	"He won't fight him."
or *Ò kʊ̀ zāb·o-o.*	"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 →   *zābɩ m*ᵃ/   "...will fight me"
dūge + *m*ᵃ →   *dūgí m*ᵃ   "...cook for me"

All non-enclitic Liaison Words begin with a Fixed-L toneme <u>8.3.1</u> except for Serialiser *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 <u>5.3.2</u>.

Base forms without tone overlay:

Kà   tì   díι‿ bà dīιb.   "And we ate their food."
And **1PL** eat   **3PL** food.

Kà   ò   bɔ́dɩgì‿ bà bʋ̀mɩs.   "And he lost their donkeys."
And **3AN** lose   **3PL** donkey:**PL**.

Kà   ò   dūgí‿ bà dīιb.   "And he cooked their food."
And **3AN** cook   **3PL** food.

Dynamic Imperfective without tone overlay:

Kà   tì   dítí‿ bà dīιb.   "And we were eating their food."
And **1PL** eat:**DIPF** **3PL** food.

Nominal forms 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
*bànɩ nà yēl Zūg-**sɔ́bí**   bà tūʋmá‿ ø   àň sī'əm lā*
REL.PL IRR say head-one:**SG 3PL** deed:**PL**   **COMP COP INDF.ADV ART**
"Those who will tell the Lord how their deeds are." (Heb 13:17, 1996)

Before complementiser-*ǹ* a final M tone becomes H:

*dāʋ̥   **lá**‿ ø   dāa záb nà'ab lā*
man:**SG ART COMP TNS** fight chief:**SG ART**
"the man's having fought the chief"

Before Serialiser-*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.

    M̀   nɔ́k   sʊ́'ʋgʋ̀‿ø kḭ́á nīm   lā.
    1SG pick.up knife**:SG SER** cut meat**:SG ART**.
    "I cut the meat with a knife."

    amaa o kena ye o tʋm tisi ba
    àmáa ò   kɛ̄   nā   yɛ́   ò   túm‿ø   tìsɪ‿bā
    but   **3AN** come hither that **3AN** work **SER** 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 5.3.2.

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 22.6.1.1
        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 22.6.1.2 (including ellipted subjects 27.1.5.2)
        ò lì bà   *except* preceding Independency Marking
        m̀ fʋ̀ tì yà   *except* preceding Independency Marking after *yɛ̄*

The Serialiser *n* is transparent to L Raising 8.2.3.
The Number and the Manner-adverb prefixes *à-* 16.2.1 17 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 27.1.3 or pre-subject adjuncts 28.1.1.

    Bà tìs ná'àb   lā   búŋ.
    3PL give chief**:SG ART** donkey**:SG**.
    "They gave the chief a donkey (*bʋ̀ŋ*[a])."

Bà ǎwɛ̀' ná'àb   lā súŋā.   "They beat the chief well (*sòŋā⁺ᐟ*)."
3PL beat chief:**SG** **ART** good:**ADV**.

Raising is absent after words ending in an affix vowel with H toneme:

M̀ dìga   lú yā.   "My dwarfs have fallen down."
1SG dwarf:**PL** fall **PFV**.

but   *M̀ yūɡʊmá lù yā.*   "My camels have fallen down."
      1SG camel:**PL** fall **PFV**.

L Raising examples, with *zàb*ᵋ "fight" *ɡɔ̄s*ᵋ "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 ɡɔ̄s ná'àb lā.   "And I've looked at the chief."
Kà ò ɡɔ̄s 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 ɡɔ́s ná'àb lā.   "I've looked at the chief."
Ò ɡɔ̀s 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 ɡɔ̀sī bá bédʊɡū.   "She looked at them a lot."   (*ba* object)
Ò ɡɔ̀sí bà bèdʊɡū.   "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 category[8]. Flexionless singulars ending in L like *mà* "mother" *z̯ùà* "friend" *d̯u'átà* "doctor", and words with cbs remodelled on a L-final sg, like *lànnɪg* "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, *bɛ̀* "be somewhere/exist", is followed by raising. *Lɛ̀ɛ* "but" is followed by raising when affected by Independency-Marking 22.6.1.1 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 Serialiser *n* 8.2.2.1.2, which is toneless, along with the linker particle *kà* "and":

proclitic personal pronouns	*m̀ fʊ̀ ò lì tì yà bà*
personifier clitics	*à- ǹ- m̀-*
*ànɔ́'ɔ̀n*ᵋ "who?"	
Complementiser	*ǹ* 8.2.2.1.1
all words with number prefixes	*à- bà- bʊ̀-*
manner-adverb prefix	*à-*
linker particle	*kà*

Initial *à-* in loanwords may be treated as Fixed-L by analogy 18.1.
If there is no intervening pause, a preceding M toneme must become H:

	Bà kʊ̀ʊdī‿ bá.	"They kill them."
	3PL kill:**DIPF 3PL.OB**.	
but	*Bà **kʊ̀ʊdí**‿ bà bʊ̄ʊs.*	"They kill their goats."
	3PL kill:**DIPF 3PL** goat:**PL**.	
	*Lì à **nɛ́** à-dàalʊ́ŋ.*	"It's a stork"
	3INAN COP FOC PERS-stork:**SG**.	

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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" LINCOM 2010, pp39ff.)

ba diib n yit na'ateŋ la na zug

bà **díɪb** ǹ   yīt   ná'-tɛ̄ŋ   lā   nā   zúg

3PL food   **COMP** 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.

wōʊ **sáa** ⌣ ∅   nāanɪ i̯áňk yà ňyá'aŋ n   tí   páe ⌣ yà tùɵna   lā

like rain:**SG COMP** then   jump **2PL** behind **SER** 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 throughout[9]. 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:

bʊ̀-pìəlɪg[a]   "white goat"   bʊ̀-pāalíg[a]   "new goat"

bī-púŋ-pìəlɪg[a]   "white girl"   bī-púŋ-pāalíg[a]   "new girl"

nɔ̄-píəlìg[a]   "white hen"   nɔ̄-páalìg[a]   "new hen"

Cb pre-modifier (*nɔ̄ɔr*[ε/] "mouth" cb *nɔ̄-*, and *dī'əs*[a/] "receiver" pl *dī'əsídìb*[a]):

nɔ̄-dí'ə̀s[a]   "chief's interpreter"

pl nɔ̄-dí'əsìdɪb[a]

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9) Unfortunately I did not think to check how words with M nominal prefixes behave with M Raising. e.g *dāʊ̯ lā tíntɔ̀ňríg* (?*tíntɔ̀ňrɪg*) "the man's mole (*tīntɔ̄ňríg*[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:

m̀ bīig	"my child" (*bīig*[a])
m̀ tìɩg	"my tree" (*tìɩg*[a])
māan bīig	"my child"
māan tíìg	"my tree"
m̀ gbīgɩm	"my lion" (*gbīgɩm*[nɛ])
m̀ yūgúm	"my camel" (*yūgúm*[nɛ])

No M Raising after words which are not followed by L Raising:

m̀ bi̯ēyá bīis	"my elder same-sex siblings' children (*bīis*[ɛ])"
m̀ bi̯ēyá fūud	"my elder same-sex siblings' clothes (*fūud*[ɛ/])"

M Raising after all other dependent free Nominal Phrases:

dāu̯ bîɩg	"a man's child" (vs *dàu̯-bīig*[a] "male child")
dāu̯ tíìg	"a man's tree"
nà'ab bîɩg	"a chief's child"
dāu̯ lā gbígìm	"the man's lion"
dāu̯ lā yúgòm	"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 bîɩg.	"They've given (it) to the chief's child."
3PL give chief:**SG ART** child:**SG**.	(M raising applied to *bīig*[a] "child")
Bà tìs ná'àb lā bīig.	"They've given the chief a child."
3PL give chief:**SG ART** child:**SG**.	(No M raising applied to *bīig*[a])

It occurs regardless of the meaning or rôle of the preceding dependent:

mɔ̄ɔgʋ-n wábʋg lā	"the wild (in-the-bush) elephant (*wābʋg*[ɔ/])"

M Raising does follow any free head before a dependent:

kūg-yínnì	"one stone" with *yínnì* as adjective <u>16.2.2</u>
but *kūgʊr yīnní*	"one stone"
wābʊg lā	"the elephant"
wābɪs pīiga	"ten elephants"
wābɪs pīiga lā	"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:

bʊ̀-wɔ̄k	"tall goat"
nɔ̄-wɔ́k	"tall hen"
bʊ̀-wɔ̄k-píəlìg	"tall white goat"
bʊ̀-wɔ̄k-páalìg	"tall new goat"
nɔ̄-wɔ́k-pìəlɪg	"tall white hen"
nɔ̄-wɔ́k-pāalíg	"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:

bʊ̀-pìəlɪg	"white goat"
bʊ̀-pāalíg	"new goat"
nɔ̄-píəlìg	"white hen"
nɔ̄-páalìg	"new hen"
dāṳ lā bʊ́-pìəlɪg	"the man's white goat"
dāṳ lā bʊ́-pāalíg	"the man's new goat"
dāṳ lā nɔ́-píəlìg	"the man's white hen"
dāṳ lā nɔ́-páalìg	"the man's new hen"

Contrast

dūg-káŋā	"this pot" (*dūk$^{ɔ/}$* cb *dūg-* "pot")
[*sālɪma dúg-*]*kàŋā*	"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 <u>8.4.1</u>. Thus

[*fūug dɔ́ɔ̀g*]	"tent" (*fūug*ᵓ⁄ "cloth", *dɔ̀ɔg*ᵓ "house")
pʊ̀'ʊsʊg [*fúùg dɔ́ɔ̀g*]	(not *[*pʊ̀'ʊsʊg fúùg*] *dɔ̀ɔg*)
	"tabernacle" (*pʊ̀'ʊsʊg*ᵓ "worship")

In   *Lì kā' [[[dāu̯ lā bîîg] bīər] náàf] zūʊre.*
       "It's not the man's child's elder-same-sex-sibling's cow's tail." WK
      (*bīig*ᵃ "child" *bīər*ᵋ⁄ "elder sib of same sex" *náaf*ᵓ "cow" *zūʊr*ᵋ "tail")

the nesting results in alternating absence of M Raising; the two-toneme words
bîig náàf, having been themselves affected by M Raising, are not *followed* by it.

The final vowel mora before the Locative Enclitic *n*ᵋ always has M toneme,
even when there is no Initial L Raising after the corresponding SF (see below):

dāu̯ lā pɔ́ɔgū̄-n	"in the man's field (*pɔ̄ɔg*ᵓ⁄)"
dāu̯ lā púʊgū̄-n	"inside the man" (*pūʊg*ᵃ "inside")
like *dāu̯ lā dɔ́ɔgū̄-n*	"in the man's hut (*dɔ̀ɔg*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:

nɔ̄-wɔ́k díìb	"a tall hen's food" (*dīɩb*ᵓ "food")
like *bʊ̀-wɔ̄k díìb*	"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 (*dāu̯ lā*) X has got lost (*bɔ̀dɩg yā*)" and
"my elder same-sex siblings' (*m̀ bi̯ēyá*) X has got lost":
Pattern L and Subpattern HL, not subject to M Raising:

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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.

bʊ̀ŋ[a]	"donkey"	*Dāṳ lā búŋ bɔ́dìg yā.*
*àňrʊŋ*ᵓ	"boat"	*Dāṳ lā áňrʊ̀ŋ bɔ́dìg yā.*
*dɔ̀ɔg*ᵓ	"house"	*Dāṳ lā dɔ́ɔ̀g bɔ́dìg yā.*
*à-gáʊ̀ňg*ᵓ	"pied crow"	*Dāṳ lā gáʊ̀ňg bɔ́dìg yā.*

Pattern H and O Nominals which have not undergone M Raising:

*wābʊg*ᵓ/	"elephant"	*M̀ bi̯ēyá wābʊg bɔ́dìg yā.*
bāŋ[a]	"ring"	*M̀ bi̯ēyá bāŋ bɔ́dìg yā.*
*yūgʊdɪr*ᵋ	"hedgehog"	*M̀ bi̯ēyá yūgʊdɪr bɔ́dìg yā.*

Pattern H and O Nominals which have undergone M Raising; two tonemes:

*wābʊg*ᵓ/	"elephant"	*Dāṳ lā wábʊ̀g bɔ̀dɪg yā.*
*pɔ̄ɔg*ᵓ/	"field"	*Dāṳ lā pɔ́ɔ̀g bɔ̀dɪg yā.*
bāŋ[a]	"ring"	*Dāṳ lā báŋ bɔ̀dɪg yā.*
pūʊg[a]	"inside"	*Dāṳ lā púʊ̀g bɔ̀dɪg yā.*

With more than two tonemes:

| *yūgʊdɪr*ᵋ | "hedgehog" | *Dāṳ lā yúgʊdɪ̀r bɔ́dìg yā.* |

Words with initial H like *náaɾ*ᵓ "cow" fluctuate, probably by analogy with words with Subpattern HL like *à-gáʊ̀ňg*ᵓ, which are not subject to M Raising:

| *náaɾ*ᵓ | "cow" | *Dāṳ lā náà̀ɾ bɔ́dìg yā.* |
| | | *Dāṳ lā náà̀ɾ bɔ̀dɪg yā.* |

8.5 Segmental Contact Phenomena

8.5.1 Consonant Assimilation

Both the initial consonant and the emic nasalisation of the deictic *ňwà*[+] "this" are lost when it appears as an enclitic after a word ending in a consonant:

bīis ňwá	"these children"	[bi:sa]
zàam ňwá	"this evening"	[za:ma]
but *pu̧'ā ňwá*	"this woman" (e.g. as vocative)	[pʰʊ̧a̧wã]

The initial *l* of the definite article *lā*[+/] assimilates totally to a preceding word final *-r*, and [r:] simplifies to [r]:

yīr lā	"the house"	[jira]
pùkɔ̀ɔňr lā	"the widow"	[pʰʊkʰɔ̃: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 *nīdɪb lā* "the people."

Initial *n* of the focus particle *nɛ̄*[+/] 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]:

Bà kpìid nɛ̄.	"They're dying."	[ba k͡pi:dɛ]
M̀ zɔ́t nɛ̄.	"I'm afraid."	[m̩ zɔt:ɛ]
M̀ mɔ́r nɛ̄ bīisá àyí.	"I have two children with me."	[m̩ mɔrɛ bi:sa:ji]
Lì pè'ɛl nɛ̄.	"It's full."	[lɪ pʰɛ̧:l:ɛ]
Lì sàň'am nɛ̄.	"It's spoilt."	[lɪ sã̧: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 nominal prefixes assimilate to the place of articulation of a following stop:

dànkɔ̀ŋ	"measles"	[daŋkʰɔ̠ŋ]
nīn-bámmā	"these people"	[nimbam:a]

Before *s z* such word-final nasals are realised as [ŋ]:

bʊ̄n-zíidìr	"thing for carrying on head"	[bʊŋzi:dɪr]
nàm zī'	"still not know"	[naŋzɪ̰]

In the case of nominal 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, <u>4.2.1</u>):

	àňwá	"like this"
but	*àwá nā*	"like this here"
	kɛ̄ň⁺	"come"
but	*kɛ̄ nā*	"come hither"

Some unstressed *CVň-* elements lose nasalisation even when the following consonant is not a nasal. Thus with the compounds of *sʊ̄ňf*ᵖ/ "heart":

*sʊ̄-málɪsìm*ᵐ	"joy"
*sʊ̄ň-kpíʼòŋ*ᵓ	"boldness"

the NT and other sources write *sukpiʼoŋ* or *sukpiʼeuŋ* for the second word; similarly *supeen* "anger" for *sʊ̄ň-pɛ́ɛ̀n*ⁿᵋ. The loss of nasalisation here probably reflects the process of bleaching and phonological simplification which has created nominal prefixes from some original Combining Forms <u>14.4</u>. KB has restored the nasalisation in writing: *sʊnkpiʼeuŋ* "boldness", *sʊnpɛɛn* "anger."

In the case of the verb *àe̥ň*ᵃ "be something/somehow" there is loss of nasalisation before the focus particle *nɛ̄*⁺/ (for the loss of the e̥ in this verb see below <u>8.5.3</u>):

	M̀ á nɛ̄ dāṳ.	"I'm a man."
but	*Lì àň súŋā.*	"It's fine."

Older written materials almost invariably write *àň* when it occurs directly before a complement as *a* not *ann*, but KB consistently has *an* [ã] whenever the form is not followed by *nɛ̄*⁺/.

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 *gɩ 6.3.1.

Regardless of origin, fronting diphthongs occur only word-finally and before *y*.

Nominal 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:

ae̯	→ *a*		*oe̯*	→ *o*	*ʋe̯*	→ *ʋ*
ae	→ *aa*				*ʋe*	→ *ʋʋ*
		ie	→ *iə*		*ue*	→ *uɵ*

	sāe̯ň	"blacksmith"
	sāe̯ň lā	"the blacksmith"
but	*sàň-kàŋā*	"this blacksmith"

Ò sʋ̀'ʋ lɔ́r.	"She owns a lorry."	*sū̄'e*[ya/]	"own"
Lì àň súŋā.	"It's good."	*àe̯ň*[a]	"be" 24.2

Ti ya'a ʋʋe, ti ʋʋnɛ tis Zugsɔb la.
Tì yá' ʋū̄e̯,   tì ʋú   nɛ̄‿ø tís Zūg-sɔ́b   lā.
1PL if   be.alive, **1PL** be.alive **FOC SER** give head-one:**SG ART**.
"If we live, we live to the Lord." (Rom 14:8): *ʋū̄e̯*[a/] "be alive"

Èňɾɩgɩm‿   ø   pāa   du̯'átà.
Shift.along:**IMP SER** reach doctor:**SG**.
"Shift along up to the doctor." (*pāe*[+/] "reach")

Lì nàa nɛ̄.	"It is finished."	*nāe*[+/] "finish"
Dúɵ wɛ̄lá?	"[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'e̯*[+] "not be" loses the final *e̯* before the particle *nɛ̄* or an object; *kā'e̯* only occurs VP-finally:

Sɔ' kae na nyaŋi dɔl zugdaannam ayi'...
Sɔ̄'   kā'e‿ ø ná ňyāŋɩ‿ø dɔ̄l   zūg-dáàn-nàm   àyí ...
INDF.AN NEG.BE SER IRR prevail **SER** follow head-owner:**PL**   **NUM**:two ...
"Nobody can serve two masters." (Mt 6:24)

Dā̰ṵ   kā'ḛ   dɔ́ɔgū̄-n   láa ⁺ø.
Man:**SG NEG.BE** room:**SG-LOC ART NEG.**
"There's no man in the room." (*dɔ̀ɔgū̄-n lā* is a clause adjunct 24.1)

Ò   kā'   bīiga   ⁺ø.   "She is not a child."
3AN NEG.BE child:**SG NEG**.

Word-final *ia ua* are also realised as [iə] [uɵ] within phrases 4.1.1, but the orthography does not reflect this:

sīa lā	"the waist"	[siəla]
sàbùa lā	"the girlfriend"	[sabuɵla]

This fronting loss is regular in my informants' speech, but NT orthography very frequently writes fronting diphthongs:

voen	for	*vū̄ʋn*
		"would live" (Gal 3:21, 1996)
Kristo da faaɛn ti	for	*Kristo dá fāaǎ̌‿ tí*
		Christ **TNS** save **1PL.OB**
		"Christ saved us." (Gal 5:1)

ILK too has several instances of *m wa'e ne* "I'm going" for *m̀ wá'a nē̄.* However, the audio version of the NT consistently shows monophthongisation. Even in the NT, *àḛǐñ*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 24.2 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 *fāeǐñ*⁺/ "save", perhaps written *faaenn* specifically to distinguish the forms from those of *fāǎñ*⁺ "grab, rob"; the 1996 NT has two instances of the certainly spurious *faaenm* for imperative *faanm*; contrast KB *Fʋ yadda ningir la faanf* "Your faith has saved you." (Lk 7:50.) (Cf *faangid* "saviour" *faangir* "salvation" 18.1.)

Unequivocal orthographic errors in the 1996 NT, like *Noŋilim pu naae da* for KB *Nɔŋilim pʋ naada* "Love does not come to an end." (1 Cor 13:8) 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" (*ňyāenɛ́* 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 *Wìdɩ-ňyá'aŋ*[a] "Woriyanga" (*wìd-ňyá'aŋ*[a] "mare") and *nwadibil* (Mt 2:2, 1996) for *ňwād-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*ᵃ|*s*ᵋ, *g*ᵓ|*d*ᵋ, *r*ᵋ|*a*⁺ and *f*ᵓ|*ɩ*⁺ **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*ᵋ|*a*⁺ Classes 19.2.2. 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 Class[11]. (For Adjectives see 10.1.)

Such substitution has become *regular* in the case of Class *g*ᵓ|*d*ᵋ stems ending in *m n* following a short vowel, which always use the plural suffix -*a*⁺ instead of -*d*ᵋ, creating a *g*ᵓ|*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*ᵋ|*b*ᵃ Subclass of ᵃ|*b*ᵃ has reinterpreted SFs ending in *m n r l* as *m*ᵐᵋ *n*ⁿᵋ *r*ᵋ *l*ˡᵋ instead of *m*ᵃ *n*ᵃ *r*ᵃ *l*ᵃ 9.3.1.1, and the *g*ᵓ|*s*ᵋ Subclass of *g*ᵃ|*s*ᵋ 9.3.2.1 has reinterpreted SFs ending in *g* after a rounded vowel mora as *g*ᵓ instead of *g*ᵃ.

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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 $r^ε|a^+$ with the singular suffix $l^ε$ 9.3.4.1.

The regular Classes and Subclasses are thus as follows:

$^a|b^a$	$sīd^a$	$sīdιb^a$	$sìd-$	"husband"
$r^ε|b^a$	$Bìn^{nε}$	$Bìm^{ma}$	$Bìn-$	"Moba person"
b^a (sg)	$nà'ab^a$	$nà'-nàm^a$	$nà'-$	"chief"
$g^a|s^ε$	$būʋg^a$	$būʋs^ε$	$bʋ̀-$	"goat"
$g^ɔ|s^ε$	$nú'ùg^ɔ$	$nú'ùs^ε$	$nū'-$	"hand"
$g^ɔ|d^ε$	$dɔ̀ɔg^ɔ$	$dɔ̀ɔd^ε$	$dɔ̀-$	"hut"
$g^ɔ|a^+$	$gbàṳŋ^ɔ$	$gbàna^+$	$gbàn-$	"book"
$r^ε|a^+$	$nɔ̄ɔr^{ε/}$	$nɔ̄yá^+$	$nɔ̄-$	"mouth"
$l^ε$	$Kūsáàl^ε$			"Kusaal"
$f^ɔ|ι^+$	$mɔ̀lιf^ɔ$	$mɔ̀lι^+$	$mɔ̀l-$	"gazelle"
$b^ɔ$	$sā'ab^ɔ$		$sà'-$	"porridge"
m^m	$tìιm^m$		$tì-$	"medicine"

M-stems with *long* root vowels in the $^a|b^a$ Class avoid the plural suffix b^a 9.3.1. Some $g^a|s^ε$ Class nouns with human reference have alternative plurals with b^a 9.3.2. Countable nouns in the m^m Class form plurals with -a^+ or -$s^ε$ or $nàm^a$ 9.4 9.3.7. The small $f^ɔ|ι^+$ Class has a few members with $f^ɔ|ι^+$ suffixes in only one number 9.3.5. The diminutive sg suffix -l^a is found in Kusaal only in the adjective $bīl^a$ "little", (plural $bībιs^ε$); it is more widespread in other Western Oti-Volta languages.

There are few other cases of irregular sg/pl pairing with nouns; examples are

$pɛ̄'og^{ɔ/}$	$pɛ̄'ɛs^{ε/}$		$pɛ̄'-$	"sheep"
$gbὲ'og^ɔ$	$gbὲ'ɛd^ε$		$gbὲ'-$	"forehead"
	$gbὲda^+$			
$bi̯āṳňk^ɔ$	$bi̯āň'ad^ε$	WK	$bi̯àň'-$	"shoulder"
	$bi̯āň'ada^+$	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 19.2.2. 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 $g^\mathfrak{o}|d^\varepsilon$ or its $g^\mathfrak{o}|a^+$ Subclass, except for a few in the $g^\mathfrak{o}|s^\varepsilon$ Subclass of $g^a|s^\varepsilon$ 9.3.2.1. All nouns in SF -*f* belong to $f^\mathfrak{o}|\iota^+$.

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." *Zɔɔm*^{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", *dìəm*^{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 $b^\mathfrak{o}$ Class. 2-mora stem gerunds in -*m* belong to $b^\mathfrak{o}$ 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", *pʋ̀'alím*^m "female sex organs." *Pīim*^{m/} "arrow" is a relic of a lost $^\mathfrak{o}|^\varepsilon$ Class.

9.1.1 Noun Class and Meaning

As usual with noun class systems, there are correlations between class membership and meaning; exceptions are frequent, however. 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 35.6, many larger animals, and tools. Almost all ethnic group names belong to $^a|b^a$ or $g^a|s^\varepsilon$ (*Zàngbὲog*^ɔ "Hausa" and *Nàsāara*⁺ "European" are the only exceptions in my materials); the place inhabited by the group has sg -$g^\mathfrak{o}$ 35.5.

The $g^\mathfrak{o}|d^\varepsilon$ and $r^\varepsilon|a^+$ Classes are the default non-human countable classes. They include all names of fruits 35.6, and most names of body parts 35.7. Human-reference nouns in $g^\mathfrak{o}|d^\varepsilon$ seem to be pejorative (*bālɛ̄rʋg*^{ɔ/} "ugly person", *dàbīog*^ɔ "coward", *zɔ̄lʋg*^{ɔ/} "fool.") Some nouns which historically belonged to $^a|b^a$ have been reallocated to $r^\varepsilon|a^+$ for phonological reasons e.g. *bīər*^{ɛ/} "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 *ʔ|ι⁺* Class includes two groups of meanings: animals, and small round things. It contains all names of seeds. No *ʔ|ι⁺* noun refers to people.

The *bɔ* Class has only two members in my own materials that are not gerunds: *sā'abɔ* "millet porridge, TZ" and *tāňpɔ* "war." There is also a word *ki'ibɔ* "soap" in written materials; WK has instead *kīibʊ́⁺* with cb *kīib-* which is probably a loan from the cognate Mampruli word 18.1. Niggli's "Dictionnaire" has Toende *kí'ιp*.

The *mᵐ* 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 *mᵐ* or *bɔ* or formally plural.

Deverbal nouns have predictable class membership: agent nouns belong to *ª|bª*, instrument nouns to *gª|sᵋ*, and gerunds take *gɔ rᵋ bɔ* or *mᵐ* 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 allomorphism 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.

fūugɔ/   "clothing"   pl *fūtᵋ/* or *fūudᵋ/*

and some *rᵋ|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 *gª|sᵋ* Class as a result of the merger of *iəň uθň* with *εεň ɔɔň* 6.3.1:

nūa⁺/   "hen"   *nɔ̄ɔsᵋ/*   "hens"

Such alternations are never levelled. However, the distribution of *oral iə uθ* versus *εε ɔɔ* is strikingly different between the *gª|sᵋ* and the *gɔ|dᵋ* Classes. There are only a few stems with the root vowel *iə* (and none with *uθ*) before singular *gɔ*, such as *dàbīogɔ* "coward" (pl *dàbīedᵋ*) and *kpī'oŋɔ* "strong" (pl *kpī'əma⁺*), and only a few with root-final oral *εε* or *ɔɔ* before the singular *gª*: *Gɔ̀ɔgª* sg of *Gɔ̀ɔsᵋ* "Goosi clan" along with *tὲ'εgª* "baobab". Moreover, there is an actual alternation in the stems used before *gª|sᵋ* and *gɔ|dᵋ* suffixes with the adjective

bī'a⁺   *bī'əsᵋ*   *bi̠à'-*   "bad"
bɛ̄'ogɔ   *bɛ̄'εdᵋ*   *bὲ'-*

The ᵃ|bᵃ Class noun *bī'əm*ᵐ "enemy" is derived from the same root with derivational **m* 13.1.2. The alternation is most likely due to a rule **iəCʋ → εεCʋ*, parallel to **uɵgʋ → ɔɔgʋ* 6.3.2, with the plural vowels remodelled on the sg; cf *lām-fɔ́ɔ̀g*ᵓ (← **lam-fuɵgʋ*: *lām*ᵐᵋ⁄ "gum" *fùe+* "draw out") pl *lām-fɔ́ɔ̀d*ᵉ "toothless." The vowel of *dàbīog*ᵓ "coward" is perhaps reintroduced from *dābíὰm*ᵐ "fear." A similar rule might account for the odd form of *pìəlɪg*ᵃ "white" seen in *zū-pέɛlὺg*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

Nominal 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.

*nīf*ᵓ⁄	*nīní*⁺	*nīn-*	or *nīf-*	"eye"
zìň'a⁺	*zὲň'εs*ᵉ	*zi̯àň'-*	or *zὲň'-*	"red" (adjective)
*wɔ̄k*ᵓ⁄	*wā'ad*ᵉ⁄	*wā'-*	or *wɔ̄k-*	"long, tall" (adjective)
*tāňp*ᵓ		*tàňp-*		"war" 6.1.1.1
*zūg*ᵓ⁄	*zūt*ᵉ⁄	*zū-*	or *zūg-*	"head"

Mooré and Toende both show *zu-* consistently in cases where Agolle has *zūg-*:

Mooré	Toende	Agolle	
zusoaba	*zùsóp*	*zūg-sɔ́b*ᵃ	"boss"
zúkʋ́ká	*zùkʋ́k*	*zūg-kūgʋr*ᵉ	"pillow"

*Zūg-sɔ́b*ᵃ "Lord" is very frequently read *Zū-sɔ́b*ᵃ in the audio version of the NT. The cb *zūg-* behaves tonally like a nominal prefix; the original *zū-* is probably a one-mora form that has not undergone Apocope 7.2.4.

The "regular" cb of *nīf*ᵓ⁄ "eye" is *nīn-*, but as a head it appears as *nīf-*:

     nīf-káŋā   "this eye"

Nīn- still predominates as a pre-modifier: *nīn-dáa*⁼ "face", *nīn-tám*ᵐ "tears", *nīn-gɔ́tìs*ᵉ "spectacles." *Gbàʋ̯ŋ*ᵓ "letter, book" now has the cb *gbàʋ̯ŋ-*, but the "regular" cb *gbàn-* still occurred as a generic argument in the 1976 NT e.g. *gbanmi'id gbàn-mī'id* "scribe" ("book-knower") where later versions have *gbauŋmi'id.* Similarly, the 1976 NT *ziŋgban'ad zīm-gbáň'àd* "fisherman" has been replaced by KB *ziiŋgban'ad.*

With *m* and *n* stems, the remodelled forms have become the regular cbs:

*zīnzāu̯ŋ*ᵓ/	*zīnzāná*⁺	*zīnzáu̯ŋ-*	"bat"
*àňrʋŋ*ᵓ	*àňrɪma*⁺	*àňrʋŋ-*	"boat"

So too with *CV*-stems in the *r*ᵋ|*a*⁺ Class:

*gbɛ̄r*ᵋ/	*gbɛ̄yá*⁺	*gbɛ̄r-*	"thigh"
*kʋ̀kɔ̄r*ᵋ/	*kʋ̀kɔ̄yá*⁺	*kʋ̀kɔ̄r-*	"voice"
		(but *kʋ̀kɔ̄-títā'ar*	"loud voice" NT)

*Vūm*ᵐ/ cb *vūm-* "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	*kī*⁺/	*kī-* or *kā-*	"cereal, millet"
*lā'af*ᵓ	*līgɪdɪ*⁺	*là'-* or *lìg-*	"cowrie" pl "money"

Two words have distinct sg- and pl-reference cbs:

dāu̯⁺	*dāp*ᵃ	*dàu̯-* sg *dàp-* pl	"man, male person"
tāu̯ň⁺/	*tāňp*ᵃ/	*tāu̯ň-* sg *tāňp-*pl	"sib of opposite sex"

Disambiguation is clearly involved with some longer remodelled cbs:

*kɔ̀lʋg*ᵓ	*kɔ̀n*ⁿᵋ	*kɔ̀lʋg-*	"bag"
*lànnɪg*ᵃ	*lànnɪs*ᵋ	*lànnɪg-*	"squirrel"

kɔ̀lʋg-kàŋā	"this bag"	cf cb *kɔ̀l-* from	*kɔ̄lɪg*ᵃ	"river"
lànnɪg-pìəlɪg	"white squirrel"	cf cb *làn-* from	*lān*ⁿᵋ	"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:

dàu̯-sʋ̀ŋ	"good man"	cf *dāu̯*	"man"
dàp-sʋ̀ma	"good men"	cf *dāp*	"men"

Remodelled cbs are traditionally written as separate words; as the orthography does not mark tone, this can lead to ambiguous forms. e.g. *yamug bipuŋ* (Acts 16:16, 1976) for *yàmmʋg-bī-púŋ* "slave girl" not *yàmmʋg bí-púŋ* "slave's girl" <u>19.8.1.5</u>.

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 *gᵓ* in singulars in -*gᵓ* -*kᵓ* -*ŋᵓ*, deletion of *g after *aa iə uɵ aaň εεň ɔɔň* with the *gᵃ|sᵋ* Class sg, consonant assimilation instead of epenthesis in all classes, and the combination of root-vowel-final stems with the flexions ᵃ sg, *ι⁺* 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:

*sīd*ᵃ	*sīdιb*ᵃ	*sìd-*	"husband"
*sàal*ᵃ	*sàalιb*ᵃ	*sàal-*	"human being"
*kpāad*ᵃ/	*kpāadíb*ᵃ	*kpāad-*	"farmer"
*kpīkpīn*ⁿᵃ/	*kpīkpīnníb*ᵃ	*kpīkpín-*	"merchant"
*sàam-pīt*ᵃ/	*sàam-pītíb*ᵃ	*sàam-pīt-*	"father's younger brother"
*bì-pīt*ᵃ/	*bì-pītíb*ᵃ	*bì-pīt-*	"younger child"
*wād-tís*ᵃ	*wād-tísìb*ᵃ	*wād-tís-*	"lawgiver" NT
*zà'-nɔ̄-gúr*ᵃ	*zà'-nɔ̄-gúrìb*ᵃ	*zà'-nɔ̄-gúr-*	"gatekeeper" NT
*nīd*ᵃ/	*nīdιb*ᵃ/	*nīn-* irreg	"person"

Most deverbal agent nouns are completely regular:

*kūʋd*ᵃ/	*kūʋdíb*ᵃ	*kūʋd-*	"killer"

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.

*kùɵs*ᵃ	*kūɵsιdιb*ᵃ	*kùɵs-*	"seller"
*pʋ̀'ʋs*ᵃ	*pʋ̄'ʋsιdιb*ᵃ	*pʋ̀'ʋs-*	"worshipper"
*dì'əs*ᵃ	*dī'əsιdιb*ᵃ	*dì'əs-*	"receiver"
*tʋ̀'as-tʋ̀'as*ᵃ	*tʋ̀'as-tʋ̄'asιdιb*ᵃ	*tʋ̀'as-tʋ̀'as-*	"talker"
*sīgιs*ᵃ/	*sīgιsídìb*ᵃ	*sīgιs-*	"lowerer"
*dìιs*ᵃ	*dìιs-nàm*ᵃ	*dìιs-*	"glutton"

The same behaviour is found with agent nouns from a few other verbs too:

sɔ̀s[a]	*sɔ̄sɪdɪb*[a]	*sɔ̀s-*	"beggar"
tìs[a]	*tīsɪdɪb*[a]	*tìs-*	"giver" WK
kīs[a/] or *kīsɪd*[a/]	*kīsɪdíb*[a]	*kīsɪd-* (only)	"hater"

These may be original 3-mora stem verbs with *ss → *s*. There are also

zàb-zàb[a]	*zàb-zàb-nàm*[a]	*zàb-zàb-*	"warrior"
	zàb-zābɪdɪb[a]		
gbān-záb[a]	*gbān-záb-nàm*[a]	*gbān-záb-*	"leatherbeater"
ňwī-tɛ́k[a]	*ňwī-tɛ́kɪdɪb*[a]		"rope-puller"

Exceptionally, consonant assimilation of *md does not appear in the plural in

	pu̯'à-sāň'am[ma]	*pu̯'à-sāň'amɪdɪb*[a]	*pu̯'à-sàň'am-*	"adulterer"
(cf	*yūʋm-yʊ́'ʋm*[na]	*yūʋm-yʊ́'ʋmnɪb*[a]	*yūʋm-yʊ́'ʋm-*	"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 <u>2.2.2</u>:

dāu̯[+]		*dāp*[a]	*dàu̯-*, *dàp-* <u>6.1.1.1</u>	"man" (*vir*)
tāu̯ň[+/]		*tāňp*[a/]	*tāu̯ň-*, *tāňp-*<u>6.1.1.1</u>	"sib of opposite sex"
sāe̯ň[+]	WK	*sāaňb*[a]	*sàň-*	"blacksmith"
sāe̯ň[a]	DK			
sɔ̄e̯ň[+]	WK	*sɔ̄ɔňb*[a]	*sɔ̀ň-*	"witch"
sɔ̄e̯ň[a]	DK			

There are also the two original *g-stems

pu̯'ā[a] ← **pu̯aga*	*pū'ab*[a]	*pu̯'à-*	"woman, wife"
bā'a[=] ← **ba'aga*	*bā'ab*[a]	*bà'a-*	"traditional diviner"

Some *CVV* stems introduce *-d-* in some forms but not others:

wìɪd[a]	*wìɪb*[a]	*wìɪd-*	"hunter"
sɔ̄ň'ɔd[a/]	*sɔ̄ň'ɔb*[a/]	*sɔ̄ň'ɔd-*	agent noun of *sɔ̄ň'e*[+/]
			"be better than"
pūkpāad[a/]	*pūkpāadíb*[a]	*pūkpá-*	"farmer" (but *kpāad*[a/]
			id is regular)

Sg final *-ʋ* is dropped elsewhere in the paradigm of

pītʋ́[+]	*pītíb*[a]	*pīt-*	"younger sibling of same sex"

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*[ɛ] 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*[ɛ]|*a*[+] Class:

Agolle	*pʋ̀kɔ̀ɔňr*[ɛ]	*pʋ̀kɔ̀ňya*[+]	*r*[ɛ]|*a*[+]	"widow"
Toende	*pɔ́kɔ́ɔ́t*	*pɔkõp*	*r*[ɛ]|*b*[a]	
Farefare	*pɔkõorɛ*	*pɔkõpa*	*r*[ɛ]|*b*[a]	
Mooré	*pʋ̀gkõoré*	*pʋgkõapa*	*r*[ɛ]|*b*[a]	
Agolle	*dà-kɔ̀ɔňr*[ɛ]	*dà-kɔ̀ňya*[+]	*r*[ɛ]|*a*[+]	"bachelor"
Toende	*dákɔ́ɔ́t*	*dakõp*	*r*[ɛ]|*b*[a]	
Farefare	*dàkõorè*	*dakõpa*	*r*[ɛ]|*b*[a]	

Such transfers may account for several human-reference nouns found unexpectedly in *r*[ɛ]|*a*[+], e.g. *bīər*[ɛ/] "elder sibling of the same sex", *pɔ̀ň'ɔr*[ɛ] "cripple", *ňyɛ̄'ɛr*[ɛ/] "next-younger sibling" (but Toende sg *yɛ̃'et* pl *yɛ̃ra id*.)

Stems in a short root vowel followed by single *m n l* regularly adopt a sg form resembling that of the the *r*[ɛ]|*a*[+] Class 9.3.1.1. All other stems in *-m* have sg *- m*[m] instead of *-m*[a]: *zū'əm*[m/] "blind person" etc.

Stems in *n* undergo consonant assimilation in the pl: **nb → mm*:

sāan[a/]	*sáam*[ma]	*sāan-*	"guest, stranger"

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*[ɛ] instead of *b*[a] or by pluralising with the word *nàm*[a] 9.4:

kpī'im[m/]	*kpī'imís*[ɛ]	*kpī'im-*	"dead person, corpse"
zū'əm[m/]	*zū'amís*[ɛ]	*zū'əm-*	"blind person"
tādɪm[m/]	*tādɪmɪs*[ɛ]	*tàdɪm-*	"weak person"
	tàdɪm-nàm[a]		

In two words WK freely accepted *-b*[a] pl forms as LFs but not SFs, clearly showing that avoidance of ambiguity drives the variations:

*kpɛ̄ɛ̌m*ᵐ	*kpɛ̄ɛ̌mma* LF-only WK		
	*kpɛ̀ɛ̌m-nàm*ᵃ	*kpɛ̀ɛ̌m-*	"elder"
*bǐʼəm*ᵐ	*bǐʼəmma* LF-only WK		
	*bìʼəm-nàm*ᵃ	*bìʼəm-*	"enemy"

Ambiguity between sg and pl may instead by avoided by replacing the sg suffix
-ᵃ with *g*ᵃ; such words may then develop *g*ᵃ|*s*ᵋ plurals as well:

*dàsāŋ*ᵃ	*dàsām*ᵐᵃ	*dàsàŋ-*	"young man"
	or *dàsāǎŋs*ᵋ		
*Yàaŋ*ᵃ	*Yàam*ᵐᵃ	*Yàaŋ-*	"Yanga, Yansi person"
	or *Yàamɩs*ᵋ		
	or *Yàaǎŋs*ᵋ		

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:

*Dàgbān*ⁿᵋ/	*Dàgbām*ᵐᵃ/	*Dàgbān-*	"Dagomba person"
*Bìn*ⁿᵋ	*Bìm*ᵐᵃ	*Bìn-*	"Moba person"
*Kùtān*ⁿᵋ/	*Kùtām*ᵐᵃ/	*Kùtān-*	member of EW's clan

An *r*-stem with an irregular stem change in the plural is seen in

*Mɔ̄r*ᵋ/	*Mɔ́ɔm*ᵐᵃ	*Mɔ̄r-*	"Muslim"

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.

	*lɛ̀m-lɛ̄m*ᵐᵃ	*lɛ̀m-lɛ̄mmɩb*ᵃ	*lɛ̀m-lɛ̀m-*	"taster"
or	*lɛ̀m-lɛ̄m*ᵐᵋ	*lɛ̀m-lɛ̄mma*⁺		
	*ňyàʼan-dɔ̀l*ˡᵃ	*ňyà'an-dɔ̀llɩb*ᵃ	*ňyà'an-dɔ̀l-* NT	"disciple" tones: WK
	*ňyā'an-dɔ́l*ˡᵋ	*ňyā'an-dɔ́llà*⁺	*ňyā'an-dɔ́l-*	WK's own forms

gbàn-zāñl[la/]	*gbàn-zāñllíb*[a]	*gbàn-zāñl-*		"one with a book in hand" KT WK
bʊ̀-zāñl[la/]	*bʊ̀-zāñllíb*[a]	*bʊ̀-zāñl-*		"goat-carrier"
or *bʊ̀-zāñl*[lɛ/]	*bʊ̀-zāñllá*[+]			
gbàn-mɔ̄r[a/]	*gbàn-mɔ̄ríb*[a]	*gbàn-mɔ̄r-*	DK	"one who has a book"
gbàn-tār[a/]	*gbàn-tāríb*[a]	*gbàn-tār-*	DK	*id*
bʊ̀-mɔ̄r[a/]	*bʊ̀-mɔ̄ríb*[a]	*bʊ̀-mɔ̄r-*		"goat-owner"
or *bʊ̀-mɔ̄r*[ɛ/]	*bʊ̀-mɔ̄rá*[+]			

Agent Nouns with stems in *nn* or in *mm*/*mn* derived from **md*, like *tʊ̀m-tūm*[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 Deverbal Adjectives 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:

nà'ab[a]	*nà'-nàm*[a]	*nà'-*	"chief"
yáab[a]	*yāa-nám*[a]	*yāa-*	"grandparent, ancestor" (**yāágbā*)
pʊ̀gʊdɩb[a]	*pʊ̀gʊd-nàm*[a]	*pʊ̀gʊd-*	"father's sister"
áñsìb[a]	*āñs-nám*[a]	*āñs-*	"mother's brother"

With the consonant assimilation **mb* → *mm*:

sàam[ma]	*sàam-nàm*[a]	*sàam-*	"father"
dìəm[ma]	*dìəm-nàm*[a]	*dìəm-*	"man's parent-in-law"
dàyáam[ma]	*dàyāam-nám*[a]	*dàyāam-*	"woman's parent-in-law"

9.3.2 *g*[a]|*s*[ɛ] Class

Straightforward examples include:

būʊg[a]	*būʊs*[ɛ]	*bʊ̀-*	"goat"
tɛ̀'ɛg[a]	*tɛ̀'ɛs*[ɛ]	*tɛ̀'-*	"baobab"
tìɩg[a]	*tìɩs*[ɛ]	*tì-*	"tree"
ňwādɩg[a/]	*ňwādɩs*[ɛ/]	*ňwād-*	"moon, month"
lɔ̄dɩg[a/]	*lɔ̄dɩs*[ɛ/]	*lɔ̄d-*	"corner"
āaňdɩg[a]	*āaňdɩs*[ɛ]	*àaňd-*	"Vitex doniana"

*bʊ̀-dìbɪg*ᵃ	*bʊ̀-dìbɪs*ᵋ	*bʊ̀-dìb-*	"male kid"
*kpìibɪg*ᵃ	*kpìibɪs*ᵋ	*kpìib-*	"orphan"
*yàmmɪg*ᵃ	*yàmmɪs*ᵋ	*yàm-*	"slave"
*kɔ̄lɪg*ᵃ	*kɔ̄lɪs*ᵋ	*kɔ̀l-*	"river"
*kpʊ̀kpàrɪg*ᵃ	*kpʊ̀kpàrɪs*ᵋ	*kpʊ̀kpàr-*	"palm tree"
*pūsɪg*ᵃ⁄	*pūsɪs*ᵋ⁄	*pūs-*	"tamarind"
*zɔ̄ɔg*ᵃ	*zɔ̄ɔs*ᵋ		"run, race" 12.1.1.1.1
*būdɪg*ᵃ			"planting" 12.1.1.1.1

Root-stems in *Caa Ciə Cuɵ* delete the **g* of the sg suffix *-g*ᵃ 6.3.1:

bāa⁼ 8.1	*bāas*ᵋ	*bà-*	"dog"
sīa⁺	*sīəs*ᵋ	*sị̀à-*	"waist"
sàbùa⁺	*sàbùɵs*ᵋ	*sàbụ̀à-*	"lover, girlfriend"

Nasal *iaň uaň* here alternates with *εεň ɔɔň* 6.3.1

zìň'a⁺	*zɛ̀ň'ɛs*ᵋ	*zị̀àň'- or zɛ̀ň'-*	"red" (adjective)
nū'-íň'a⁺	*nū'-ɛ́ň'ɛ̀s*ᵋ	*nū'-ɛ́ň'-*	"fingernail"
Mùa⁺	*Mɔ̀ɔs*ᵋ	*Mɔ̀-*	"Mossi person"
nūa⁺⁄	*nɔ̄ɔs*ᵋ⁄	*nɔ̄-*	"hen"

Historical **Cag- *Cịag- *Cụag-* stems 6.1.1.1 show singulars with *-k*ᵃ:

*zàk*ᵃ	*zà'as*ᵋ	*zà'-*	"compound"
*pụāk*ᵃ	*pʊ̄'as*ᵋ	*pụ̀'à-*	"female" (adjective)

Stems in **CVg-* display consonant assimilation in the sg via **gg → kk*:

*gìk*ᵃ	*gìgɪs*ᵋ	*gìg-*	"dumb person"
*kūk*ᵃ	*kūgʊs*ᵋ	*kùg-*	"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 → ˜s* 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.

*bāŋ*ᵃ	*bāaňs*ᵋ	*bàŋ-*	"ring, chain, fetter"
*tɛ̄ŋ*ᵃ	*tɛ̄ɛňs*ᵋ	*tɛ̀ŋ-*	"land"
*pàŋ*ᵃ	*pàaňs*ᵋ	*pàŋ-*	"power"

*bʋ̀ŋ*ᵃ	*bʋ̀mɪs*ᵉ	*bʋ̀ŋ-*	"donkey"
*nāŋ*ᵃ	*nāmɪs*ᵉ	*nàŋ-*	"scorpion"
*sú'əŋ*ᵃ	*sū'əmís*ᵉ	*sū'əŋ-*	"rabbit"
*ňwāaŋ*ᵃ	*ňwāamɪs*ᵉ	*ňwàaŋ-*	"monkey"
*níiŋ*ᵃ	*níis*ᵉ	*nīiŋ-*	"bird"
	*nīimís*ᵉ		
*kʋ̀lɪŋ*ᵃ	*kʋ̀lɪs*ᵉ	*kʋ̀lɪŋ-*	"door"
	*kʋ̀lɪmɪs*ᵉ		
*kʋ̄'alíŋ*ᵃ	*kʋ̄'alís*ᵉ	*kʋ̄'alíŋ-*	sleeveless traditional
	*kʋ̄'alímìs*ᵉ		smock

So too with all deverbal instrument nouns:

*mɛ̄ɛdɪŋ*ᵃ	*mɛ̄ɛdɪs*ᵉ	*mɛ̀ɛdɪŋ-*	"building tool"
	*mɛ̄ɛdɪmɪs*ᵉ		
*pīəsíŋ*ᵃ	*pīəsís*ᵉ	*pīəsíŋ-*	"sponge"
	*pīəsímìs*ᵉ		← *pīe*⁺ᐟ "wash (self)"

Various irregular stem alternations are seen in

*bīig*ᵃ	*bīis*ᵉ	*bī-* or *bì-*	"child"
*bɛ̀rɪŋ*ᵃ	*bɛ̀rɪgɪs*ᵉ		a plant used for fibre
tàmpūa⁺	*tàmpɔɔs*ᵉ	*tàmpɔ̀-*	"housefly" DK (no *ň*)
*būtɪŋ*ᵃ	*būtɪɪs*ᵉ	*bʋ̀tɪŋ-*	"cup" 2.4

Very irregular in both flexion and phonology, though apparently *g*ᵃ|*s*ᵉ Class, is

sāŋá⁺	*sānsá*⁺ [saŋsa]	*sān-*	"time"

These human-reference nouns have alternative plurals with the suffix -*b*ᵃ:

*dàsāŋ*ᵃ	*dàsām*ᵐᵃ	*dàsàŋ-*	"young man"
	or *dàsāaňs*ᵉ		
*Yàaŋ*ᵃ	*Yàam*ᵐᵃ	*Yàaŋ-*	"Yanga, Yansi person"
	or *Yàamɪs*ᵉ		
	or *Yàaňs*ᵉ		
Sà'dàbùa⁺	*Sà'dàbùəb*ᵃ		clan name 35.5
	or *Sà'dàbùəs*ᵉ		

9.3.2.1 $g^ɔ|s^ɛ$ Subclass

Several $s^ɛ$-plural stems with rounded vowels have sg $g^ɔ$, by reinterpretation of $g^a|s^ɛ$ Class sg as $g^ɔ$ when the SF forms coincide 2.2.2 9.1. WK avoids the change to -$g^ɔ$ with human-reference nouns. No regular Deverbal Instrument Noun takes -$g^ɔ$. Some of these words also have $d^ɛ$ plurals, and some may have become $g^ɔ|d^ɛ$ entirely.

*kūug*ᵃ/	*kūus*ᵉ/	*kū-*	"mouse"
or *kūug*ᵓ/			
*sʋ̀'ʋg*ᵃ	*sʋ̀'ʋs*ᵉ	*sʋ̀'-*	"knife"
or *sʋ̀'ʋg*ᵓ			
*nú'ùg*ᵓ	*nú'ùs*ᵉ	*nū'-*	"hand"
*zʋ̀nzɔ̀ŋ*ᵃ	*zʋ̀nzɔ̀ɔ̆s*ᵉ	*zʋ̀nzɔ̀ŋ-*	"blind person"
or *zʋ̀nzɔ̀ŋ*ᵓ			
*tɛ̀ŋ-zʋ̀ŋ*ᵓ	*tɛ̀ŋ-zʋ̀ʋ̆s*ᵉ		"foreign land"
but	*pi̯àň'-zʋ̀na*⁺		"foreign language"
*yʋ́'ʋŋ*ᵓ	*yʋ̄'ʋmís*ᵉ	*yʋ̄'ʋŋ-*	"night"
*zùuňg*ᵓ	*zùuňs*ᵉ	*zʋ̀ň-*	"vulture"
	or *zùuňd*ᵉ		

Compare Mampruli *nuuwa* pl *nuusi* "hand", *suuwa* pl *suusi* "knife", *kuuwa* pl *kuusi* "mouse", *zuuwa* pl *zuusi* "vulture" (but *yuŋŋu* pl *yunsi* "night.")

In *yàmmʋg* "slave" the epenthetic vowel before the flexion has been rounded by the *-m-* and the resulting SF reinterpreted as ending in $g^ɔ$:

*yàmmʋg*ᵃ WK	*yàmmɪs*ᵉ	*yàm-*	"slave"
or *yàmmʋg*ᵓ			

Some $g^ɔ|s^ɛ$ *m*-stems were probably originally $g^ɔ|d^ɛ$, but have disambiguated the plural by substituting pl -$s^ɛ$ for -$d^ɛ$ instead of the usual -a⁺ 9.3.3.1:

*à-dàalúŋ*ᵓ	*à-dàalís*ᵉ WK	*à-dàalúŋ-*	"stork"
	*à-dàalímìs*ᵉ		
*sī'úŋ*ᵓ	*sī'imís*ᵉ	*sī'uŋ-*	a kind of big dish
cf *dìɪsʋ́ŋ*ᵓ	*dìɪsís*ᵉ	*dìɪsʋ́ŋ-*	"spoon"
	dìɪsímà⁺		

Two words of this type drop -*s*- from the stem in the plural:

*wīlɪsʋ́ŋ*ᵓ	*wīlɪmís*ᵉ	*wīlɪsʋ́ŋ-*	a kind of snail
*yālɪsʋ́ŋ*ᵓ	*yālɪmís*ᵉ	*yālɪsʋ́ŋ-*	"quail"

9.3.3 *gᵓ|dᵋ* Class

Before the sg *-gᵓ -kᵓ -ŋᵓ* stem-final vowels are rounded, changing epenthetic vowels to *ʋ* and creating rounding diphthongs from root vowels 6.3.2 4.3.

All stems in *m n* following a short vowel belong to the *gᵓ|a⁺* Subclass instead, along with all stems which include a derivational suffix 9.3.3.1.

dàʋgᵓ	*dàadᵋ*	*dà-*	"piece of wood"
fɛ̄ň'ogᵓ/	*fɛ̄ň'ɛdᵋ/*	*fɛ̄ň'-*	"ulcer"
vīugᵓ/	*vīidᵋ/*	*vī-*	"owl"
vāʋňgᵓ/	*vāaňdᵋ/*	*vāň-*	"leaf"
mɔ̄ɔgᵓ	*mɔ̄ɔdᵋ*	*mɔ̀-*	"grass, bush"
dʋ̀ndùugᵓ	*dʋ̀ndùudᵋ*	*dʋ̀ndù-*	"cobra"
dàbīogᵓ	*dàbīədᵋ*	*dàbi̯à-*	"coward"
	zùədᵋ		"friendship"
wābʋgᵓ/	*wābɪdᵋ/*	*wāb-*	"elephant"
zūəbúgᵓ	*zūəbídᵋ*	*zūəb-*	"(human head) hair"
bālɛ̄rʋgᵓ/	*bālɛ̄rɪdᵋ/*	*bālɛ́r-*	"ugly person"
	or *bālɛ̄rɪsᵋ/*		
bɛ̄sʋgᵓ	*bɛ̄sɪdᵋ*	*bɛ̀s-*	kind of pot
Dʋ̀nnʋgᵓ			Denugu (place name)

Some stems ending in root vowels have plurals of the form *CVtᵋ* 6.1.1.1:

dɔ̀ɔgᵓ	*dɔ̀ɔdᵋ* or *dɔ̀tᵋ*	*dɔ̀-*	"hut, room; clan"

So too *pɔ̄ɔgᵓ/* "farm, field", *fūugᵓ/* "clothing, shirt"; exceptionally, the *singular* also shows a short vowel in the following word, probably a true 1-mora stem:

zūgᵓ/	*zūtᵋ/*	*zū-* or *zūg-*	"head"

Historical **Cag- *Ci̯ag- *Cu̯ag-* stems 6.1.1.1 show singular *-kᵓ*, and *u̯a* becomes *ɔ* before *-kᵓ* 6.3.2:

bɔ̀kᵓ	*bʋ̀'adᵋ*		*bu̯'à-*	"hole, pit"
lɔ̀kᵓ	*lʋ̀'adᵋ*		*lu̯'à-*	"quiver (for arrows)"
lāu̯kᵓ	*lā'adᵋ*		*là'-*	"(item of) goods"
bi̯āu̯ňkᵓ	*bi̯āň'adᵋ*	WK	*bi̯àň'-*	"shoulder"
	bi̯āň'ada⁺	SB		

Stems in *CVd* show *-t-* in the pl 6.2.1 via **dd → tt*:

ùdʊg^ɔ	*ùt^ɛ*	*ùd-*	"(piece of) chaff"
gādʊg^{ɔ/}	*gāt^{ɛ/}*	*gād-*	"bed" (Hausa *gadoo*)

Stems in *CVg* develop *kk* in the singular via **gg → kk*:

dūk^{ɔ/}	*dūgʊd^{ɛ/}*	*dūg-*	"cooking pot"
	dūgʊb dút^ɛ		"cooking pots" SB

Stems in *l* develop the cluster *nn* in the pl via **ld → nn*:

yɔ̄lʊg^{ɔ/}	*yɔ̄n^{nɛ/}*	*yɔ̄l-*	"sack; 200 cedis"
zɔ̄lʊg^{ɔ/}	*zɔ̄n^{nɛ/}*	*zɔ̄l-*	"fool"
sìlʊg^ɔ	*sìn^{nɛ}* or *sìlɩs^ɛ*	*sìl-*	"hawk"

The only *m n* stems making plurals with *-d^ɛ* are *CVVC* root-stems <u>6.1.1.2</u>:

làngáʊŋ^ɔ	*làngāamá⁺*	*làngāʊŋ-*	"crab"
	or *làngáam^{mɛ}*		

and the synonymous *màngāʊ́ŋ^ɔ*, the plural-only *sʊ̄ň-pɛ́ɛ̀n^{nɛ}* "anger" and perhaps the placename *Tèmpáan^{nɛ}* "Tempane" <u>35.3</u>.

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 <u>9.2.2</u>.

gbàṳŋ^ɔ	*gbàna⁺*	*gbàn-* or *gbàṳŋ-*	"letter, book"
zīnzāṳŋ^{ɔ/}	*zīnzāná⁺*	*zīnzáṳŋ-*	"bat"
àňrʊŋ^ɔ	*àňrɩma⁺*	*àňrʊŋ-*	"boat"
mālʊŋ^ɔ	*mālɩma⁺*	*màlʊŋ-*	"sacrifice"

The expected *ṳ*-glide is absent in the sg and cb of

nìn-gbīŋ^{ɔ/}	*nìn-gbīná⁺*	*nìn-gbīŋ-*	"body"

This may represent the influence ot 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

gɔ|aᐩ Subclass except for those with stems in velars and Fusion Verbs 11.1, which have the singular suffix *rᵋ* 12.1.1.1.

gàadʊgɔ	←	*gàadᵋ*		"(sur)pass"
lìəbʊgɔ	←	*lìəbᵋ*		"become"
dīgɩlʊ́gɔ	←	*dīgɩlᵋ/*		"lay down"
yāarʊ́gɔ	←	*yāarᵋ/*		"scatter"
sīgɩsʊ́gɔ	←	*sīgɩsᵋ/*		"lower"

Only stems in *-s-* and *-sɩm-* have plurals, always with *-aᐩ*:

bū'əsʊ́gɔ	*bū'əsáᐩ*	*bū'əs-*	"question"
zàaňsʊ́ŋɔ	*zàaňsímàᐩ*	*zàaňsʊ́ŋ-*	"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

dìgɩnʊgɔ	←	*dìgɩnᵋ*	"lie down"
zìň'inʊgɔ	←	*zìň'inᵋ*	"sit down"

Gerunds of 3-mora *m*-stems may optionally not assimilate *mg → ŋŋ*:

tɔ́ɔŋɔ	←	*tɔ̄ɔmᵐ/*	"depart, disappear"
or *tɔ̄ɔmʊ́gɔ*			
sàň'ʊŋɔ	←	*sàň'amᵐ*	"destroy"
or *sàň'amʊgɔ*			
kàrʊŋɔ	←	*kàrɩmᵐ*	"read"
or *kàrɩmʊgɔ*			

Gerunds of 4-mora *m*-stems always assimilate:

zàaňsʊ́ŋɔ	←	*zàaňsɩmᵐ*	"dream"

9.3.4 *rᵋ|aᐩ* Class

Straightforward examples include:

kūgʊrᵋ/	*kūgáᐩ*	*kūg-*	"stone"
dìgɩrᵋ	*dìgaᐩ*	*dìg-*	"dwarf"
būgʊrᵋ	*būgaᐩ*	*bʊ̀g-*	"abode of
			a *wīnⁿᵋ* (spirit, god)"

*bàlàŋɩr*ᵋ	*bàlàŋa*⁺	*bàlàŋ-*	"hat"
*yūgʋdɩr*ᵋ	*yūgʋda*⁺	*yùgʋd-*	"hedgehog"
*pṳ'à-sādɩr*ᵋ/	*pṳ'à-sādá*⁺	*pṳ'à-sād-*	"young woman"
*nɔ́bìr*ᵋ	*nɔ̄bá*⁺	*nɔ̄b-*	"leg"
*līɩbɩr*ᵋ	*līɩba*⁺	*lìɩb-*	"twin"
*sɔ̄nnɩr*ᵋ	*sɔ̄nna*⁺	*sɔ̀n-*	"inner
			compound wall"
*sāngʋ́nnìr*ᵋ	*sāngʋ́nnà*⁺	*sāngʋ́n-*	"millipede"
*bì'isɩr*ᵋ	*bì'isa*⁺	*bì'is-*	"woman's breast"
*sūmmɩr*ᵋ	*sūmma*⁺	*sùm-*	"groundnut"
*yīmmír*ᵋ	*yīmmá*⁺	*yīm-*	"solitary" (adjective)

along with all gerunds of 3-mora stem verbs in *-k*ᵋ *-ŋ*ᵋ and undeleted *-g*ᵋ like:

*yùugʋr*ᵋ	"delay"
*nɔ̄kír*ᵋ	"taking"
*nìŋɩr*ᵋ	"doing"

For the allomorphism in *CVV* root-stems before the plural *-a*⁺ see [6.1.1.1](#).
Unglottalised vowel stems:

*zūʋr*ᵋ	*zūya*⁺	*zʋ̀-*	"tail"
*bīər*ᵋ/	*bi̯ēyá*⁺	*bi̯ā-*	"elder same-sex sib"
*zūɵr*ᵋ	*zṳēya*⁺	*zṳà-*	"hill"
*nɔ̄ɔr*ᵋ/	*nɔ̄yá*⁺	*nɔ̄-*	"mouth"
*yɔ̀ɔr*ᵋ	*yɔ̀ya*⁺	*yɔ̀-*	"soldier ant"

Glottalised vowel stems:

*yʋ̄'ʋr*ᵋ/	*yʋ̄dá*⁺	*yʋ̄'-*	"name"
*tītā'ar*ᵋ	*tītāda*⁺	*tītá'-*	"big" (adjective)
*pɔ̀ň'ɔr*ᵋ	*pɔ̀ňda*⁺	*pɔ̀ň'-*	"cripple"
*ňyɛ̄'ɛr*ᵋ/	*ňyɛ̄dá*⁺	*ňyɛ̄'-*	"next-younger sibling"
*pʋ̀-tɛ̀ň'ɛr*ᵋ	*pʋ̀-tɛ̀ňda*⁺	*pʋ̀-tɛ̀ň'-*	"mind"
*yū'ɵr*ᵋ	*yṳāda*⁺	*yù'ɵr-* [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:

*bà'ar*ᵉ	*bà'a*⁺ or *bàda*⁺	*bà'-*	"idol" (Farefare *bàgrɛ̀*)
*ňyā'ar*ᵉ	*ňyā'a*⁺	*ňyà'-*	"root" (← **ɲɛg-*)
*si̯à'ar*ᵉ	*si̯à'a*⁺	*si̯à'-*	"forest"
*bi̯āň'ar*ᵉ/	*bi̯áň'a*⁺	*bi̯āň'-*	"wet mud, riverbed"
*mʋ̀'ar*ᵉ	*mu̯'àa*⁺	*mu̯'à-*	"reservoir, dam"
	or *mʋ̀'ada*⁺		
*zànkʋ̀'ar*ᵉ	*zànku̯'àa*⁺	*zànku̯'à-*	"jackal"
	or *zànkʋ̀'ada*⁺		
*kʋ̀ndʋ̀'ar*ᵉ	*kʋ̀ndu̯'àa*⁺	*kʋ̀ndu̯'à-*	"barren woman"
	or *kʋ̀ndʋ̀'ada*⁺		

So too, despite the derivation from *dà'*⁺ "buy", where the glottalisation is not derived from **g* historically:

*kì-dà'ar*ᵉ	*kì-dà'ada*⁺ WK		"bought-in millet"

Stems in deleted **g* after a long vowel include

*vúɵr*ᵉ	*vūáa*=	*vūɵ-*	"fruit of *vúɵŋ*ᵃ tree"

and all Fusion Verb gerunds <u>11.1</u> like

*gbáň'ar*ᵉ	←	*gbāň'e*⁺/	"grab"
*dí'ər*ᵉ	←	*dīe*⁺/	"get"
*dúɵr*ᵉ	←	*dūe*⁺/	"rise"

Some root-stems show *CV* with a short vowel before the *r*ᵉ|*a*⁺ sg <u>9.2.1</u>. They regularly use the segmental form of the sg for cb.

*gbɛ̄r*ᵉ/	*gbɛ̄yá*⁺	*gbɛ̄r-*	"thigh"
*kʋ̀kɔ̄r*ᵉ/	*kʋ̀kɔ̄yá*⁺	*kʋ̀kɔ̄r-*	"voice"

Similarly *kpàkūr*ᵉ/ "tortoise" *gāňr*ᵉ/ "ebony fruit" *gūmpūzēr*ᵉ/ "duck" *ňyɔ̀-vūr*ᵉ/ "life".

2-mora stem verbs make gerunds in -*r*ᵉ instead of - *b*ɔ after a noun cb:

*nɔ̄-lɔ́ɔ̀r*ᵉ	"fasting" ("mouth-tying")
*fū-yɛ́ɛ̀r*ᵉ	"shirt-wearing"

These set expressions show shortening of the vowel, but this is not productive:

*nā'-lɔ́r*ᵉ			"place in the compound for tying up cows"
*wìd-lɔ̄r*ᵉ/			"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.

*kùkpàr*ᵉ	*kùkpàra*⁺	*kùkpàr-*	"palm fruit"
*Ňwād-dár*ᵉ			"Venus"
*tān*ⁿᵉ	*tāna*⁺	*tàn-*	"earth"
*kpān*ⁿᵉ	*kpāna*⁺	*kpàn-*	"spear"
*má'an*ⁿᵉ	*mā'aná*⁺	*mā'an-*	"okra"
*pībɪn*ⁿᵉ	*pībɪna*⁺	*pìbɪn-*	"covering"
*dūm*ⁿᵉ	*dūma*⁺	*dùm-*	"knee"
*zɔ̄ɔm*ⁿᵉ	*zɔ̄ɔma*⁺	*zɔ̀ɔm-*	"fugitive"
*yùʋm*ⁿᵉ	*yùma*⁺	*yùʋm-*	"year" 6.1.1.2
*gbīgɪm*ⁿᵉ	*gbīgɪma*⁺	*gbìgɪm-*	"lion"
*yūgúm*ⁿᵉ	*yūgʋmá*⁺	*yūgʋm-*	"camel"
*gέl*ˡᵉ	*gēlá*⁺	*gēl-*	"egg"
*íɪl*ˡᵉ	*īɪlá*⁺	*īɪl-*	"horn"

With unusual sandhi in the sg, and presumably analogical levelling

*ňwān*ⁿᵉ SB	*ňwāna*⁺ NT	*ňwàn-*	"calabash"
*ňwām*ᵐᵉ WK	*ňwāma*⁺	*ňwàm-*	
	SB WK NT		

An exceptional suppletive plural, segmentally and tonally, is seen in

*dāar*ᵉ	*dābá*⁺	*dà-*	"day"

These two *r*ᵉ|*a*⁺ Class words probably have 1-mora stems:

[Mampruli *zari*]	*zā*⁺/	*zā-*	"millet"
*yīr*ᵉ/	*yā*⁺/	*yī-*	"house"

*Yīr*ᵉ/ also has the irregular locative forms sg *yín*ⁿᵉ pl *yáan*ᵉ 20.3.

9.3.4.1 *l*^{ɛ} Subclass

Language names [35.5](#) all belong to a *r*^{ɛ}|*a*$^+$ Subclass partly formed with the suffix *-l*^{ɛ}. The suffix is always *-l*^{ɛ} after stems ending in a root vowel:

Language		Speakers	
Kūsáàl^ɛ	Kusaal	*Kūsáàs*^{ɛ}	Kusaasi
Bùsáàňl^ɛ	Bisa	*Bùsáàňs*^{ɛ}	Bisa
Mɔ̀ɔl^ɛ	Mooré	*Mɔ̀ɔs*^{ɛ}	Mossi
Sìmīil^ɛ	Fulfulde	*Sìmīis*^{ɛ}	Fulɓe
Zàngbɛ̀ɛl^ɛ	Hausa	*Zàngbɛ̀ɛd*^{ɛ}	Hausa
Nàsāal^ɛ	English/French	*Nàsàa-nàm*^{a}	Europeans

After stems ending in a consonant other than *-r-* the suffix is either replaced by *r*^{ɛ}, or assimilates to the stem final in a way which is indistinguishable from *r*^{ɛ}:

Nàbɪr^ɛ	Nabit	*Nàbɪdɪb*^{a}	Nabdema
Tùɵnnɪr^ɛ	Toende Kusaal	*Tùɵn*^{nɛ}	Toende area
Dàgbān$^{nɛ/}$	Dagbani	*Dàgbām*$^{ma/}$	Dagomba
Bìn^{nɛ}	Moba	*Bìm*^{ma}	Moba
Yàan^{nɛ}	Yansi	*Yàaňs*^{ɛ}	Yansi
Gūrín^{nɛ}	Farefare	*Gūrís*^{ɛ}	Farefare
Tàlɪn^{nɛ}	Talni	*Tàlɪs*^{ɛ}	Tallensi
Bùl^{lɛ}	Buli	*Bùlɪs*^{ɛ}	Bulsa
Àgɔl^{lɛ}	Agolle Kusaal	*Àgɔl*^{lɛ}	Agolle area

However, stems in *-r-* show the distinctive assimilation **rl* → *tt* [6.2.1](#):

Yāt$^{ɛ/}$	Yarsi	*Yārɪs*$^{ɛ/}$	Yarsi
Bāt$^{ɛ/}$	Bisa	*Bārɪs*$^{ɛ/}$	Bisa

Unexpected epenthesis [6.2.1](#) occurs in:

Kàmbʊ̀nɪr^ɛ	Twi	*Kàmbʊ̀mɪs*^{ɛ}	Ashanti
Ňwāmpūrɪl$^{ɛ/}$	Mampruli	*Ňwāmpūrɪs*$^{ɛ/}$	Mamprussi

9.3.5 *ꟼ|ɩ⁺* Class

The plural -*ɩ*⁺ causes the stem vowels *aa iə ɛɛ* to undergo "umlaut" to *ii*. Straightforward examples for the *ꟼ|ɩ*⁺ Class are

mɔ̀lɩꟼ	*mɔ̀lɩ⁺*	*mɔ̀l-*	"gazelle"
bīilíꟼ	*bīilí⁺*	*bīil-*	"seed"
ňyīríꟼ	*ňyīrí⁺*	*ňyīr-*	"egusi"
zūríꟼ	*zūrí⁺*	*zūr-*	"dawadawa seed"
būn-búʋdìꟼ			"plant"

Two 1-mora stem *ꟼ|ɩ*⁺ nouns are

no sg	*kī⁺/*	*kī-* or *kā-*	"cereal, millet"

cf Mampruli sg *kaafu* pl *kyi id*.

no sg	*mùi̯⁺*	*mùi̯-*	"rice"

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:

náaꟼ	*nīigí⁺*	*nā'-*	"cow"
wáaꟼ	*wīigí⁺*	*wā'-*	"snake"

Stems in -*n*- show consonant assimilation in the sg **nf → ṽf* 6.2.1:

nīꟼ/	*nīní⁺*	*nīn-* or *nīf-*	"eye"
píɩňꟼ	*pīɩní⁺*	*pīɩn-*	"genet"
kíiňꟼ	*kīiní⁺*		"millet seed"
zúʋňꟼ	*zūʋní⁺*		"dawadawa seed"

In the word

míiꟼ	*mīiní⁺*	"okra seed"

the singular is probably remodelled after an umlauted pl: cf *má'an*ⁿᵋ "okra."

In two words stem -*d*- is lost in the sg:

wìəꟼ	*wìdɩ⁺*	*wìd-*	"horse"
lā'aꟼ	*līgɩdɩ⁺*	*là'-* or *lìg-*	"cowrie" pl "money"

Some words only have *ꟼ|ι*⁺ 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.

*zíiŋ*ᵃ	*zīmí*⁺	*zīm-*	"fish"
*wālıg*ᵃ	*wālıs*ᵋ	*wàl-*	a kind of gazelle
	or *wālí*⁺ tones *sic* WK		
*sībıg*ᵃ/	*sībí*⁺	*sīb-*	a kind of termite
sīiňꟼ/	*sīiňs*ᵋ/	*sīň-*	"bee"
or *sīiňg*ᵃ/			
sōñꟼ/	*sōňyá*⁺	*sōň-*	"heart"
or *sūuňr*ᵋ/			

One such word also irregularly deletes the final stem consonant of the cb:

*kpā'ʋŋ*ᵓ	*kpīˀiní*⁺	*kpā'-*	"guinea fowl"

9.3.6 *bᵓ* Class

In my materials there are only two *bᵓ* Class nouns which are not gerunds:

*sā'ab*ᵓ		*sà'-*	"millet porridge, TZ"
*tāňp*ᵓ		*tàňp-*	"war" 6.1.1.1

Written sources also have *ki'ib*ᵓ, probably *kīˀıb*ᵓ/ "soap", cf Toende *kíˀıp* in Niggli's "Dictionnaire." WK has instead *kīibú*⁺, most likely a Mampruli loan 18.1.

However, all regular gerund forms of 2-mora stem Variable Verbs belong here:

*kūʋb*ᵓ/	←	*kū*⁺	"kill"
*dūgʋb*ᵓ/	←	*dūg*ᵋ	"cook"
*dū'ab*ᵓ	←	*du̯'à*ᵃ	"bear, beget"
*kādıb*ᵓ	←	*kàd*ᵋ	"drive away"
*pīlıb*ᵓ	←	*pìl*ᵋ	"cover"
*kpārıb*ᵓ	←	*kpàr*ᵋ	"lock"
*bāsıb*ᵓ	←	*bàs*ᵋ	"abandon, go away"

Stems in *b* show *-p-* via **bb → pp*

*sɔp*ᵓ/	←	*sɔb*ᵋ	"write"
*lɔp*ᵓ/	←	*lɔb*ᵋ	"throw stones at"

Stems in *m* show the consonant assimilation *mb → *mm*

*kīm*ᵐᵓ	←	*kìm*ᵐ	"tend a flock/herd"
*wūm*ᵐᵓ	←	*wʊ̀m*ᵐ	"hear"

Stems in *n* do not assimilate, however (cf 3-mora *n*-stem gerunds 9.3.3.1)

*būnɩb*ᵓ	←	*bùn*ᵋ	"reap"

The verb *yīs*ᵋ "make go/come out" has the expected gerund *yīsɩb*ᵓ/; exceptionally the alternate form *yīis*ᵋ/ also makes its gerund in the *b*ᵓ Class: *yīisíb*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:

*dāam*ᵐ/	*dā-*	"millet beer, pito"
*zīɩm*ᵐ/	*zī-*	"blood"
*kù'əm*ᵐ	*kṵ'à-*	"water"
*mèlɩgɩm*ᵐ		"dew"
*kūdɩm*ᵐ		"olden days"
*dū'uním*ᵐ	*dū'un-*	"urine"
*zàam*ᵐ	*zà-*	"evening"
*dàalɩm*ᵐ		"masculinity"
*pʊ̀'alɩm*ᵐ		"femininity"
*yàarɩm*ᵐ	*yàar-*	"salt"
*zāaňsím*ᵐ	*zāaňs-*	"soup"

The few words with short stem vowels all use the segmental form of the sg for the cb, and are probably *m*-stems:

*vūm*ᵐ/	*vūm-*	"life"
*kūm*ᵐ	*kùm-*	"death"
*zɔ̄m*ᵐ/	*zɔ̄m-*	"flour"
*yām*ᵐ/	*yām-*	"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.

bùgúm^m		*bùgúm-* or *bùgūm-* "fire"	
pūum^{m/}		*pūum-*	"flowers, flora"
bìilím^m			"childhood"
bì'isím^m			"milk"
dàalím^m	*dàalímìs*^ɛ	*dàalím-*	"male sex organs"
pʊ̀'alím^m	*pʊ̀'alímìs*^ɛ	*pʊ̀'alím-*	"female sex organs"
pīim^{m/}	*pīmá*⁺	*pīm-*	"arrow" <u>6.1.1.2</u>

Pīim^{m/} "arrow" is a remnant of an old ᵓ|ᵋ 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 <u>19.2.1</u> <u>19.7</u>. Plurals with *nàm*^a are made for:

(a) a few human-reference nouns which have a sg consisting of a bare stem alone:

mà⁺	*mà nám*^a	*mà-*	"mother"
	(tone *sic*, behaving as uncompounded)		
bā'^{+/}	*bā'-nám*^a	*bā'-*	"father"
zʊ̠à⁺	*zʊ̠à-nàm*^a	*zʊ̠à-*	"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 <u>9.3.1</u>.

(c) loanwords, unless they have been fitted into the Class system by analogy:

tìp^a	*tìp-nàm*^a	*tìp-*	"healer"
bʊ̀rkìn^a	*bʊ̀rkìn-nàm*^a	*bʊ̀rkìn-*	"honourable person"

(d) several pronouns

ànɔ́'ɔ̀n	"who" asking for a plural answer "what people?"
nɛ̄'	inanimate pronoun "this" in the New Testament ;
	but my informants use animate pl *bàn* rather than *nɛ̄'-nám*.

*dāan*ᵃ	*dàan-nàm*ᵃ	*dàan-*	"owner of ..." 19.9.3
*tīráàn*ᵃ	*tīráàn-nàm*ᵃ	*tīráàn-*	"neighbour, peer"

(e) quantifiers used as Noun Phrase heads, e.g.

*pīiga nám*ᵃ   "tens"

Àyí   námá‿ àyí   á   nɛ̄ nāasí.
NUM:two **PL**   **NUM:**two **COP FOC** four.
"Two two's are four."

(f) plural forms with singular meaning:

*dà-pūʋdá nàm*ᵃ	"crosses"
*kūt nám*ᵃ	"nails"; sg also "iron"
*bɛ̄'ɛd nám*ᵃ	"evils"

(g) mass nouns used with count meanings:

*bùgúm nám*ᵃ	"fires, lights"
*sā'ab nám*ᵃ	"portions of millet porridge"
*dāam nám*ᵃ	"beers"

(h) forms with the Personifier particle *À-* 19.10:

À-zī'‿   ø kpí nàm kpîid   nɛ́ kà téñbìd.
PERS-NEG.KNOW SER 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:

*bāñ'as*ᵋ	*bàñ'-*	"disease"
*ňyɔ̄'ɔs*ᵋ/	*ňyɔ̄'-*	"smoke"
*tàdɪmís*ᵋ		"weakness"
*zɔ̄lɪmís*ᵋ		"foolishness"
*mɛ̄t*ᵋ/	*mɛ̄t-* 9.2.2	"pus"
*kūt*ᵋ	*kùt-* 9.2.2	"iron"

*zùθd*ᵉ		"friendship"
*būʋd*ᵉ		"innocence"
*sīiňd*ᵉ/		"honey"
*nīn-pʊ́ʋ̀d*ᵉ		"pus"
*wāad*ᵉ/		"cold weather"
*sʊ̄ň-pɛ́ɛ̀n*ⁿᵉ		"anger"
*ku̯'à-nūud*ᵉ/		"thirst"
sālɪma⁺	*sàlɪm-*	"gold"
sìda⁺	*sìd-*	"truth"

*Kūt*ᵉ is used not only as "iron" but also for "nail"; the original singular *kūdʋg*ᵓ appears in the personal name *À-Kūdʋg*ᵓ 35.2.

So too with a number of irregularly formed abstract nouns from verbs:

*gɛ̄ɛňmís*ᵉ	"madness"	← *gɛ̄ɛňm*ᵐ/		"madden, go mad"
*bùdɪmís*ᵉ	"confusion"	← *bùdɪm*ᵐ		"confuse"
*tìtʊ̄mɪs*ᵉ	"sending"	← *tʊ̀m*ᵐ		"send"
*zīid*ᵉ/	"carrying on head"	← *zī*⁺		"carry on head"
*vūud*ᵉ/	"noise"	← *vū*⁺		"make a noise"
*kɛ̄n*ⁿᵉ/	"arrival"	← *kɛ̄ň*⁺		"come"
*pi̯àň'ad*ᵉ	"word, speech"	← *pi̯āň'*ᵃ		"speak" (irreg. tones)

[sg *pi̯àu̯ňk*ᵓ exists, but the pl is generally used for "speech"]

tɛ̄ň'ɛsá⁺	"thought"	cf *tɛ̄ň'ɛsá yīnní*	"one thought"
			(Acts 4:32)
dì'əma⁺	"festival"	← *dì'əm*ᵐ	"play, not be serious"
tʊ̄ʋma⁺	"work"	← *tʊ̀m*ᵐ	"work"

[sg *tʊ̄ʋm*ᵐᵉ   "deed"]

For *nà'asɪ*⁺ "honour", *kābɪrí*⁺, "permission to enter" and *sūgʋrʊ́*⁺ "forbearance" see 9.6.

A single object may be referred to by the name of its parts:

	dà-pūʋdá⁺	"cross"
pl	*dà-pūʋdá nàm*ᵃ	
cf	*dà-pūʋdír*ᵉ	"cross-piece"

A Kusaal plural may just happen to correspond to an English mass noun:

	lāu̯kↃ	"piece of goods"
pl	*lā'adᵋ*	"goods"

A piece of West African history underlies

	līgɩdɩ⁺	"money"
sg	*lā'afↃ*	"cowrie"

See also on the ᵃ|*b*ᵃ Subclass with *-b*ᵃ as a sg suffix <u>9.3.1.2</u>.

9.6 Nouns with Apocope Blocking

A number of nouns ending in *-ɩ*⁺ or *-ʋ*⁺ display Apocope Blocking <u>6.4</u>:

būudɩ⁺	*bùud-*	"tribe"
pīinɩ⁺	*pìin-*	"gift"
nà'asɩ⁺		"honour"
kābɩrí⁺		"entry permission"
sūgʋrʋ́⁺		"forbearance"

It is unlikely that this *-ɩ*⁺ represents the *fↃ*|*ɩ*⁺ Class plural suffix. There are no traces of any *fↃ* sg forms, and the *fↃ*|*ɩ*⁺ Class does not otherwise include abstract nouns. Cognates of *būudɩ⁺* in related languages in fact show that the *-dɩ* component represents the equivalent of the *gↃ*|*d*ᵋ Class plural: Farefare *búúrí* "*race, sort, espèce, clan*", *bu-zãŋka* "*race étrangère*"; Mooré *búudu* "*famille, espèce*" sg *búugu*; *nà'asɩ⁺* may similarly represent a *g*ᵃ|*s*ᵋ Class pl with Apocope Blocking.

Other words in final *-ɩ*⁺ or *-ʋ*⁺ are probably loanwords from languages where citation forms do not undergo Apocope, e.g. WK's Mampruli loan *kīibʋ́⁺* "soap" <u>18.1</u>. Both *kābɩrí⁺* and *sūgʋrʋ́⁺* 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 <u>13.2.1.4</u>; the related verbs *kābɩr*ᵋ/ "ask for admission", *sūgʋr*ᵋ/ "forbear, be patient with" would then need to be explained as back-formations.

9.7 Loanwords

Some loanwords 18.1 are fitted into Noun Classes by analogy (cf 9.1):

*àrazàk*ᵃ	*àrazà'as*ᵋ	*àrazà'-*	"riches"
			Hausa *arzìkii*
*màli̯āk*ᵃ/	*màli̯ā'as*ᵋ/	*màli̯ā'-*	"angel" DK (Arabic)
*gādʋg*ᵓ/	*gāt*ᵋ/	*gād-*	"bed" Hausa *gadoo*
*lɔ̀mbɔ̀'ɔg*ᵓ	*lɔ̀mbɔ̀'ɔd*ᵋ	*lɔ̀mbɔ̀'-*	"garden"
			Hausa *làmbuu*
*lɔ́r*ᵋ	*lɔ́yà*⁺ tones *sic*	*lɔ́r-*	"car, lorry"
	or *lɔ́ɔm*ᵐᵃ		cf *Mɔ̄r*ᵋ 9.3.1.1
*àlɔ́pìr*ᵋ	*àlɔ́pìya*⁺		"aeroplane" SB
*wādɩr*ᵋ/	*wādá*⁺	*wād-*	pl "customs, law"

(English "order", via Hausa, with sg and cb back-formations)

Others make *nàm*ᵃ plurals 9.4:

gādʋ⁺	*gādʋ-nám*ᵃ	*gādʋ-*	"bed" WK
kèɛkɛ̀⁺	*kèɛkɛ̀-nàm*ᵃ	*kèɛkɛ̀-*	"bicycle" Hausa *kèekè*
dāká⁺	*dāká-nàm*ᵃ	*dāká-*	"box" Hausa *àdakàa*
*tɛ́ɛbʋ̀l*ᵋ	*tɛ́ɛbʋ̀l-nàm*ᵃ	*tɛ́ɛbʋ̀l-*	"table"
Nàsāara⁺	*Nàsàar-nàm*ᵃ	*Nàsàar-*	"white person,
	or *Nàsàa-nàm*ᵃ	*Nàsàa-*	European" 35.5;
			ultimately from Arabic
			نصارى *Nasˤa:ra:*
			"Christians";
			cf Hausa *Nàsaara*

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:

du̯'átà ná'àb	"a doctor's chief"
du̯'átà-nà'ab	"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 nominal prefixes 7.2.4:

dūnɩya⁺	"world" (Arabic دنيا *dunya:*)
dūnɩyá-kàŋā	"this world"

10 Adjective Flexion

10.1 Primary

Kusaal 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 infixed 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 *bʋ̄ʋg*ᵃ "goat"

*bʋ̀-pìəlɪg*ᵃ	*bʋ̀-pìəlɪs*ᵋ	*bʋ̀-pìəl-* (*g*ᵃ|*s*ᵋ)	"white goat"
*bʋ̀-pìəl*ǀᵋ	*bʋ̀-pìəla*⁺	*bʋ̀-pìəl-* (*r*ᵋ|*a*⁺)	*id*

WK claims a meaning difference in intensity in gradable adjectives with suffixes of different classes, consistently ranking the singular suffixes *g*ᵃ *r*ᵋ *g*ᵓ in decreasing order, so that for example *fū-pɪ́əlìg* "white shirt" is whiter than *fū-pɪ́əl id*. However, DK specifically denied any difference of meaning.

A few traces of the agreement system remain 19.8.1.1. 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*ᵋ over *a*⁺ for human reference:

*nīn-sábɪlìs*ᵋ	"Africans"
nīn-sábɪlà⁺	accepted by informants but much less common
*Zu̧à-wìis*ᵋ	"Red Zoose Clan"
	though *wìug*ᵓ "red" is usually *r*ᵋ|*a*⁺ ~ *g*ᵓ|*d*ᵋ type

The ᵃ\|*b*ᵃ and *f*ᵓ\|*ɪ*⁺ suffixes are found only in set expressions and *b*ᵓ never occurs. Most often, *r*ᵋ\|*a*⁺ Class suffixes occur along with either *g*ᵃ\|*s*ᵋ or *g*ᵓ\|*d*ᵋ but not both; this perhaps reflects an intermediate stage in the collapse of the historical agreement system in which *g*ᵃ\|*s*ᵋ and *g*ᵓ\|*d*ᵋ 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*ᵋ 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*ᵋ, and deverbal adjective stems in *g k ŋ* do not use the sg suffixes *g*ᵃ *g*ᵓ 10.2.

Examples of adjectives with suffixes from more than one Noun Class:

zìň'a[+]	*zèň'ɛs*[ɛ]	*zèň'-*	"red"
zèň'og[ɔ]	*zèň'ɛd*[ɛ]		
	zèňda[+]		

bī'a[+]	*bī'əs*[ɛ]	*bi̯à'-*	"bad"
bɛ̄'og[ɔ]	*bɛ̄'ɛd*[ɛ]	*bɛ̀'-*	

bɛ̄'ɛd[ɛ] is often used as sg, with a *nàm*[a] plural

Other primary adjectives use either *g*[a]|*s*[ɛ] or *g*[ɔ]|*d*[ɛ] suffixes but not both:

wàbɩg[a]	*wàbɩs*[ɛ]	*wàb-*	"lame"
wàbɩr[ɛ]	*wàba*[+]		

vèňlɩg[a]	*vèňlɩs*[ɛ]		"beautiful"
	vèňla[+]		

vènnɩg[a]	*vènnɩs*[ɛ]	*vèn-*	"beautiful"
vènnɩr[ɛ] rare	*vènna*[+]		

and similarly *wɛ̄nnɩr*[ɛ] "resembling."

sābɩlíg[a]	*sābɩlís*[ɛ]	*sābɩl-*	"black"
sābíl[lɛ]	*sābɩlá*[+]		

and similarly *pāalíg*[a] "new" *záal*[lɛ] "empty" *bàaňlɩg*[a] "slim" *pìəlɩg*[a] "white"

tītā'ʋg[ɔ] rare	*tītāda*[+]	*tītá'-*	"big"
tītā'ar[ɛ]			

nèog[ɔ]	*nèɛd*[ɛ]	*nè-*	"empty"
nèɛr[ɛ]	*nèya*[+]		

wìug[ɔ]	*wìid*[ɛ]	*wì-*	"red"
wìir[ɛ]	*wìya*[+]		

wɔk[ɔ/]	*wā'ad*[ɛ/]	*wā'-* or *wɔk-*	"long, tall"
wā'ar[ɛ/] rare	*wā'á*[+]		

bèdʋgɔ		*bèd-*	"great"
bèdɪrᵋ rare	*bèda⁺*		
kūdʋgɔ	*kūtᵋ* rare	*kʋ̀d-*	"old"
kūdɪrᵋ	*kūda⁺*		

S-stems do not use pl *sᵋ*:

būgʋsígᵃ		*būgʋs-*	"soft"
būgʋsírᵋ	*būgʋsá⁺*		

Similarly *mā'asírᵋ* "cold, wet" *mālɪsírᵋ* "sweet" *tēbɪsírᵋ* "heavy" *lābɪsírᵋ* "wide", and also

pɔ̀ɔdɪgᵃ		*pɔ̀ɔd-*	"few, small"
pɔ̀ɔdɪrᵋ	*pɔ̀ɔda⁺*		

Stems in *m n* do not use sg *rᵋ*, except for

sʋ̀ŋɔ		*sʋ̀ŋ-*	"good"
sʋ̀mᵐᵋ	*sʋ̀ma⁺*		

As usual with adjectives, the singular may show either *gᵃ* or *gɔ* but not both.

gīŋᵃ	*gīma⁺*	*gìŋ-*	"short"

dɛ̄ɛŋᵃ	*dɛ̄ɛňsᵋ*		"first"
	dɛ̄ɛmɪsᵋ	*dɛ̀ɛŋ-*	
	dɛ̄ɛna⁺		

As with nouns, stems in *m n*, and all 3-mora stems, use pl *-a⁺* instead of *-dᵋ*. A number of adjectives with such stems can be regarded as simply belonging to the single *gɔ|a⁺* Subclass (compare 9.3.3.1):

dà-zɛ̄mmúgɔ	*dà-zɛ̄mmá⁺*	*dà-zɛ̄m-*	"equal piece of wood"
tūʋlúgɔ	*tūʋlá⁺*	*tūʋl-*	"hot"
lāllúgɔ	*lāllá⁺*	*lāl-*	"distant"
mì'isʋgɔ	*mì'isa⁺*	*mì'is-*	"sour"
wàųŋɔ	*wàna⁺*	*wàųŋ-*	"wasted, thin"
kpī'oŋɔ	*kpī'əma⁺*	*kpì'oŋ-*	"hard, strong"
zùlʋŋɔ	*zùlɪma⁺*	*zùlʋŋ-*	"deep"

and so also *yàlʋŋ*ꜟ "wide" *ňyālʋ́ŋ*ꜟ "wonderful" *yēl-nárʋ̀ŋ*ꜟ "necessary thing", along
with the probably originally 3-mora stems (via **rr → r*, **ss → s* <u>6.2.1</u>):

*yī-pɔ́ňrʋ̀g*ꜟ	*yī-pɔ́ňrà*⁺		"nearby house"
*kísʋ̀g*ꜟ	*kīsá*⁺	*kīs-*	"hateful, taboo"

Other single-class adjectives are:

*pṳāk*ᵃ	*pʋ̄'as*ᵋ	*pṳ'à-*	"female" (human)
*ňyá'aŋ*ᵃ	*ňyá'as*ᵋ	*ňyā'aŋ-*	"female" (animal)
	or *ňyā'amís*ᵋ		
*ňyὲɛsíŋ*ᵃ	*ňyὲɛnsís*ᵋ	*ňyὲɛsíŋ-*	"self-confident"
*vʋ̄r*ᵋ⁄	*vʋ̄yá*⁺	*vʋ̄r-*	"alive"
*dāʋg*ꜟ	*dāad*ᵋ	*dà-*	"male"
*tɔ̄ɔg*ꜟ	*tɔ̄ɔd*ᵋ	*tɔ̀-*	"bitter"

and other derivatives in *-m-*: *vὲňllíŋ*ᵃ "beautiful" *mālɪsíŋ*ᵃ "pleasant" *lāllíŋ*ᵃ "distant."
   Extremely **irregular** is

*bī̄l*ᵃ	*bībɪs*ᵋ	*bìl-* or *bì-*	"little"

   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",
pììlà "lamb", *bùdíblá* "boy", *púglá* "girl", *kíílá* "young guinea fowl"; Mooré *bìríblá*
"boy", *bìpúglá* "girl." The plural stem *bib-* is presumably reduplicated.

10.2 Deverbal

   Dynamic Deverbal Adjectives are derived with *d*, the same formant as found
in agent nouns (though the stems occasionally differ.) However the *d* in these forms
may be assimilated or dropped by morphophonemic rule <u>13.1.1.2.1</u>, so that not all
Dynamic Deverbal Adjectives are current *d*-stems.
   Dynamic Deverbal Adjectives take *r*ᵋ|*a*⁺ Class sg and pl. In addition, they may
take another sg suffix; this is *g*ᵃ for WK, but *g*ꜟ for KT:

*kʋ̄ʋdír*ᵋ	*kʋ̄ʋdá*⁺	*kʋ̄ʋd-*	"murderous;
*kʋ̄ʋdíg*ᵃ WK			liable to be killed"
*kʋ̄ʋdʋ́g*ꜟ KT			

tūmmɪr[ɛ]	*tūmma*[+] WK *tūmna*[+] KT	*tùm-*	"working, helpful"

Invariable verbs:

sīnnír[ɛ] rare *sīnníg*[a]	*sīnná*[+]	*sīn-*	"silent"
dēl[lɛ/]	*dēllá*[+]	*dēl-*	"leaning"
mɔ̄r[ɛ/]	*mɔ̄rá*[+]	*mɔ̄r-*	"having"
nɔ̄-záňl[lɛ]	*nɔ̄-záňlla*[+]		"hen for holding"
kùg-dēl[lɛ/]	*kùg-dēllá*[+]		"chair for leaning on"
būn-gúl[lɛ]	*būn-gúllà*[+]		"thing for suspending"

Stems in *g k ŋ* do not use the sg suffixes *g*[a] *g*[ɔ]:

būn-túlɪgìr[ɛ]	*būn-túlɪgà*[+]		"heating thing"
ňwī-tɛ́kìr[ɛ]	*ňwī-tɛ́kà*[+]	*ňwī-tɛ́k-*	"pulling-rope"
būn-súŋìr[ɛ]	*būn-súŋà*[+]		"helpful thing"
bì-nɔ̀ŋɪr[ɛ]	*bì-nɔ̀ŋa*[+]		"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:

nīn-pʊ́'alìŋ[a]	*nīn-pʊ́'alìma*[+]		"harmful person"
nīn-záaňsʊ̀ŋ[ɔ]	*nīn-záaňsà*[+]		"dreamy person"

Resultative Adjectives are derived with *-lɪm-*. They inflect regularly as *g*[ɔ]|*a*[+] Subclass *m*-stems. KT (not WK) also has forms without *-m-* in both sg and pl:

kpìilʊ́ŋ[ɔ]	*kpìilímà*[+]	*kpìilʊ́ŋ-*	"dead"	WK
nīn-kpíilʊ̀g[ɔ]	*nīn-kpíilìma*[+]		"dead person"	KT
gēɛňlʊ́ŋ[ɔ]	*gēɛňlímà*[+]	*gēɛňlʊ́ŋ-*	"tired"	WK
nīn-gɛ́ɛňlʊ̀g[ɔ]	*nīn-gɛ́ɛňlìma*[+]		"tired person"	KT
pè'ɛlʊ́ŋ[ɔ]	*pè'ɛlímà*[+]	*pè'ɛlʊ́ŋ-*	"full"	WK KT
	dūg-pɛ́'ɛlà[+]		"full pots"	KT

11 Verb Flexion

Though written solid with the verb in traditional orthography, Remoteness Marker *n*ᵋ 30.1.1 and subject pronoun ʸᵃ 22.7.3 are not flexions but Liaison Enclitics.

Historically, imperfective verb forms were created by the addition of *derivational *d* or **y* (← **ʎ*) 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 22.6.2.2.

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. 22.6.1.1.

Straightforward examples of verb inflexion include:

kū⁺	*kūʋd*ᵃ/	*kʋ̀ʋm*ᵃ	"kill"
kpɛ̀ň'⁺	*kpɛ̀ň'ɛd*ᵃ	*kpɛ̀ň'ɛm*ᵃ	"enter"
ki̯à⁺	*kìəd*ᵃ	*kìəm*ᵃ	"cut"
ku̯ā⁺	*kūɵd*ᵃ/	*kùɵm*ᵃ	"hoe"
gɔ̀ň⁺	*gɔ̀ɔňd*ᵃ	*gɔ̀ɔňm*ᵃ	"hunt"
*dūg*ᵋ	*dūgʋd*ᵃ/	*dʋ̀gʋm*ᵃ	"cook"
*yùug*ᵋ	*yùugɪd*ᵃ	*yùugɪm*ᵃ	"delay, get late"
*yādɪg*ᵋ/	*yādɪgíd*ᵃ	*yàdɪgɪm*ᵃ	"scatter"
*pi̯āň'*ᵃ	*pi̯āň'ad*ᵃ/	*pi̯àň'am*ᵃ	"speak; praise"
*du̯'à*ᵃ	*dʋ̀'ad*ᵃ	*dʋ̀'am*ᵃ	"bear, beget"
*nɔ̄k*ᵋ/	*nɔ̄kíd*ᵃ	*nɔ̀kɪm*ᵃ	"take"
*si̯àk*ᵋ	*si̯àkɪd*ᵃ	*si̯àkɪm*ᵃ	"believe, agree"
*gāŋ*ᵋ/	*gāŋíd*ᵃ	*gàŋɪm*ᵃ	"choose"
*kpɛ̀'ŋ*ᵋ	*kpɛ̀'ŋɪd*ᵃ	*kpɛ̀'ŋɪm*ᵃ	"strengthen"
*kpàr*ᵋ	*kpàrɪd*ᵃ	*kpàrɪm*ᵃ	"lock"
*sūgʋr*ᵋ/	*sūgʋríd*ᵃ	*sùgʋrɪm*ᵃ	"forgive"
*bàs*ᵋ	*bàsɪd*ᵃ	*bàsɪm*ᵃ	"go/send away"
*sīgɪs*ᵋ/	*sīgɪsíd*ᵃ	*sìgɪsɪm*ᵃ	"lower"
*nā'mɪs*ᵋ/	*nā'mɪsíd*ᵃ	*nà'mɪsɪm*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:

dì[+]	*dìt*[a]	*dìm*[ma]	"eat"
ňyɛ̄[+]	*ňyɛ̄t*[a/]	*ňyɛ̀m*[ma]	"see"

and so also *lì*[+], *lù*[+] "fall" *dū*[+] "go up" *yī*[+] "go/come out" *zɔ̀*[+] "run, fear."
    Stems in *-d-* show *-t-* in the dipf via **dd → tt*:

bùd[ɛ]	*bùt*[a]	*bùdɪm*[a]	"plant"
gàad[ɛ]	*gàt*[a] 6.3.3	*gàadɪm*[a]	"pass, surpass"

Stems in *l* generate a cluster in the dipf via **ld → nn* 6.2.1:

vūl[ɛ]	*vūn*[na/]	*vùlɪm*[a]	"swallow"
màal[ɛ]	*màan*[na]	*màalɪm*[a]	"make; sacrifice"
dīgɪl[ɛ/]	*dīgín*[na]	*dìgɪlɪm*[a]	"lay down"

Only 2-mora stems assimilate **bm → mm*:

lɛ̀b[ɛ]	*lɛ̀bɪd*[a]	*lɛ̀m*[ma]	"return"
sɔ̄b[ɛ]	*sɔ̄bɪd*[a/]	*sɔ̀m*[ma]	"write"
lìəb[ɛ]	*lìəbɪd*[a]	*lìəbɪm*[a]	"become"
ɛ̄ɛňb[ɛ/]	*ɛ̄ɛňbíd*[a]	*ɛ̀ɛňbɪm*[a]	"lay a foundation"

Only 2-mora *n*-stems show **nd → nn*; only *kɛ̄ŋ*[ɛ/] (below) shows **nm → mm*:

bùn[ɛ]	*bùn*[na]	*bùnɪm*[a]	"reap"
mɔ̄n[ɛ]	*mɔ̄n*[na/]	*mɔ̀nɪm*[a]	"make porridge"
gɔ̀'ɔn[ɛ]	*gɔ̀'ɔnɪd*[a]	*gɔ̀'ɔnɪm*[a]	"extend neck"
dìgɪn[ɛ]	*dìgɪnɪd*[a]	*dìgɪnɪm*[a]	"lie down"

The *nn*-stem *sùn*[ɛ] 6.2.1 does not assimilate at all:

sùn[nɛ]	*sùnnɪd*[a]	*sùnnɪm*[a] "bow head"

4-mora *m*-stems always assimilate **md → mn, mm*:

sìilɪm[m]	*sìilɪm*[ma]	*sìilɪm*[ma]	"quote proverbs"
lāŋím[m]	*lāŋím*[ma]	*làŋɪm*[ma]	"wander searching"

3-mora *m*-stems assimilate optionally <u>6.2.1</u>:

kàrɪm^m	*kàrɪm*^m	*kàrɪm*^{ma}	"read"
	or *kàrɪmɪd*^a		
tɔ̄ɔm^{m/}	*tɔ́ɔm*^{ma}	*tɔ̀ɔm*^{ma}	"depart"
	or *tɔ̄ɔmíd*^a		

Stems in -*mm*- never assimilate in the Dynamic Imperfective, but simplify **mmm → mm* in the imperative:

tàm^m	*tàmmɪd*^a	*tàm*^{ma}	"forget"
zàm^m	*zàmmɪd*^a	*zàm*^{ma}	"cheat, betray"
dàm^m	*dàmmɪd*^a	*dàm*^{ma}	"shake"
lɛ̀m^m	*lɛ̀mmɪd*^a	*lɛ̀m*^{ma}	"sip, taste"

There are no verb stems of the form **CVbɪm*, so these -*mm* stems can probably be ascribed to the assimilation **bm → mm* at derivational level <u>6.2.1</u>.
2-mora stems normally assimilate:

tʊ̀m^m	*tʊ̀m*^{ma}	*tʊ̀m*^{ma}	"work"
wʊ̀m^m	*wʊ̀m*^{ma}	*wʊ̀m*^{ma}	"hear"
kìm^m	*kìm*^{ma}	*kìm*^{ma}	"tend flock/herd"
dùm^m	*dùm*^{ma}	*dùm*^{ma}	"bite"

but the NT/KB sometimes have unassimilated forms to avoid ambiguity <u>6.2.1</u>.

Fusion Verbs are 3-mora stems with deleted **g* after *aa iə uө aaň ɛɛň ɔɔň* <u>6.3.1</u>. 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 <u>7.3.1</u>. Base Forms before Liaison likewise drop the **g*.

fāeň^{+/}	*fāaňd*^{a/}	*fàaňm*^a	"save"
dī'e^{+/}	*dī'əd*^{a/}	*dì'əm*^a	"get, receive"
dūe^{+/}	*dūөd*^{a/}	*dùөm*^a	"rise, raise"
pūň'e^{+/}	*pūň'өd*^{a/}	*pùň'өm*^a	"rot" WK

Contrast the tonemes of the Gerunds *fáaňr*^ɛ *dí'ər*^ɛ *dú'өr*^ɛ *púň'өr*^ɛ.
For the forms taken by Fusion Verb Base Forms before Liaison see <u>8.2.1</u>.

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.

*gɔ̄s*ᵋ	*gɔ̄sɩd*ᵃ/	*gɔ̀sɩm*ᵃ	"look"
	or *gɔ̄t*ᵃ/	*gɔ̀m*ᵐᵃ	
*tìs*ᵋ	*tìsɩd*ᵃ	*tìsɩm*ᵃ	"give"
	or *tìt*ᵃ		

Before Liaison Word objects the Base Form may also be *tì-*, e.g. *tì f* "give you."

*yɛ̀l*ᵋ	*yɛ̀t*ᵃ	*yɛ̀lɩm*ᵃ	"say"
*wìk*ᵋ	*wìid*ᵃ 6.1.1.1	*wìkɩm*ᵃ	"fetch water"
*i̯ā̃ñk*ᵋ/	*i̯ā̃ñ'ad*ᵃ/	*i̯àñkɩm*ᵃ	"leap, fly"
*gīlɩg*ᵋ/	*gīn*ⁿᵃ/	*gìlɩgɩm*ᵃ	"go around"
*kɛ̄ŋ*ᵋ/	*kɛ̄n*ⁿᵃ/	*kɛ̀m*ᵐᵃ	"go"

The verb

*dɛ̀lɩm*ᵐ	[*dɛ̄l*ˡᵃ/]	*dɛ̀lɩm*ᵐᵃ	

is used as inchoative to *dɛ̄l*ˡᵃ/ "be leaning (of a person);" compare *gʊ̀l*ᵋ dipf *gʊ̀n*ⁿᵃ "suspend" beside the Stance Verb *gʊ̀l*ˡᵃ "be hanging."

Only two Variable Verbs are irregular in the actual flexional suffixes taken:

kɛ̄⁺	*kɛ̄t*ᵃ/	*kɛ̀l*ᵃ	"let, allow"

has *-l*ᵃ not *-m*ᵃ, for the Imperative form with Independency Marking.

The verb

kɛ̄ñ⁺	*kɛ̄n*ᵃ/	*kɛ̀m*ᵃ	"come"

has Dynamic Imperfective *-n*ᵃ for *-d*ᵃ; this verb is also remarkable in always being immediately followed by *nā*⁺/ "hither" 23.7 which disambiguates the forms which are homophonous with those of *kɛ̄ŋ*ᵋ/ "go" above:

> *Kὲm nā!*   "Come!"
> *Kὲm sá!*   "Go!"

The verb

> *nɔ̀ŋ*ᵉ   *nɔ̀ŋɩm*ᵃ   "love"

is morphologically regular, but the base form always has Descriptive Aspect 11.2.2.1:

> *M̀ nɔ́ŋī f.*   "I love you."   (Family, spiritual.)
> cf *M̀ bɔ́ɔdī f.*   "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 22.6.2.1.

> *M̀ nɔ́ŋ.*   "I love him." (e.g. in reply to a question) WK

WK specifically stated that **M̀ nɔ́ŋ yā* was an impossible form.

The agent noun *nɔ̀ŋɩd*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 nɔ̀ŋɩd 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:

> *mī'*⁺   "know"
> *zī'*⁺   "not know"
> *bὲ*⁺   "be somewhere/exist"
> *kā'e̱*⁺ (← **kagɩ*)   "not be"

Though they resemble Variable Verb perfectives, the particle *yā*⁺ does not occur after them 22.6.2.1 and the Tone Pattern LO word *bὲ*⁺ "be somewhere, exist" is followed by L Raising 8.3. (The irregular Variable Verb *nɔ̀ŋ*ᵉ "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 (← *ʎ); for its combinations with the preceding root see 6.2.1.1. Forms without *y appear in Perfective Gerunds, Agent Nouns and Dynamic Deverbal 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 *àe̯ň*[a] "be something/somehow", *vūe̯*[a/] "be alive" and *tɔ̄e̯*[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 l 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:

kpī꞉əm[ma/]	not	**kpí꞉əm*[ma]	"be strong, hard"
wā꞉am[ma/]	not	**wá꞉am*[ma]	"be long, tall" KT

The Dagbani cognate of *kpī꞉əm*[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**:

īgɩ[ya/]			"be kneeling down"
dīgɩ[ya/]			"be lying down"
vābɩ[ya/]			"be lying prone"
làbɩ[ya]			"crouch hidden behind something"
tàbɩ[ya]			"be stuck to something"
zì꞉e[ya]			"be standing still"
zìň꞉i[ya]			"be sitting down"
tī꞉i[ya/]			"be leaning" (of an object)
sùr[a]			"have head bowed"
dɛ̄l[la/]			"be leaning" (of a person)
gùl[la]			"be hanging"
gɔ̄꞉e[ya/]	WK	← *gɔdya	"have neck extended" 6.2.1.1
gɔ̄r[a/]	DK	← *gɔrya	
gɔ̄l[la/]	KT	← *gɔlya	

Other Dynamic Invariable Verbs are

wà'e^{ya}	"travel to"
sīn^{na/}	"be silent"
dɔ̄l^{la/}	"attend on, be with in a subordinate rôle"
zāñl^{la/}	"carry in one's hands"
gūr^{a/}	"guard"
tèñr^a	"remember"

Stance Verbs are *dynamic*. They distinguish a continuous/progressive sense from a habitual/propensity sense with the focus particle *nɛ̄*^{+/} just like Dynamic Imperfectives of Variable Verbs 22.2.2.2, 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 33.1.2.3, 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:

	Ò zìñ'i nɛ̄.	"She's sitting down." WK KT
	Ò pū zíñ'idā.	"She doesn't sit down" WK
but	*Ò pū zíñ'inìdā.*	"She doesn't sit down." KT
	Ò zìñ'i nɛ̄.	"She's sitting down."
	Ò pū zíñ'idā.	"She doesn't sit down" WK
but	*Ò pū zíñ'inìdā.*	"She doesn't sit down." KT
	Ò vàbɩ nɛ̄.	"He's lying prone."
	Ò pū vābɩdá.	"He doesn't lie prone." WK
but	*Ò pū vábɩnìdā.*	"He doesn't lie prone." KT
	Ò dìgɩ nɛ̄.	"She's lying down."
	Ò pū dīgɩdá.	"She doesn't lie down" WK
	Lì zì'ə nɛ̄.	"It's standing up."
	Lì pū zí'ɩdā.	"It (a defective tripod) doesn't stand up." WK
	Lì tì'i nɛ̄.	"It's leaning against something."
	Lì tì'id.	"It can be leant against something." WK
	Lì pū tī'iyá.	"It's not leaning against something."
	Lì pū tī'idá.	"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:

Ò sìn.	"She's silent."
Ò sìn nɛ̄.	"She's keeping silent."

Ò zàñl nɛ̄ kɔ́lʋ̀g.	"He's holding a bag."
Ò zàñl kɔ́lʋ̀g.	"He holds a bag."
Ò pū zāñllá.	"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:

Sìn!	"Be quiet!"
Dɔ̀llī m.	"Follow me!"

Kà bà sīn.	"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 *bɔ̀ɔd*[a] "want" + gerund 22.3.2. They make deverbal nominal derivatives 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 Deverbal 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 *tɛ̄ñrɩd*[a] "remember-er" and the variant *gūrɩd*[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

*àe̯ň*ᵃ	"be something/somehow" 6.1.1.1
bɛ̀⁺	"be somewhere/exist" (no Agent Noun)
kā'e̯⁺ (← *kagι*)	"not be" (negative to both *àe̯ň*ᵃ and *bɛ̀*⁺)
*mɔ̄r*ᵃ/	"have"
*tār*ᵃ/	"have"
*sʋ̄'e*ʸᵃ/	"own"
*sɔ̄ň'e*ʸᵃ/	"be better than"
mī'⁺	"know"
zī'⁺	"not know"
*nɛ̄n*ⁿᵃ/	"envy"
*kīs*ᵃ/	"hate"
*zɛ̄m*ᵐᵃ/	"be equal to"
*kpɛ̄ɛ̌m*ᵐᵃ/	"be older than"
*wɛ̄n*ⁿᵃ/	"resemble" 23.4

The verb *bɔ̀ɔd*ᵃ "want, like" is formally the dipf of *bɔ̀*⁺ "seek", but has become an independent Relational Verb. Similarly the dipf of *zɔ̀*⁺ "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 23.1. The irregular Variable Verb *nɔ̀ŋ*ᵋ "love" has a finite form which is syntactically Relational 11.1.1 22.6.2.1.

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.

*vʋ̄e̯*ᵃ/	"be alive"	*vʋ̄r*ᵋ/	"alive"
*tɔ̄e̯*ᵃ/	"be bitter"	*tɔ̄ɔg*ɔ	"bitter"
*mā'as*ᵃ/	"be cool"	*mā'asír*ᵋ	"cool"
*bʋ̄gʋs*ᵃ/	"be soft"	*bʋ̄gʋsír*ᵋ	"soft"
*tɛ̄bιs*ᵃ/	"be heavy"	*tɛ̄bιsír*ᵋ	"heavy"
*mālιs*ᵃ/	"be sweet"	*mālιsír*ᵋ	"sweet"
*lābιs*ᵃ/	"be wide"	*lābιsír*ᵋ	"wide"
*mì'is*ᵃ	"be sour"	*mì'isʋg*ɔ	"sour"
*vɛ̀n*ⁿᵃ	"be beautiful"	*vɛ̀nnιg*ᵃ	"beautiful"
*vɛ̀ň*ˡᵃ	"be beautiful"	*vɛ̀ňllιg*ᵃ	"beautiful"
*lāl*ˡᵃ/	"be far"	*lāllúg*ɔ	"far"
*pɔ̀ɔd*ᵃ	"be few"	*pɔ̀ɔdιg*ᵃ	"few"

sʊ̀m^{ma}	"be good"	*sʊ̀ŋ*^ɔ	"good"
kpɪ̃'əm^{ma/}	"be strong"	*kpɪ̃'oŋ*^ɔ	"strong"
yàlɪm^{ma}	"be wide"	*yàlʊŋ*^ɔ	"wide"
zùlɪm^{ma}	"be deep"	*zùlʊŋ*^ɔ	"deep"
tàdɪm^{ma}	"be weak"	*tādɪm*^{m/}	"weak person"
gīm^{ma/}	"be short"	*gīŋ*^a	"short"
dùr^a	"be many"		(no adjective)
kàr^a	"be few"		(no adjective)

With stem changes between adjective and verb:

tʊ̄l^{la/}	"be hot"	*tʊ̄ʊlʊ́g*^ɔ	"hot"
ňyɛ̀ɛs^a	"be self-confident"	*ňyɛ̀ɛsíŋ*^a	"self-confident"
wā'am^{ma/}	"be long"	*wɔ̄k*^{ɔ/}	"long"

The verb *nār*^{a/} "be necessary" has a related adjective *nàrʊŋ*^ɔ "necessary" (??tone) but the verb is probably primary; it is much commoner than the adjective. The verb *pɔ̀ňr*^a "be near (to)" has an adjectival form seen in WK's *yī-pɔ́ňrà*⁺ "nearby houses" but makes the Perfective Gerund *pɔ̄ňrɪb*^ɔ. The verb *tūň'e* "be able" occurs almost exclusively as an auxiliary verb in the Serial VP construction 26.3.1; it has no extant Long Form in my materials.

12 Stem Conversion

Nominals 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 Nominals 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 *bɔ̀ɔd*[a] "want" 22.3.2:

> *Tììg   lā bɔ́ɔ̀d līig.*   "The tree is about to fall."
> Tree:**SG ART** want fall:**GER**.

This is only possible with gerunds that can have 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 19.7.2.1.

Although gerunds can be expanded with arguments 19.9.2 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 *-gɔ* replaced by *-rɛ* after stems ending in underlying **g*. Those irregular 2-mora stem verbs which avoid the regular *bɔ* Class suffix similarly include a significant proportion of stems in *-b* and *-m* 12.1.1.1.1.

2-mora stems	*-bɔ*	but *-rɛ* as final element of a compound
3-mora stems in **g*		
[surface *-gɛ -kɛ -ŋɛ -ae⁺ -ie⁺ -ue⁺*]	*-rɛ*	
all others	*-gɔ*	

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*ᵋ. 4-mora stems in *-sɪm -lɪm* follow the rule and use *-g*ᵓ:

*sìilɪm*ᵐ	"cite proverbs"	→	*sìilʊ́ŋ*ᵓ
*zàaňsɪm*ᵐ	"dream"	→	*zàaňsʊ́ŋ*ᵓ

but stems in **-gɪm* drop the *-m-* and use *-r*ᵋ:

*wàŋɪm*ᵐ	"waste away"	→	*wàŋɪr*ᵋ
*lāŋím*ᵐ	"wander"	→	*lāŋír*ᵋ
*zàkɪm*ᵐ	"itch"	→	*zàkɪr*ᵋ

For examples of regular gerunds see 9.3 under Noun Flexion.
2-mora stems regularly use *-r*ᵋ not *b*ᵓ in compounds; see 19.7.1.

*pʊ̱'à-dīɪr*ᵋ	"marriage"
*nīn-kʊ́ʊ̀r*ᵋ	"murder"
*dā-nʊ́ʊ̀r*ᵋ	"beer-drinking"
*mɔ̀-pīl*ˡᵋ	"grass roof"
*fū-yέὲr*ᵋ	"shirt-wearing" WK

12.1.1.1.1 Irregular Formations

All of these have been verified as occurring in the *bɔ̀ɔd* "want" + gerund construction above.
Irregular 2-mora stem verbs 11.1.1 may have regular gerunds:

*tìs*ᵋ	"give"	→	*tīsɪb*ᵓ
kɛ̄⁺	"let"	→	*kɛ̄ɛb*ᵓ/
*gʊ̀l*ᵋ	"suspend"	→	*gūlɪb*ᵓ

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*ᵋ and the formation is thus shown to belong in fact to the *g*ᵓ|*s*ᵋ 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:

lì⁺	"fall"	→	*līig*^a		
zī⁺	"carry on head"	→	*zīid*^{ɛ/}		
bɛ̀ň'⁺	"fall ill"	→	*bɛ̄ň'ɛs*^ɛ		
kɛ̄ň⁺	"come"	→	*kɛ̄n*^{nɛ/}		
zɔ̀⁺	"run"	→	*zūa*⁺	also	*zɔ̄ɔg*^ɔ
vū⁺	"make noise"	→	*vūug*^{ɔ/}		
pi̯ā̄ň'^a	"speak"	→	*pi̯àu̯ňk*^ɔ		
bʋ̀d^ɛ	"plant"	→	*būdɪg*^a	also	*būdʋg*^ɔ
yɛ̀l^ɛ	"say, tell"	→	*yɛ̀lʋg*^ɔ	cf Mooré *yèele*; ?? **yiə* → *yɛ*	
kūl^ɛ	"go home"	→	*kūlɪg*^{a/}	also	*kūlʋg*^{ɔ/}
tàňs^ɛ	"shout"	→	*tàňsʋg*^ɔ		
sɔ̄ňs^ɛ	"converse"	→	*sɔ́ňsìg*^a		
gɔ̄s^ɛ	"look"	→	*gɔ́sìg*^a		
sɔ̀s^ɛ	"pray, beg"	→	*sɔ̄sɪg*^a		
kīr^ɛ	"hurry"	→	*kìkírʋ̀g*^ɔ	or	*kīrɪb*^{ɔ/}
lɛ̀b^ɛ	"return"	→	*lɛ̄bɪg*^a		
tɛ̀b^ɛ	"carry in both hands"				
		→	*tɛ̄bɪg*^a		
kàňb^ɛ	"scorch"	→	*kāňbɪr*^ɛ		
ɔ̀ňb^ɛ	"chew"	→	*ɔ̄ňbɪr*^ɛ		
lūb^ɛ	"buck"	→	*lūbɪr*^{ɛ/}		
zàb^ɛ	"fight"	→	*zàbɪr*^ɛ		
tɛ̀ňb^ɛ	"tremble"	→	*tɛ̀ňbʋg*^ɔ		
tʋ̀m^m	"work"	→	*tūʋma*⁺		
tʋ̀m^m	"send"	→	*tìtūmɪs*^ɛ		
wʋ̀m^m	"hear"	→	*wūm*^{mɔ}	or	*wʋ̀mmʋg*^ɔ <u>13.1.1.4</u>

With 3-mora and 4-mora stem verbs there are very few irregularities in gerund formation. A few have plural-as-singular forms <u>9.5</u>. The verb *yīis*^{ɛ/} "make go/come out" has *yīisíb*^ɔ, like the alternate form *yīs*^ɛ 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 <u>13.1.1.1</u> <u>13.1.1.2.1</u>:

pʋ̀'ʋs^ɛ	"greet, thank"	→	*pʋ̀'ʋsɪm*^m		"worship"
			or *pʋ̀'ʋsʋg*^ɔ		
kū⁺	"kill"	→	*nīn-kúʋsìm*^m		"murderousness"
yɔ̄lɪs^{ɛ/}	"untie"	→	*yɔ̄lɪsím*^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.

zìn̆ᵢʸᵃ	"be sitting"	→	*zīn̆ᵢgᵃ* also "place", regular *gᵃ|sᵋ* Class
zìᵉʸᵃ	"be standing"	→	*zīᵃ⁺* KED *zīəgᵃ*	DK KT
			(wholly exceptional undeleted *g* [6.3.1](#))
dīgɪʸᵃ/	"be lying"	→	*dīkᵃ/* KT *dīgɪrᵋ/*	WK
īgɪʸᵃ/	"be kneeling"	→	*īkᵃ/* KT *īgɪrᵋ/*	WK
vābɪʸᵃ/	"be lying prone"	→	*vāpᵓ/* KT *vābɪrᵋ/*	WK
tīᵢʸᵃ/	"be leaning"	→	*tīᵢbᵓ/*	
	(of an object)			
gʊ̀lᵃ	"be hanging"	→	*gūlɪbᵓ*	

The Adjectival Verb *pɔ̀n̆rᵃ* also makes a Perfective Gerund:

pɔ̀n̆rᵃ	"be near"	→	*pɔ̄n̆rɪbᵓ*

However, most Invariable Verbs, including the Dynamic type, with stems in *ll 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.

ɛ̄ɛn̆bírᵋ	"(physical) foundation"	*ɛ̄ɛn̆búgᵓ*	"laying a foundation"
dūkᵓ/	"cooking pot"	*dūgʊbᵓ/*	"cooking"
dà'a⁼	"market"	*dā'abᵓ*	"buying"
kūkᵃ	"chair"	*kūgʊbᵓ*	"resting on something"
zūg-kūgʊrᵋ	"pillow"		
su̞ākᵃ/	"hiding place"	*sū'abᵓ/*	"hiding"
sɔ̄bɪrᵋ/	"piece of writing"	*sɔ̄pᵓ/*	"writing, orthography"
kūtᵋ	"iron, nail" [9.5](#)	*kūdʊbᵓ*	"working iron"
kùəsɪmᵐ	"merchandise"	*kùəsʊgᵓ*	"selling"
pɛ̀bɪsɪmᵐ	"wind"	*pɛ̀bɪsʊgᵓ*	"blowing of the wind; wind"

See also on *pʊ̀'alímᵐ dàalímᵐ* [13.1.2](#).

The forms *vābɩr*ᵉ/ *lābɩr*ᵉ/ *dīgɩr*ᵉ/ *īgɩr*ᵉ/ 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 *pìbɩl*ᵉ "cover", *zàňbɩl*ᵉ "tattoo", *màal*ᵉ "sacrifice" show single -*n*- in place of -*l*-:.

*pībɩn*ⁿᵉ	*pībɩna*⁺	*pìbɩn-*	"covering"
*zāňbɩn*ⁿᵉ	*zāňbɩna*⁺	*zàňbɩn-*	"tattoo" (NT "sign")
*māan*ⁿᵉ	*māana*⁺	*màan-*	"sacrifice"

Although my informants definitely had single -*n*- in these words, it is possible that this represents a secondary simplification of *nn; compare Mooré *pìbíndgà* "*couvercle*" 6.2.1.1. Toende, like Mooré, has Pattern L for these words: *zãbín*, *màan*. 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 *tūədɩr*ᵉ "mortar", from *tu̦à*⁺ "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

| *dīɩb*ᵓ | | | "food" |

Gerund forms may be abstract *count* nouns describing particular instances of the activity of the verb, and may then have plurals:

*zɔ̄ɔg*ᵓ	*zɔ̄ɔs*ᵉ		"race"
*bū'əsʋ́g*ᵓ	*bū'əsá*⁺	*bū'əs-*	"question"
*zàaňsʋ́ŋ*ᵓ	*zàaňsímà*⁺	*zàaňsʋ́ŋ-*	"dream"

Such words may be formally plural but construed as singular 9.5

dì'əma⁺	"festival"
*pi̦àň'ad*ᵉ	"word, language"
tēň'ɛsá⁺	"thought"

Thus *tēň'ɛsá yīnní* "one thought" (Acts 4:32).

12.2 Nominals from Nominals

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 $g^a|s^\varepsilon$ Classes, their languages, which belong to the $-l^\varepsilon$ Subclass of $r^\varepsilon|a^+$ 9.3.4.1 and the associated place, which has the suffix $-g^\jmath$:

Kūsáa⁼ sg	*Kūsáàs*$^\varepsilon$ pl	Kusaasi person
Kūsáàl$^\varepsilon$		Kusaal language
Kūsáὺg$^\jmath$		Kusaasi territory

See many examples in 35.5.

A further example of sg $-g^\jmath$ deriving associated place names is:

wὲεd^a or *wὶιd*^{a}	"hunter"
wὲog$^\jmath$	"deep bush"

The suffix $-d^\varepsilon$ is found with some names of liquids which are not m^m Class 9.5; hence also

sīiňf$^{\jmath/}$	"bee"
sīiňd$^{\varepsilon/}$	"honey"

Names of trees are almost all $g^a|s^\varepsilon$ Class, while their fruits belong to either the $r^\varepsilon|a^+$ or the $g^\jmath|d^\varepsilon$ Class 35.6.

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 $-g^\jmath$. 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 19.7.1 19.7.2.1. However, such abstract nouns cannot be used in the immediate future construction with *bɔ̀ɔd*^{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:

vūe̯[a/]	"be alive"	*vūm*[m/]	"life"
sừm[ma]	"be good"	*sừm*[m]	"goodness"
pɔ̀ɔd[a]	"be few"	*pɔ̀ɔdɪm*[m]	"scarcity"
vèn[na]	"be beautiful"	*vènnɪm*[m]	"beauty"
vèňl[la]	"be beautiful"	*vèňllɪm*[m]	"beauty"
būgʊs[a/]	"be soft"	*būgʊsím*[m]	"softness"
tēbɪs[a/]	"be heavy"	*tēbɪsím*[m]	"weight"
mā'as[a/]	"be cool, wet"	*mā'asím*[m]	"coolness, damp"
mālɪs[a/]	"be sweet"	*mālɪsím*[m]	"sweetness"
lābɪs[a/]	"be wide"	*lābɪsím*[m]	"width"
ňyὲɛs[a]	"be confident"	*ňyὲɛsɪm*[m]	"self-confidence"
lāl[la/]	"be far"	*lāllúg*[ɔ]	"distance"
kpǐ'əm[ma/]	"be strong, hard"	*kpǐ'oŋ*[ɔ]	"hardness, strength"
yàlɪm[ma]	"be wide"	*yàlʊŋ*[ɔ]	"width"
mì'is[a]	"be sour"	*mì'isʊg*[ɔ]	"sourness"
tɔ̄e̯[a/]	"be bitter"	*tɔ̄ɔg*[ɔ]	"bitterness"
zừlɪm[ma]	"be deep"	*zừlʊŋ*[ɔ]	"depth"
tūl[la/]	"be hot"	*tūʊlúg*[ɔ] or *tūllím*[m]	"heat"

Abstract nouns derived from other adjectives (often used as adverbs) include

pìəlɪg[a]	"white"	→	*pìəlɪm*[m]	"brightness"
tītā'ar[ɛ]	"big"	→	*tītā'am*[m]	"multitude"
pāalíg[a]	"new"	→	*pāalím*[m]	"recently"
bāaňlíg[a]	"quiet"	→	*bāaňlím*[m]	"quietly"
záal[lɛ]	"empty"	→	*zāalím*[m]	"emptily"
kūdʊg[ɔ]	"old"	→	*kūdɪm*[m]	"old times"
nὲɛr[ɛ]	"empty"	→	*nὲɛm*[m]	"for free"
zɛ̄mmúg[ɔ]	"equal"	→	*zɛ̄mmúg*[ɔ]	"equality"

Some nouns referring to people form similarly derived abstract nouns:

sāan[a/]	"guest"	→	*sāʊ́ŋ*[ɔ]	"hospitality"
kpɛ̄ɛňm[m]	"elder"	→	*kpɛ̄oňŋ*[ɔ]	"eldership"
sɔ̄e̯ň[a]	"witch"	→	*sɔ̄ɔňg*[ɔ]	"witchcraft"
zu̯à[+]	"friend"	→	*zùɵd*[ɛ]	"friendship"
gbáňyà'a[=]	"lazy person"	→	*gbáňyà'am*[m]	"laziness"
dàmà'a[=]	"liar"	→	*dàmà'am*[m]	"lying"

Human-reference noun stems may also form abstract *m*[m] Class derivatives with the derivational suffix *-lɪm* [13.1.2](#).

13 Derivational Suffixes

The statement of underlying full word structure made in <u>6</u> 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~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* <u>6.2.1.1</u>. 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 nominals; 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 <u>6.2.1.1</u>.

For Tone Patterns in derivation see <u>7.5</u>.

13.1 Nominals

13.1.1 From Verbs

The deverbal 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 nominal derivation 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 nominals are predictable <u>7.5.1</u>.

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|bᵃ Class, although those derived from *mm*-stem Variable Verbs and *ll-* or *r(r)*-stem Invariable Verbs may also show *r*ᵋ|*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 the formation is often found with verbs whose subject is not an "agent", including transitive Descriptive Verbs, as with English deverbal derivatives in "-er". Whether an Agent Noun can be created from a Descriptive Verb correlates closely with whether the verb can be used in a direct command 11.2.2.

The formant of Agent Nouns is the derivational suffix *-d*, found also in Dynamic Deverbal 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 Deverbal 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.

kʊ̄⁺	"kill"	→	*kʊ̄ʊd*ᵃ/	"killer"	
mɛ̀⁺	"build"	→	*mɛ̄ɛd*ᵃ	"builder"	
dì⁺	"eat"	→	*dīt*ᵃ	"eater"	
*gɔ̄s*ᵋ	"look"	→	*gɔ̄t*ᵃ/	"seer, prophet"	
*dʊ̄g*ᵋ	"cook"	→	*dʊ̄gʊd*ᵃ/	"cook"	
*dṳ'à*ᵃ	"bear, beget"	→	*dʊ̄'ad*ᵃ	"elder relation"	
*kàd*ᵋ	"drive away"	→	*saríyà-kāt*ᵃ	"judge"	23.1
*sɔ̄b*ᵋ	"write"	→	*sɔ̄bɩd*ᵃ/	"writer"	
*bùn*ᵋ	"reap"	→	*būn*ⁿᵃ	"reaper"	
*tʊ̀m*ᵐ	"work"	→	*tʊ̀m-tʊ̄m*ⁿᵃ	"worker"	
*kìm*ᵐ	"tend flock"	→	*kɔ̀ňb-kīm*ⁿᵃ	"herdsman, shepherd"	
*kpàr*ᵋ	"lock"	→	*kpārɩd*ᵃ	"lock-er"	
*gbīs*ᵋ	"sleep"	→	*gbīsɩd*ᵃ/	"sleeper"	

*sḭàk*ᵉ	"believe"	→	*sḭākɪd*ᵃ	"believer"	
*i̯āňk*ᵉ/	"jump, fly"	→	*i̯āň'ad*ᵃ/	"flier"	11.1.1
*sòŋ*ᵉ	"help"	→	*sūŋɪd*ᵃ	"helper"	
*bàŋ*ᵉ	"understand"	→	*bāŋɪd*ᵃ	"wise man"	
*kɛ̄ŋ*ᵉ/	"go"	→	*kɛ̄n*ⁿᵃ/	"traveller"	11.1.1
*gàad*ᵉ	"pass"	→	*tùɵn-gāt*ᵃ	"leader"	
*mɔ̄ɔl*ᵉ/	"proclaim"	→	*mɔ̄ɔl-mɔ́ɔ̀n*ⁿᵃ	"proclaimer"	
*màal*ᵉ	"sacrifice"	→	*màal-māan*ⁿᵃ	"sacrificer"	
*pà'al*ᵉ	"teach"	→	*pā'an*ⁿᵃ	"teacher"	
*sūgʊr*ᵉ/	"forbear"	→	*sūgʊríd*ᵃ	"forgiver"	
*yū'ʊm*ᵐ/	"sing"	→	*yūʊm-yʊ́'ʊ̀m*ⁿᵃ	"singer"	
			pl *yūʊm-yʊ́'ʊ̀mnɪb*ᵃ		
*sàň'am*ᵐ	"spoil"	→	*pṵ'à-sāň'am*ⁿᵃ	"adulterer"	
			pl *pṵ'à-sāň'amɪdɪb*ᵃ		

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:

nāe⁺/	"finish"	→	*nāad*ᵃ/	"someone who doesn't give up easily" WK
dī̯e⁺/	"receive"	→	*dī̯əd*ᵃ/	"receiver"
ňwà'e⁺	"cut wood"	→	*ňwā'ad*ᵃ	"woodcutter"
gbāň'e⁺/	"catch"	→	*zīm-gbáň'àd*ᵃ	"fisherman"
pīe⁺/	"wash"	→	*pīəd*ᵃ/	"washer"
fāeň⁺/	"save"	→	*fāaňd*ᵃ/	"saviour" WK

The NT/KB have *faangid* for "saviour"; see 18.
3-mora stems in *-s* consistently drop the *-d* in the sg and cb:

*sīgɪs*ᵉ/	"lower"	→	*sīgɪs*ᵃ/	"lowerer"
			pl *sīgɪsídɪ̀b*ᵃ	
*kùɵs*ᵉ	"sell"	→	*kùɵs*ᵃ	"seller"
			pl *kūɵsɪdɪb*ᵃ	
*pʊ̀'ʊs*ᵉ	"worship"	→	*pʊ̀'ʊs*ᵃ	"worshipper"
			pl *pū'ʊsɪdɪb*ᵃ	
*tʊ̀'as*ᵉ	"talk"	→	*tʊ̀'as-tʊ̀'as*ᵃ	"talker"
			pl *tʊ̀'as-tū'asɪdɪb*ᵃ	
*dī̯əs*ᵉ/	"receive"	→	*nɔ̄-dí'ə̀s*ᵃ	"chief's spokesman"
			pl *nɔ̄-dí'əsɪ̀dɪb*ᵃ	("linguist", see 37)

Some 2-mora stems also irregularly drop the *-d* in the sg and cb:

*zàb*ᵋ	"fight"	→	*zàb-zàb*ᵃ		"warrior"
			*gbān-záb*ᵃ		"leather-worker"
*tìs*ᵋ	"give"	→	*tìs*ᵃ		"giver"
*sɔ̀s*ᵋ	"beg"	→	*sɔ̀s*ᵃ		"beggar"

Stems in *-mm-* drop the *-d-* throughout; such nouns may use *rᵋ|a*⁺ Class suffixes instead of ᵃ|*b*ᵃ 9.3.1.1 (cf Invariable Verbs in *nn ll r(r)* below):

*dàm*ᵐ	"shake"	→	*dàm-dām*ᵐᵃ		"shaker"
			*dàm-dām*ᵐᵋ		(cf dipf *dàmmɪd*ᵃ)

The *nn*-stem *sùn*ⁿᵋ "bow the head" 6.2.1 likewise drops *-d-*:

*sùn*ⁿᵋ	"bow head"	→	*sūn*ⁿᵃ		"deep thinker, close
			pl *sūnnɪb*ᵃ		observer" WK 37
			cb *sùn-*		(cf dipf *sùnnɪd*ᵃ)

Agent nouns can only be formed from 3-mora verb stems in *-*g-* if the **g* is either deleted or assimilated with the root final consonant as *-k-* or *-ŋ-*:

*yādɪg*ᵋ⁄	"scatter"	→	*yāt*ᵃ⁄		technical term for one participant in a housebuilding ritual

Various irregular formations in my materials include:

*tēk*ᵋ⁄	"pull"	→	*ňwī-tɛ́k*ᵃ		"rope-puller"
			pl *ňwī-tɛ́kɪdɪb*ᵃ		
*nɔ̀ŋ*ᵋ	"love"	→	*nɔ̀ŋɪd*ᵃ		"lover"; tones irreg
*tì'əb*ᵋ	"heal"	→	*tī'əb*ᵃ		"healer"; tones irreg; ?noun primary 37

For 4-mora stems: KT has no agent nouns; WK drops the final *-m-* and proceeds as for 3-mora stems:

*sìilɪm*ᵐ	"cite proverbs"	→	*sīin*ⁿᵃ		"speaker of proverbs"
			pl *sīinnɪb*ᵃ		
*pʊ̀'alɪm*ᵐ	"harm"	→	*pū'an*ⁿᵃ		"harmer"
*zàaňsɪm*ᵐ	"dream"	→	*zàaňs*ᵃ		"dreamer"
			pl *zāaňsɪdɪb*ᵃ		

Invariable Verbs with stems ending in vowels or plosives add *-d-* to form the agent noun stem:

zìň'i^{ya}	"be sitting down"	→	*zīň'id*^a	"sitter"
zì'e^{ya}	"be standing still"	→	*zī'əd*^a	"stander"
mī'⁺	"know"	→	*mī'id*^{a/}	"knower"
			gbàn-mī'id^{a/}	"scribe" NT ("book-knower")
zī'⁺	"not know"	→	*zī'ɩd*^{a/}	"ignorant person"
sʊ̄'e^{ya/}	"own"	→	*sʊ̄'ʊd*^{a/}	"owner"
sɔ̄ň'e^{ya/}	"be better than"	→	*sɔ̄ň'ɔd*^{a/} pl *sɔ̄ň'ɔb*^{a/} <u>9.3.1</u>	
dīgɩ^{ya/}	"be lying down"	→	*dīgɩd*^{a/}	"lier-down"
īgɩ^{ya/}	"be kneeling"	→	*īgɩd*^{a/}	"kneeler"
vābɩ^{ya/}	"be lying prone"	→	*vābɩd*^{a/}	"lier prone"
làbɩ^{ya}	"be crouching"	→	*lābɩd*^a	"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 Deverbal Adjectives <u>9.3.1.1</u>.

sīn^{na/}	"be silent"	→	*nīn-sín*^{na}	"silent person"
nɛ̄n^{na/}	"envy"	→	*nīn-nɛ́n*^{na}	"envious person"
dɔ̄l^{la/}	"be with"	→	*ňyà'an-dɔ̀l*^{la}	"disciple" (irreg. tone)
			or *ňyà'an-dɔ̀l*^{lɛ}	
zāň l^{la/}	"be holding"	→	*nɔ̄-záň l*^{la}	"holder of hens"
			or *nɔ̄-záň l*^{lɛ}	
dɛ̄l^{la/}	"be leaning"	→	*nīn-dɛ́l*^{la}	"person prone to lean"
mɔ̄r^{a/}	"have"	→	*bʋ̀-mɔ̄r*^{a/}	"owner of goats"
			or *bʋ̀-mɔ̄r*^{ε/}	
tār^{a/}	"have"	→	*bʋ̀-tār*^{a/}	"owner of goats"
			or *bʋ̀-tār*^{ε/}	

Variant formations occur in

kīs^{a/}	"hate"	→	*kīs*^{a/} or *kīsɩd*^{a/}	"hater"
tɛ̀ňr^a	"remember"	→	*tɛ̄ňrɩd*^a	"rememberer"
gūr^{a/}	"be on guard"	→	*gūrɩd*^{a/}	"guard"
			gū'ud^{a/}	"guard"
			zà'-nɔ̄-gúr^a	"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 Deverbal 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 Deverbal Adjective to have a past passive sense like an English past participle, though examples occur, e.g *sūm-dʊ́gʊdà*[+] "cooked groundnuts" WK, *ziiŋdʊgida* = *zííŋ-dʊ́gʊdà*[+] "cooked fish" (Lk 24:42), beside the more usual sense in *ni'im dʊgida* = *nīm-dʊ́gʊdà*[+] "meat for cooking" (1 Samuel 2:15.)

When used without a preceding noun cb, Dynamic Deverbal Adjective forms have the meaning of Agent Nouns:

    kʊ̄ʊdír[ɛ] pl *kʊ̄ʊdá*[+]   "killer" = *kʊ̄ʊd*[a/] pl *kʊ̄ʊdíb*[a]

With a preceding cb the meanings differ:

    pʉ̀'à-kʊ̄ʊd[a/]   "woman-killer, killer of women"
    pʉ̀'à-kʊ̄ʊdír[ɛ]   "woman killer, murderous woman"

Accordingly, Deverbal Adjectives will be cited with a preceding cb.
With **Variable Verbs**:
2-mora stems all retain the **d*.

gɔ̀ñ[+]	"hunt"	→	*pʉ̀'à-gɔ̄ɔ̌ndɪr*[ɛ]	"prostitute" ("wandering woman")
là'[+]	"laugh"	→	*pʉ̀'à-lā'adɪr*[ɛ]	"woman prone to laughter/ woman to be laughed at"
ňyɛ̄[+]	"see"	→	*bʊ̄n-ňyɛ́tìr*[ɛ]	"visible object"
kʉ̄ā[+]	"hoe"	→	*nā'-dá-kʊ̄ədír*[ɛ]	"ox for ploughing"
yɛ̀[+]	"don clothes"	→	*fū-yɛ́ɛdìr*[ɛ]	"shirt for wearing" WK
			fū-yɛ́ɛdùg[ɔ]	KT
kʊ̄[+]	"kill"	→	*tì-kʊ̄ʊdím*[m]	"poison" ("killing medicine")
dʉ̀'à[a]	"bear/beget"	→	*tɛ̀ŋ-dʊ̄'adɪg*[a]	"native land"
dʊ̄g[ɛ]	"cook"	→	*sūm-dʊ́gʊdà*[+]	"cooked groundnuts" WK
sīg[ɛ]	"descend"	→	*yī-sígɪdìr*[ɛ]	"lodging-house"
sʉ̀'ā[a]	"hide"	→	*yɛ̄l-sʊ́'adìr*[ɛ]	"confidential matter"

ɔ̌ŋ̌bᵋ	"chew"	→	*bū̄n-ɔ́ŋ̌bɪdà*⁺	"solid food"
*bùn*ᵋ	"reap"	→	*bū̄n-búnnìr*ᵋ	"thing for reaping"
*tʋ̀m*ᵐ	"work"	→	*bū̄n-túmmìr*ᵋ	"useful thing"
*vʋ̄l*ᵋ	"swallow"	→	*tì-vʋ̄nním*ᵐ	"oral medication"
*gbīs*ᵋ	"sleep"	→	*pʋ̠'à-gbīsɪdír*ᵋ	"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 <u>6.3.1</u> or otherwise <u>11.1.1</u>. The dropping of -*d* is thus much more consistent than in agent nouns.

*gīlɪg*ᵋ⁾	"go around"	→	*pʋ̠'à-gīnníg*ᵃ	"prostitute"
sūeŋ̌⁺⁾	"anoint"	→	*kpā-sɔ́ɔŋ̌dìm*ᵐ	"anointing oil"
*tʋ̄lɪg*ᵋ⁾	"heat up"	→	*bū̄n-túlɪgìr*ᵋ	"heater, thing for heating"
*pɛ̀lɪg*ᵋ	"whiten"	→	*bū̄n-pɛ́lɪgìr*ᵋ	"whitening thing, whitener"
*yādɪg*ᵋ⁾	"scatter"	→	*bū̄n-yátìr*ᵋ	"scattering thing, scatterer"
				(cf the agent noun *yāt*ᵃ⁾)
*i̠āŋ̌k*ᵋ⁾	"fly, jump"	→	*bū̄n-i̠áŋ̌'adìr*ᵋ	"flying creature"
*pàk*ᵋ	"surprise"	→	*yɛ̄l-pákìr*ᵋ	"disaster"
*tɛ̄k*ᵋ⁾	"pull"	→	*ŋ̌wī-tɛ́kìr*ᵋ	"rope for pulling with"
*kɛ̄ŋ*ᵋ⁾	"go"	→	*bʋ̀ŋ-kɛ̄nnír*ᵋ	"donkey that doesn't sit still"
*sʋ̀ŋ*ᵋ	"help"	→	*bū̄n-súŋìr*ᵋ	"helpful thing"
*nɔ̀ŋ*ᵋ	"love"	→	*bì-nɔ̀ŋɪr*ᵋ	"beloved child"

3-mora stems in -*m* retain the -*d*, forming the consonant cluster -*mm*-:

| *sàŋ̌'am*ᵐ | "destroy" | → | *bʋ̀-sāŋ̌'ammɪr*ᵋ | "scapegoat" WK |

3-mora stems in -*s* all drop the -*d*:

| *pɛ̀lɪs*ᵋ | "sharpen" | → | *bū̄n-pɛ́lɪsìr*ᵋ | "sharpening thing" |
| *kùəs*ᵋ | "sell" | → | *bū̄n-kúəsìr*ᵋ | "item for sale" |

4-mora stems (all examples KT) all drop -*d* (whereas agent nouns drop stem-final -*m*):

*sìilɪm*ᵐ	"cite proverbs"			
		→	*bū̄n-síilʋ́ŋ*ᵓ	"thing relating to proverbs"
*pʋ̀'alɪm*ᵐ	"harm"	→	*nīn-pʋ́'alìŋ*ᵃ	"harmful person"
			*pʋ̠'à-pʋ̀'alíŋ*ᵃ	"harmful woman"
*zàaŋ̌sɪm*ᵐ	"dream"	→	*nīn-záaŋ̌sʋ̀ŋ*ᵓ	"dreamy person"
			*pʋ̠'à-zàaŋ̌sʋ́ŋ*ᵓ	"dreamy woman"

The adjectives associated with Adjectival Verbs are not deverbal but primary; Dynamic Deverbal Adjectives from **Dynamic Invariable Verbs** show the same stem as the Agent Noun 13.1.1.1:

*dīgɪ*ʸᵃ/	"be lying"	→	*bʊ̀ŋ-dīgɪdír*ᵋ	"donkey that lies down a lot"	
*vābɪ*ʸᵃ/	"be prone"	→	*bʊ̀ŋ-vābɪdír*ᵋ	"donkey always lying prone"	
*zìñ'i*ʸᵃ	"be sitting"	→	*kūg-zíñ'idìr*ᵋ	"stone for sitting on"	
				(i.e. not a *būgʊr*ᵋ WK)	
*zāñl*ˡᵃ/	"be holding"	→	*nɔ̄-záñl*ˡᵋ	"hen for holding"	
*dɛ̄l*ˡᵃ/	"be leaning"	→	*nīn-dɛ́l*ˡᵋ	"person you can lean on" WK	
		→	*kʊ̀g-dɛ̄l*ˡᵋ/	"chair for leaning on"	
*gʊ̀l*ˡᵃ	"be hanging" →		*būn-gʊ́l*ˡᵋ	"thing for suspending"	

13.1.1.2.2 Resultative

Resultative Deverbal Adjectives are only derived from Variable Verbs with finite Resultative forms 22.2.2.1. Almost all such verbs are either intransitive or Patientive Ambitransitive 23.1, 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 *-lɪm-*; it either deletes a preceding derivational suffix or is a formation from roots alone; all examples show *-lɪm* after a *CVV* root. For the flexion see 10.2.

kpì⁺	"die"	→	*kpìilʊ́ŋ*ɔ	"dead"
gɛ̄ñ⁺	"get tired"	→	*gɛ̄ɛñlʊ́ŋ*ɔ	"tired"
*pɛ̀'ɛl*ᵋ	"fill"	→	*pɛ̀'ɛlʊ́ŋ*ɔ	"full"
kɔ̀⁺	"break"	→	*kɔ̀ɔlʊ́ŋ*ɔ	"broken"
yɛ̀⁺	"wear"	→	*yɛ̀ɛlʊ́ŋ*ɔ	"worn" (of a shirt)
yɔ̀⁺	"close"	→	*yɔ̀ɔlʊ́ŋ*ɔ	"closed"
*pʊ̀'alɪm*ᵐ	"harm"	→	*pʊ̀'alʊ́ŋ*ɔ	"damaged"
àeñ⁺	"tear"	→	*àañlʊ́ŋ*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 Dynamic Deverbal 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*ᵋ Class. In a few cases the meaning overlaps with that of agent nouns.

kʋ̄+	"kill"	→	*kʋ̄ʋdíŋ*ᵃ	"thing for killing with"
lɔ̄+	"tie"	→	*si̯à-lɔ̄ɔdíŋ*ᵃ	"belt" ("waist-tying thing")
*dʋ̄g*ᵋ	"cook"	→	*dʋ̄gʋdíŋ*ᵃ	"cooking utensil"
*sɔ̄b*ᵋ	"write"	→	*sɔ̄bɩdíŋ*ᵃ	"writing implement"
*kpàr*ᵋ	"lock"	→	*kpārɩdɩŋ*ᵃ	"thing for locking"
ňwà'e+	"cut wood"	→	*ňwā'adɩŋ*ᵃ	"axe"
pīe+/	"wash self"	→	*pīədíŋ*ᵃ	"thing for washing oneself"
sʋ̀+	"bathe"	→	*sʋ̄ʋdɩŋ*ᵃ	"sponge"
*gɔ̄s*ᵋ	"look"	→	*nīn-gɔ́tìŋ*ᵃ	"mirror"
			*nīn-gɔ́tìs*ᵋ	"spectacles" [*nīn-* "eye"]
*bʋ̀d*ᵋ	"plant"	→	*bʋ̄tɩŋ*ᵃ 2.4	"cup" (originally "seed cup")
*pīəs*ᵋ/	"clean"	→	*pīəsíŋ*ᵃ	"cleaning implement"
*kùəs*ᵋ	"sell"	→	*kūəsɩŋ*ᵃ	"professional salesperson"
dā'e+/	"push"	→	*dā'adíŋ*ᵃ	"pusher (person or thing)"
*zìň'i*ʸᵃ	"be sitting"	→	*zīň'idɩŋ*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 nominals by adding the suffix *-m-* to the stem. These forms almost all belong to the *m*ᵐ Class. **Vowel-stems add *-lɩm-*,** where the *-l-* may represent historical *ʎ 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.

*sʋ̄'e*ʸᵃ/	"own"	→	*sʋ̄'ʋlím*ᵐ
mī̄'+	"know"	→	*mī̄'ilím*ᵐ
zī̄'+	"not know"	→	*zī̄'ɩlím*ᵐ
*àe̯ň*ᵃ	"be something"	→	*àaňlím*ᵐ
bɛ̀+	"be somewhere"	→	*bɛ̀llím*ᵐ
kā'e̯+	"not be"	→	*kā'alím*ᵐ
*sɔ̄ň'e*ʸᵃ/	"be better than"		has no gerund
*mɔ̄r*ᵃ/	"have"	→	*mɔ̄rím*ᵐ
*tār*ᵃ/	"have"	→	*tārím*ᵐ
*nār*ᵃ/	"be necessary"	→	*nārím*ᵐ
*nɛ̄n*ⁿᵃ/	"envy"	→	*nɛ̄nním*ᵐ
*wɛ̄n*ⁿᵃ/	"resemble"	→	*wɛ̄nním*ᵐ [?? misheard for *wɛ̀nním*ᵐ]
*sīn*ⁿᵃ/	"be silent"	→	*sīnním*ᵐ
*dɔ̄l*ˡᵃ/	"accompany"	→	*dɔ̄llím*ᵐ
*zāňl*ˡᵃ/	"hold in the hand"	→	*zāňllím*ᵐ
*dɛ̄l*ˡᵃ/	"be leaning" (of a person)	→	*dɛ̄llúgɔ* or *dɛ̄llím*ᵐ

*gūr*ᵃ/	"guard"	→	*gūrím*ᵐ
*tɛ̀řr*ᵃ	"remember"	→	*tɛ̄řrɪb*ᵓ
			or *tɛ̄řrím*ᵐ [?? misheard for *tɛ̀řrím*ᵐ]
But *kīs*ᵃ/	"hate"	→	*kísʊ̀g*ᵓ

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 *bɔ̀ɔd*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:

*bɔ̀ɔdɪm*ᵐ	"will" (Pattern L, unlike *bɔ̄ɔdɪr*ᵋ "desirable")
	contrast the Perfective Gerund *bɔ̄ɔb*ᵓ "seeking"
*gɔ̀ɔřdɪm*ᵐ	"wandering" (*gɔ̀ř*⁺ "hunt")
*zɔ̀tɪm*ᵐ	"fear" [*M̀ zɔ́t nɛ̄* "I'm afraid."]
	contrast *zɔ̄ɔg*ᵓ "running"

This probably simply means that the stems do not contain *-m-* and have only three morae; cf the *dàalɪm*ᵐ "masculinity", *pʊ̀'alɪm*ᵐ "femininity" alongside *dàalím*ᵐ "male sex organs", *pʊ̀'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 *wʊmmʊg* of *wʊ̀m*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 *wʊmdʊgɔ*.

Unequivocal Imperfective Gerund forms with *-m-* derived from almost all agentive verbs occur as pre-modifiers of the bound noun

-tāa⁼	*-tāas*ᵋ	*-tà-* or *-tā-*	"companion in ..."

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:

mī'⁺	"know"	→	*mī'ilím-tāa*⁼	"partner in knowledge"	
zī'⁺	"not know"	→	*zī'ɪlím-tāa*⁼	"partner in ignorance"	
bɛ̀⁺	"exist"	→	*bɛ̀llím-tāa*⁼	"partner in existence"	WK
*dɔ̄l*ˡᵃ/	"be with"	→	*dɔ̄llím-tāa*⁼	"fellow-companion"	

Forms from Variable Verbs are made with *-m-* added to the stem seen in the Dynamic Deverbal Adjective, but have the gerund tone pattern of Pattern L from Pattern L verbs, with H on the last vocalic mora:

mὲ⁺	"build"	→	*mὲɛdím-tāa*⁼	"fellow-builder"
dì⁺	"eat"	→	*dìtím-tāa*⁼	"messmate"
pū̄⁺	"share"	→	*pū̄ʋdím-tāa*⁼	"fellow-sharer"
kpὲň'⁺	"enter"	→	*kpὲň'ɛdím-tāa*⁼	"fellow-resident"
*zàb*ᵋ	"fight"	→	*zàbɩdím-tāa*⁼	"enemy"
*dūg*ᵋ	"cook"	→	*dūgʋdím-tāa*⁼	"fellow-cook"
fāň⁺	"snatch"	→	*fāaňdím-tāa*⁼	"fellow-robber"
*tòm*ᵐ	"work"	→	*tòmmím-tāa*⁼	"co-worker"
*pʋ̀'ʋs*ᵋ	"worship"	→	*pʋ̀'ʋsím-tāa*⁼	"fellow-worshipper"
*dìɩs*ᵋ	"feed"	→	*dìɩsím-tāa*⁼	"fellow-feeder"
*sòŋ*ᵋ	"help"	→	*sòŋím-tāa*⁼	"fellow-helper"
		or	*sòŋɩdím-tāa*⁼	
*sì̥àk*ᵋ	"agree"	→	*sì̥àkím-tāa*⁼	"fellow in agreement"

Stance Verbs may use *-dɩm-* or *-lɩm-* or even *-nɩm-*; 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 suffixe is retained.

*īgɩ*ʸᵃ/	"be kneeling"	→	*īgɩlím-tāa*⁼	"fellow-kneeler"	
		or	*īgɩdím-tāa*⁼	"fellow-kneeler"	WK
*zìň'i*ʸᵃ	"be sitting"	→	*zìň'ilím-tāa*⁼	"fellow-sitter"	
		or	*zìň'idím-tāa*⁼	"fellow-sitter"	WK
*vābɩ*ʸᵃ/	"lie prone"	→	*vābɩlím-tāa*⁼	"fellow lier-prone"	
		or	*vābɩdím-tāa*⁼	"fellow lier-prone"	WK
*làbɩ*ʸᵃ	"be crouched"	→	*làbɩlím-tāa*⁼	"fellow croucher in hiding"	
*zì'e*ʸᵃ	"be stood"	→	*zì'əlím-tāa*⁼	"fellow-stander"	
		or	*zì'ədím-tāa*⁼	"fellow-stander"	WK
*dīgɩ*ʸᵃ/	"be lying"	→	*dīgɩlím-tāa*⁼	"fellow-lier"	
		or	*dìgɩním-tāa*⁼	"fellow-lier"	WK

For the irregular verb *nɔ̀ŋ*ᵋ WK has two forms with different nuances 11.1.1

*nɔ̀ŋ*ᵋ	"love"	→	*nɔ̀ŋɩlím-tāa*⁼	"fellow liker"
		or	*nɔ̀ŋɩdím-tāa*⁼	"fellow lover"

13.1.1.5 Other Deverbal Formations

-s- appears in a few concrete nouns derived from verbs:

dīgɪsá[+]	"lairs"	←	*dīgɪ*[ya/]	"be lying down"
dūʋsá[+]	"steps"	←	*dū*[+]	"go up"

-m- derives nouns from verbal roots in

zɔ̄ɔm[mɛ]	"refugee"	cf	*zɔ̀*[+]	"run"
kpī'im[m/]	"corpse"	cf	*kpɪ̀*[+]	"die"

-d- appears as an instrument noun formant instead of the usual *-dɪm-* in

tūedɪr[ɛ]	"mortar"	←	*tʋ̯à*[+]	"grind in a mortar"

See also on *pībɪn*[nɛ] "covering" etc, where the *n* may represent **ld* [12.1.2].

-b- possibly derives nouns from verbal roots in

kpɪ̀ibɪg[a]	"orphan"	cf	*kpɪ̀*[+]	"die"
dà'abɪr[ɛ]	"slave"	cf	*dà'*[+]	"buy"

This *-b* may be connected with the stem of *bīig*[a] "child"; cf Gurmanche *kpēbígā* "orphan", *kpé* "die", *bígā* "child". Kusaal has no synchronic process to turn a root into a suffix; however, there may be relics of such processes in *bī-díbìŋ*[a] "boy" (Mooré *bìríblá*), *bī-púŋ*[a] "girl" (Mooré *bìpúglá*) beside *dāʋ̯*[+] "man" *pʋ̯'ā*[a] "woman" (← **pʋ̯aga*), in the reduplicated plural *bībɪs*[ɛ] of *bīl*[a] "small", and the personal name *À-Sāan-dʋ́*[+], cf *sāan*[a/] "stranger", *dāʋ̯*[+] "man."

13.1.2 From Nominals

-s- forms adjectives and cognate Adjectival Verbs.

mā'asír[ɛ]	"cold, wet"	cf	*mā'e*[+/]	"cool down"
mā'as[a/]	"be cold, wet"			
būgʋsír[ɛ]	"soft"	cf	*būk*[ɛ/]	"weaken"
būgʋs[a/]	"be soft"			
tēbɪsír[ɛ]	"heavy"	cf	*tēbɪg*[ɛ/]	"get heavy"
tēbɪs[a/]	"be heavy"			
mɪ̀'isʋg[ɔ]	"sour"	cf	*mɪ̀'ig*[ɛ]	"get sour"
mɪ̀'is[a]	"be sour"			

-d- (apart from its use to form deverbal nominals) features in a number of words
where it has no evident derivational meaning:

	*yūgʊdɪ*ᵉ	"hedgehog"
	*lā'af*ᵓ	"cowrie"
pl	*līgɪdɪ*⁺	"money" **lagɪd-*
	*pʊ̀gʊdɪb*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

*Nàbɪd*ᵃ	"Nabdema"	but	*Nàbɪr*ᵉ	"Nabit language"
*Dàgáàd*ᵃ	"Dagaaba person"	=	Dagaare *Dagao*	
*nīdɪb*ᵃ/	"people"	=	Mooré *nébà*	

-m- appears in both concrete and abstract nouns, with no single common meaning:

*bī'əm*ᵐ	"enemy"	cf	*bī'a*⁺	"bad"
*tādɪm*ᵐ/	"weak person"	cf	*tàdɪg*ᵉ	"become weak"
*āňsíŋ*ᵃ	"sister's child"	cf	*áňsìb*ᵃ	"mother's brother"
*yáaŋ*ᵃ	"grandchild"	cf	*yáab*ᵃ	"grandparent"
← **yāámgā*			← **yāágbā*	
*vúeŋ*ᵃ	"red kapok"	cf	*vúer*ᵉ	"red kapok fruit"
← **vūémgā*			← **vūégrī*	
*bì'isím*ᵐ	"milk"	cf	*bì'isɪr*ᵉ	"breast"
*yūgúm*ⁿᵉ	"camel"		[ultimately ← Berber **a-ləqəm* (Souag)]	
*gbīgɪm*ⁿᵉ	"lion"			
*zìlɪm*ᵐᵉ	"tongue"			
*àňrʊŋ*ᵓ	"boat"			
*nā'am*ᵐ	"chiefship"	cf	*nà'ab*ᵃ	"chief"
*zɔ̄lɪmís*ᵉ	"foolishness"	cf	*zɔ̄lʊg*ᵓ/	"fool"

Abstract *-mís*ᵉ forms seem always to have H toneme; cf *bùdɪmís*ᵉ "confusion",
where, however, the *-m-* is part of the verb stem *bùdɪm*ᵐ "get confused"; cf also

*tàdɪmís*ᵉ	"weakness"	cf	*tādɪm*ᵐ/	"weak person"

-m- is seen also in the adjectives

*zùlʊŋ*ᵓ	"deep"		*ňyālʊ́ŋ*ᵓ	"wonderful"
*yàlʊŋ*ᵓ	"wide"		*nàrʊŋ*ᵓ	"necessary"

Added to existing adjectival stems, -m- produces no change of meaning:

*ňyɛ̀ɛsíŋ*ᵃ	"self-confident"	cf	*ňyɛ̀ɛs*ᵃ	"be self-confident"
*vɛ̀ňllíŋ*ᵃ	"beautiful"	cf	*vɛ̀ňllɪg*ᵃ	"beautiful"
*mālɪsíŋ*ᵃ	"pleasant"	cf	*mālɪsíg*ᵃ	"pleasant"
*lāllíŋ*ᵃ	"distant"	cf	*lāllʊ́g*ᵓ	"distant"

-lɪm- derives abstract nouns from nominals. The *-l-* is perhaps the *ʎ formant of Invariable Verbs 11.2 and may occur in some primary adjectives like

*sābɪlíg*ᵃ	"black"	cf	*sɔ̄b*ᵋ	"get dark"

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 *-lɪm-*, like

dāy̰⁺	"man"	→	*dàalɪm*ᵐ	"masculinity"
*py̰'ā*ᵃ	"woman"	→	*pʊ̀'alɪm*ᵐ	"femininity"

versus *dàalím*ᵐ "male sex organs", *pʊ̀'alím*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 *bìilím*ᵐ "childhood"; WK did not accept *bìilɪm.

    -lɪm- 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.

*tītā'al*ˡᵋ	"proud person"	→	*tītā'alɪm*ᵐ	"pride"
*gīŋ*ᵃ	"short"	→	*gīĭňlím*ᵐ	"shortness"
*wɔ̄k*ᵓ/	"long, tall"	→	*wā'alím*ᵐ	"tallness"
*sāan*ᵃ/	"guest, stranger"	→	*sáannìm*ᵐ	"strangerhood"
*tīráàn*ᵃ	"neighbour"	→	*tīráànnɪm*ᵐ	"neighbourliness"
*gīŋ*ᵃ	"short"	→	*gīŋɪlím*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 + *sɩm* or *lɩm*, never *CVVC* root + *m*. Some Adjectival Verbs have stems including the nominal 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*ᵉ 6.2.1.1 signifying "assume the stance" and in *-l*ᵉ "make assume the stance"; all the *-n*ᵉ verbs are Pattern LO regardless, but the *-l*ᵉ verbs have the same Pattern as the base Stance Verb.

	Stance Verb		Assume Stance	Make Assume Stance
	*dīgɩ*ʸᵃ/	be lying	*dìgɩn*ᵋ	*dīgɩl*ᵋ/
	*vābɩ*ʸᵃ/	be lying prone	*vàbɩn*ᵋ	*vābɩl*ᵋ/
	*īgɩ*ʸᵃ/	be kneeling	*ìgɩn*ᵋ	*īgɩl*ᵋ/
	*làbɩ*ʸᵃ	be crouching hidden	*làbɩn*ᵋ	*làbɩl*ᵋ
	*zìň'i*ʸᵃ	be sitting	*zìň'in*ᵋ	*zìň'il*ᵋ
	*zì'e*ʸᵃ	be standing	*zì'ən*ᵋ	*zì'əl*ᵋ
	*tī'i*ʸᵃ/	be leaning (of thing)	*tì'in*ᵋ	*tī'il*ᵋ/
WK	*gɔ̄'e*ʸᵃ/	be looking up	*gɔ̀'ɔn*ᵋ	
	*sùr*ᵃ	have bowed head	*sùn*ⁿᵋ	*sùn*ⁿᵋ [sic]
	-	cover oneself	*lìgɩn*ᵋ	*lìgɩl*ᵋ
	-	perch (of bird)	*zùən*ᵋ	*zùəl*ᵋ
	-	perch (of bird)	*yà'an*ᵋ	*yà'al*ᵋ

The Resultative 22.2.2.1 of *zùe+* is used for "be perching":

Níiŋ lā zúə nɛ̄.	"The bird is perching." KT
Bird:**sg** **art** perch **foc**.	

Other derivational relationships involving Stance Verbs are seen in

*gʊ̀l*ˡᵃ	be suspended	*gʊ̀l*ᵋ	*gʊ̀l*ᵋ
*tàbɩ*ʸᵃ	be stuck to	*tàb*ᵋ	*tàbɩl*ᵋ
*dɛ̄l*ˡᵃ/	"be leaning" (person)	*dɛ̀lɩm*ᵐ	

13.2.1.2 Causatives

Several derivational suffixes are found with a causative sense.

Patientive Ambitransitive verbs 23.1 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

*gūr*ᵃ/	"guard"	*gū'ul*ᵋ/	"put someone on guard"
bāň'⁺	"ride"	*bāň'al*ᵋ/	"put someone on a horse/bicycle etc"
*zàb*ᵋ	"fight"	*zàbɩl*ᵋ	"cause to fight"
*dṵ'à*ᵃ	"bear, beget"	*dʊ̀'al*ᵋ	"make interest (of a loan)"
yɛ̀⁺	"dress oneself"	*yɛ̀ɛl*ᵋ	"dress another person"
*pìd*ᵋ	"don hat/shoes/rings"	*pìl*ᵋ	"put hat/shoes/rings on another person"

-g- can be a causative or inchoative suffix with roots forming Invariable Verbs or intransitive Variable Verbs:

*dɔ̄l*ˡᵃ/	"accompany"	*dɔ̄lɩg*ᵋ/	"make accompany"
*gɔ̄r*ᵃ/	"look up" DK	*gɔ̄dɩg*ᵋ/	"make look up" DK
*zāňl*ˡᵃ/	"be holding"	*zàŋ*ᵋ	"pick up"
*tɛ̀ňr*ᵃ	"remember"	*tìeň*⁺	"bring to mind, remind"
*yùul*ᵋ	"swing" intransitive	*yùlɩg*ᵋ	"swing" transitive
kɔ̀⁺	"break" intransitive	*kɔ̀'ɔg*ᵋ	"break" Pat. Ambitransitive

-s- is the usual causative suffix for Variable Verbs:

kpɛ̀ň'⁺	"enter"	*kpɛ̀ň'ɛs*ᵋ	"make enter"
nìe⁺	"appear"	*nɛ̀ɛs*ᵋ	"reveal"
yī⁺	"go/come out"	*yīis*ᵋ/ or *yīs*ᵋ	"make go/come out"
dì⁺	"eat"	*dìɩs*ᵋ	"feed"
nū⁺	"drink"	*nūlɩs*ᵋ/	"make drink"; also *nūlɩg*ᵋ/
*sīg*ᵋ	"go down"	*sīgɩs*ᵋ/	"lower"
*lɛ̀b*ᵋ	"return"	*lɛ̀bɩs*ᵋ	"make return; answer"
*mṵ'à*ᵃ	"suck" (of a baby)	*mʊ̀'as*ᵋ	"give to suck"
[Mooré *tá*	"arrive"]	*tā'as*ᵋ/	"help to travel, walk"

It is also seen in

zēm^{ma/}	"be equal"	*zɛ̄'mɪs*^{ɛ/}	"make equal"
kpìig^ɛ	"go out (fire)"	*kpìis*^ɛ	"quench"

gūr^{a/} "guard" has the causative *gū'ul*^{ɛ/} (cf *gū'ud*^{a/}, agent noun) but also has the derivative *gū'us*^{ɛ/} "take care, watch out"

13.2.1.3 Reverse Action

-g- attached to dynamic verbal roots implies reversal:

yɛ̀⁺	"dress oneself"	*yɛ̀ɛg*^ɛ	"undress oneself"
pìd^ɛ	"put (hat etc) on"	*pìdɪg*^ɛ	"take (hat etc) off"
pìl^ɛ	"put (hat etc) on s'one"	*pìlɪg*^ɛ	"take (hat etc) off someone"
lɔ̄⁺	"tie up"	*lɔ̄dɪg*^{ɛ/}	"untie"
yɔ̀⁺	"close"	*yɔ̀'ɔg*^ɛ	"open"
ɛ̀n̆d^ɛ	"block up"	*ɛ̀n̆dɪg*^ɛ	"unblock"
yà'al^ɛ	"hang up"	*yàk*^ɛ	"unhang"
pà'al^ɛ	"put on top"	*pàk*^ɛ	"take off top"
pìbɪl^ɛ	"cover up"	*pìbɪg*^ɛ	"uncover"
tàbɪ^{ya}	"be stuck to"	*tàbɪg*^ɛ	"unstick, get unstuck"
là'as^ɛ	"gather together"	*lāk*^{ɛ/}	"open" (eye, book)
		Mooré *lákè*	"un-stick together"
		Farefare *làkɛ̀*	"*enlever, ouvrir*"

Reversive *-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 *-ʊl-* and *-ʊk-*, 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:

kɔ̀⁺	"break"	*kɔ̀'ɔsᵋ*	"break several times"
tɔ̀ň⁺	"shoot"	*tɔ̀ň'ɔsᵋ*	"hunt"
*pìəb*ᵋ	"blow (flute etc)"	*pɛ̀bɪsᵋ*	"blow (wind)"
*làbɪ*ʸᵃ	"crouch in hiding"	*làbɪsᵋ*	"walk stealthily"
*vũẹ*ᵃ/	"be alive"	*vũ'ʋsᵋ/*	"breathe, rest"
*i̯ã̄ňk*ᵋ/	"fly, jump"	*i̯ã̄ň'asᵋ/*	"leap, jump repeatedly"
yā'e⁺/	"open mouth"	*yā'asᵋ/*	"open repeatedly" WK
dī'e⁺/	"receive"	*dī'əsᵋ/*	"receive (many things)"

-**g**- probably occurs with an inchoative meaning in the Base Forms of several irregular verbs 11.1.1, and also in

*sɔ̄ň'e*ʸᵃ/	"be better than"	*sũ̄ň'e*⁺/	"become better than" WK

-**m**- derives some Particle-Verbs 22.7.2:

lɛ̀m	"again"	cf	*lɛ̀b*ᵋ	"return"
là'am	"together"	cf	*là'as*ᵋ	"gather together"
		also	*là'am*ᵐ	"associate with", main verb
dɛ̀ŋɪm	"first"	cf	*dɛ̀ŋ*ᵋ	"go first"
màlɪgɪm	"again"	cf		Toende *malig* "do again"

-**g**- and -**m**- occur with no clear meaning in

fā̄ň⁺	"rob, snatch"	*fāeň*⁺/	"save" (? "snatch back")
*lìəb*ᵋ	"become"	*lɛ̀bɪg*ᵋ	"turn over"
			Mooré *lèbge* "become"
sɔ̄ň⁺	"rub"	*sũ̄eň*⁺/	"anoint"
*nɔ̄b*ᵋ	"get fat"	*nɔ̄bɪg*ᵋ/	"grow" (child, plant)
nā⁺	"join"	*nāe*⁺/	"finish"; compare
			Hausa *gamàa* "join, finish"
*kɔ̀ňs*ᵋ	"cough"	*kɔ̀ňsɪm*ᵐ	"cough"

-**r**- appears in

kābɪr^{ɛ/}	"ask for admission"
sūgʊr^{ɛ/}	"forbear, be patient with"

Kābɪr^{ɛ/} is probably connected with *kāab*^{ɛ/} "offer, invite", and Toende Kusaal has *kábɪs* "*frapper à la porte, informer, signaler.*" There seems to be no root **sūg-*. Both words appear frequently in pan-regional formulaic expressions <u>34</u> and may well be loanwords. These verbs may be back-formations from the nouns *kābɪrí*⁺ and *sūgʊrʊ́*⁺, where *rɪ/rʊ* possibly originated in the equivalent of *r*^ɛ|*a*⁺ Class singular flexions <u>9.6</u>.

13.2.2 From Nominals

-**g**- derives many verbs from nominal roots, with the meaning "make/become ..." The same suffix occurs with verbal roots, where it is inchoative <u>13.2.1.4</u>.

ňyɔ̄'ɔs^{ɛ/}	"smoke"	*ňyū'e*^{+/}	"set alight"
ňwīig^{a/}	"rope"	*ňwīig*^{ɛ/}	"make a rope"
tādɪm^{m/}	"weak person"	*tàdɪg*^ɛ	"become weak"
kpì'a⁺	"neighbour"	*kpì'e*⁺	"approach"
zūər^ɛ	"hill"	*zùe*+	"get higher, more"
À-Tūl^{lɛ}	"Breech-Delivered" <u>35.2</u>	*tùlɪg*^ɛ	"invert"
mā'asír^ɛ	"cool, wet"	*mā'e*^{+/}	"get cool, wet"
		(*mā'al*^{ɛ/}	"make cool, wet")
būgʊsír^ɛ	"soft"	*būk*^{ɛ/}	"soften"
tēbɪsír^ɛ	"heavy"	*tēbɪg*^{ɛ/}	"get/make heavy"
gīŋ^a	"short"	*gìŋ*^ɛ	"scrimp"
kpì'oŋ^ɔ	"strong"	*kpɛ̀'ŋ*^ɛ	"strengthen"
vūr^{ɛ/}	"alive"	*vū'ʊg*^{ɛ/}	"make/come alive"
pɔ̀ɔdɪg^a	"few"	*pɔ̀'ɔg*^ɛ	"diminish; denigrate"
pìəlɪg^a	"white"	*pɛ̀lɪg*^ɛ	"whiten"
sābɪlíg^a	"black"	*sɔ̄bɪg*^{ɛ/}	"blacken"
nīn-múa⁺	"concentration" ("red eye")	*mu'e*⁺	"redden"
kūdʊg^ɔ	"old"	*kùdɪg*^ɛ	"shrivel up, dry out, age"
sʊ̀ŋ^ɔ	"good"	*sʊ̀ŋ*^ɛ	"help"
tʊ̄ʊlúg^ɔ	"hot"	*tʊ̄lɪg*^{ɛ/}	"heat up"
mì'isʊg^ɔ	"sour"	*mì'ig*^ɛ	"turn sour"
zùlʊŋ^ɔ	"deep"	*zùlɪg*^ɛ	"deepen"
lāllúg^ɔ	"far"	*lālɪg*^{ɛ/}	"get to be far, make far"
màṳk^ɔ	"crumpled up"	*màk*^ɛ	"crumple up"
dɛ̄ɛŋ^a	"first"	*dèŋ*^ɛ	"precede"
nɛ̀ɛr^ɛ	"clear, empty"	*nìe*⁺	"appear"

With the addition of *-m* as a second derivational suffix:

*wàṳŋ*ᵓ	"wasted"	*wàŋɩm*ᵐ	"waste away"

-l- can make causatives from nominal roots, often corresponding to an intransitive or Patientive Ambitransitive verb with derivational *-g-*:

mā'e⁺ᐟ	"get cool"	*mā'al*ᵋᐟ	"make cool"
pūň'e⁺ᐟ	"rot"	*pɔ̄ň'ɔl*ᵋᐟ	"cause to rot"
nìe⁺	"appear"	*nὲεl*ᵋ	"reveal"
*wū̄'ʋg*ᵋᐟ	"get wet"	*wū̄'ʋl*ᵋᐟ	"make wet"
*ňyá'aŋ*ᵃ	"behind"	*ňyā'al*ᵋᐟ	"leave behind"
*gɛ̄og*ᵓ	"space between legs"	*gɛ̄εl*ᵋᐟ	"put between legs" Tones *sic*
*līk*ᵃ	"darkness"	*lìgɩl*ᵋ	"cover up"

-lɩm- derives verbs from nominal roots, meaning "act as ..." or "make/become ...":

*pṳ'ā*ᵃ	"woman"	*pʋ̀'alɩm*ᵐ	"cook"
*pɔ̀ň'ɔr*ᵋ	"cripple"	*pɔ̀ň'ɔlɩm*ᵐ	"cripple, get crippled"
*wàbɩr*ᵋ	"lame"	*wàbɩlɩm*ᵐ	"make, go lame"
*gū̄'ʋs*ᵋ	"semi-ripe things"	*gʋ̀'ʋlɩm*ᵐ	"become semi-ripe"
*bū̄gʋd*ᵃ	"client of diviner"	*bʋ̀gʋlɩm*ᵐ	"cast lots"
		cf *bʋ̀k*ᵋ	"cast lots"

-m- appears deriving a verb from a nominal root in

*nɛ̄εr*ᵋᐟ	"millstone"	*nɛ̄εm*ᵐᐟ	"grind with a millstone"

-s- has a factitive sense in

zṳà⁺	"friend"	*zùɵs*ᵋ	"befriend"

14 Derivational Prefixes

Many nominal stems have an element preceding the root which is not the combining form of another nominal. Such elements will be called **nominal prefixes**. No finite verb form has a prefix.

Nominal 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-* 20.4 and the number prefixes 16.2.1.) However, nominal prefixes are common in particular semantic fields, such as with words for small animals, reptiles and insects.

Most nominal 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 ɪ ʊ* vowel distinction of affix vowels; *ɪ ʊ* become *i u* by ATR harmony before *i u* of an initial root mora, and the *ɪ/ʊ* distinction itself is predictable 4.4. There is also a complex reduplicated type *CVsɪn* or *CVlɪn*. Stems with nominal 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 nominal prefixes and combining forms is not absolute, and a few prefixes clearly originated as cbs, sometimes with phonological simplifications 14.4. Other prefixes are related to verbal negative particles 14.3. Nevertheless, cbs and nominal 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 nominal paradigm, if it ends in a consonant other than a nasal, if it has a vowel other than short *a ɪ ʊ* 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 nominal 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 18.

For the Personifier Clitic *à-* as part of some common nouns referring to living creatures see 19.10; it is not a prefix but a proclitic particle.

As prefix vowels, *ɪ* and *ʊ* are subject to ATR harmony 4.4, which is ignored in writing as it is non-contrastive.

14.1 Reduplication-Prefixes

The simplest type of nominal prefix copies the initial *C* of the root, followed by a vowel which is most often *ɪ*, but rounded to *ʊ* by neighbouring labial consonants. No cases occur with voiced stops or voiced fricatives.

*kʊ̀kɔ̄r*ᵋ/	"voice"
*kʊ̀kɔ̀m*ᵐᵋ	"leper"
*kìkàŋ*ᵃ	"fig tree"
*kìkīrɪg*ᵃ/	"tutelary spirit"
*k[p]ʊ̀kpàrɪg*ᵃ	"palm tree"
*kpīkpīn*ⁿᵃ/	"merchant"
*kpàkūr*ᵋ/	"tortoise"
*tītā'ar*ᵋ	"big"
*tìtūmɪs*ᵋ	"sending" (*tʊ̀m*ᵐ "send")
*tàtàl*ˡᵋ	"palm of hand"
*pīpīrɪg*ᵃ/	"desert"
*fūfūm*ᵐᵋ	"envy"; "stye" (believed to result from envy)
*sìsì'əm*ᵐ	"wind"
*zà-sìsɔ̄bɪr*ᵋ/	"evening"
	(*zà-* cb of *zàam*ᵐ "evening", *sɔ̄b*ᵋ "get dark")
*lìlāalíŋ*ᵃ	"swallow"
*mìmīilím*ᵐ	"sweetness"
*mìmīilúg*ᵓ	*id*

More complex is a similar type with a final nasal consonant; voiced stops and fricatives may occur with this type:

*gʊ̀ngūm*ᵐᵋ	"kapok material" (*gʊ̀m*ᵐᵋ "kapok fruit")
*dʊ̀ndùug*ᵓ	"cobra"
*dìndēog*ᵓ/	"chameleon"
*bìmbìm*ᵐᵋ	"altar"
*bʊ̀mbàrɪg*ᵃ	"ant"
*zʊ̀nzɔ̀ŋ*ᵃ	"blind" (*zū'əm*ᵐ/ "go/make blind")
*zīnzāu̯ŋ*ᵓ/	"bat"
*kìnkàŋ*ᵃ	"fig"
*tīntɔ̄ňríg*ᵃ	"mole"
*pʊ̀mpɔ̄ɔg*ᵓ	"housefly" (cf *tàmpūa*⁺ *id* 9.3.2)
sīnsáaň⁼	a kind of tiny ant
*nɔ̄b-púmpàu̯ŋ*ᵓ	"foot"

An even more complex type follows the reduplicated *CV* with *-sɪn* or *-lɪn*:

kpìsɪnkpìl[lɛ]	"fist"
tàsɪntàl[lɛ]	"palm of hand"
sīlɪnsíù̌ng[ɔ]	"spider" pl *sīlɪnsíîňd*[ɛ]
sīlɪnsíùg[ɔ]	"ghost" pl *sīlɪnsíîs*[ɛ]
zīlɪnzíòg[ɔ]	"unknown" cf *zī*'[+] "not know"
vùlɪnvùuǐl[lɛ]	"mason wasp"
wàsɪnwàl[lɛ]	a parasitic gall on trees,
	called "mistletoe" in local English
nɛ̄sɪnnɛ̄og[ɔ/]	"envious person" cf *nɛ̄n*[na/] "envy" WK
	others "centipede" = WK *nà'-nɛ̄sɪnnɛ̄og*[ɔ/]

14.2 *Da(n) ba(n) sa(n)*

dàwàlɪg[a]	"hot, humid period just before the rainy season"
dàyūug[ɔ/]	"rat"
dàyáam[ma]	"woman's parent-in-law"
dàtāa[=]	"enemy" cf *nìn-tāa*[=] "co-wife", Ghanaian "rival"
dàmà'a[=]	"liar" cf *mà'*[+] "lie"
dàkīig[a]	"sibling-in-law via wife"
dàwān[nɛ/]	"pigeon"
dādúk[ɔ]	a kind of large pot, cf *dūk*[ɔ/] "pot"
dàtìu̯ŋ[ɔ]	"right hand"
dàgɔ̀bɪg[a]	"left hand"
bānāa[=]	traditional long-sleeved smock
bàlàŋɪr[ɛ]	"hat"
bàlàar[ɛ]	"stick, staff"
bālɛ̄rʋg[ɔ/]	"ugly" cf *lɛ̄r*[ɛ] "get ugly"
bàyɛ̄og[ɔ/]	"betrayer of secrets"
	cf *yɛ̄ɛs*[ɛ/] "betray a secret"
sākárʋ̀g[ɔ]	"fox"
sàbùa[+]	"lover, girlfriend" ? *bɔ̀ɔd*[a] "want, love"
sāmán[nɛ]	clear space in front of a *zàk*[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 18:

*dànkɔ̀ŋ*ɔ	"measles"
*sāngʊ́nnìr*ɛ	"millipede"
*zànkʋ̀'ar*ɛ	"jackal"
*Zàngbèog*ɔ	"Hausa person"
*màngávʋŋ*ɔ	"crab"
*làngávʋŋ*ɔ	"crab"
*nànzù'us*ɛ	"pepper"

The interesting word *nàyīig*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 *nàyìig-nàm*ᵃ, though there is an analogical *g*ᵃ|*s*ɛ pl *nàyīis*ɛ as well; there is also a derived abstract noun *nàyīigɪm*ᵐ "thievery." The Farefare cognate of *nàyīig*ᵃ is *nàyìgà*, pl *nayigba* or *nayigsi*; Dagbani has *nayiɣa* pl *nayiɣsi* and also *tayiɣa id*.

14.3 *Pū kʋ̀(n)*

In some words these prefixes have a negative meaning, and they are then presumably connected with the verb negative particles *pū kʋ̀*:

*kʋ̀ndʋ̀'ar*ɛ	"barren woman"; cf *du̯'à*ᵃ "bear, beget"
*nīn-pū-nān*ⁿᵃ/	"disrespectful person"; cf *nān*ɛ "love, respect"
*tʋ̀b-pū-wúmnìb*ᵃ	"deaf people" (Rom 11:7)
	cf *tʋ̀bʋr*ɛ "ear", *wʋ̀m*ᵐ "hear."

However, most cases are not analysable:

*kʋ̀ndʋ̀ŋ*ᵃ	"jackal"
*gūmpūzɛ̄r*ɛ/	"duck"
*dāmpūsāar*ɛ	"stick"
*bān-kʋ́sél*ˡɛ	"lizard" ? first element connected with *bàŋ*ᵃ
	"agama lizard", but the tones are unexpected.

14.4 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] *nīis*[ɛ] [= Mooré *ninga*] but the word is rare; as a nominal 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 *dàu̯-*, *dàp-*, but the *dà-* form is seen in

        dà-pāal[a/]   "son, boy"   cf *pāalíg* "new"
        dà-kɔ̀ɔňr[ɛ]   "son, bachelor"   cf *àdàkɔ́ň'* "one"
        compare *pùkɔ̀ɔňr*[ɛ] below

pù	"woman"	cf *pu̯'ā*[a] "woman" cb *pu̯'à-*. Identifiable in e.g.

        pùkɔ̀ɔňr[ɛ]   "widow"
        cf   Mooré *pùgkõoré*   "widow"
        with Mooré *pùgsádà*   "young woman"
                 = Kusaal *pu̯'à-sādır*[ɛ/]

pū-	"farm"	cf *pɔ̄ɔg*[ɔ/] "field, farm", regular cb *pɔ̄-*. Tonally, this *pū-* is a M prefix, not a combining form 7.2.4.

        pūkpāad[a/]   "farmer" (= *kpāad*[a/] *id*)

nà'	"chief"(?)	appears before a number of nouns signifying animals and insects:

        nà'-nɛ̄sınnɛ̄og[ɔ/] "centipede" WK
    cf   *nɛ̄sınnɛ̄og*[ɔ/] "envious person" WK; others: "centipede"
        nà'-zɔ̀m[mɛ]   "locust"
        nà'-dàwān[nɛ/]   "pigeon" = *dàwān*[nɛ/]

The "chief" cb perhaps relates to traditional folklore; cf *à-kɔ̄ra-díəm*[ma] "praying mantis" ("hyena's parent-in-law") and animal and bird names which incorporate the Personifier Clitic 19.10 like *à-dàalʋ́ŋ*[ɔ] "stork", *à-gáʋ̀ŋg*[ɔ] "pied crow", *à-mús*[ɛ] "cat."

15 Pronouns

Pronouns occur as NP heads. Demonstrative, Indefinite and Interrogative pronouns may occur as post-determiners after a head, which is reduced to a cb, while the pronoun inflects to show the number of the head, as with adjectives.

15.1 Personal

		Proclitic	Enclitic	Free	Subject+*ǹ*
Sg	1st	*m̀*	*m*ᵃ	*mān* SF *mánɛ̄* LF	*mán*
	2nd	*fʋ̀*	*ͅ*ᵖ	*fūn* SF *fʋ́nɛ̄* LF	*fʋ́n*
	3rd an	*ò*¹² [ʊ]	*o* [ʊ]	*ɔ̄n*ᵋ	*ɔ́n*
	3rd inan	*lì* or *dì*	*lɪ*⁺	*līn*ᵋ or *dīn*ᵋ	*lín* or *dín*
Pl	1st	*tì*	*tɪ*⁺	*tīnám*ᵃ ¹³	*tīnámì*‿ ø
	2nd	*yà*	*ya*⁺	*yānám*ᵃ	*yānámì*‿ ø
	3rd	*bà*	*ba*⁺	*bān*ᵋ	*bán*

"an"= animate, "inan" = inanimate: on gender see 19.2.2.

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 *ǹ*-Clauses 31.

The alternate form *mām* also occurs for 1st sg in any rôle.

The 2nd pl subject has an enclitic form ʸᵃ used *after* imperatives addressing more than one person 28.2.3 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 31.2.2:

> *Fʋn kanɛ buoli fʋ mɛŋ ...*   "You who call yourself ... (Rom 2:17)
> *Fūn-kánì bùəlɪ‿ fʋ̀ mɛ̄ŋ ...*
> **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 19.2.2.

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12) Toende Kusaal has *ʊ̃*. The original form was probably **ŋ͡mʋ*, with later **ŋ͡m* → **ŋ* before the rounded vowel. Cf also the Dagbani free pronoun *ŋuna* = Kusaal *ɔ̄n*ᵋ.
13) Toende has 1pl *tʋn* 2pl *nam* for the free pronouns; the *nam* component of the Agolle forms is presumably the element seen in the pluraliser *nàm*ᵃ 9.4.

15.2 Demonstrative

Some forms of Demonstrative pronouns are limited to usage either as NP heads or as post-determiners, while other forms may appear in both uses.

Head or Dependent:

	Animate sg	Inanimate sg		Plural
Long	*ɔ̀ŋā*[+/]	*lìnā*[+/]	far	*bàmmā*[+/]
Short	*ɔ̀n*[ε]	*lìn*[ε]	far	*bàn*[ε]

Head only:

Long		*nɛ̄'ŋá*[+]	near	
Short		*nɛ̄'*[+/]	near	*nɛ̄'-nám*[a] NT

Post-determining only:

Long	*kàŋā*[+/]	*kàŋā*[+/]
Short	*kàn*[ε]	*kàn*[ε]

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*[ε] Class pronoun *kà*, parallel to *lì*, originally *r*[ε]*|a*[+] Class. My informants use these forms for animate reference as well as inanimate, but NT prefers *ɔ̀ŋā*[+/] *ɔ̀n*[ε].

Post-determining pronouns follow a noun cb. Some speakers allow sg and pl noun forms, but these probably have the tones of combining forms 19.5. After quantifiers (other than *àdàkɔ́ň'*), which lack cbs, *kàn*[ε] *kàŋā*[+/] do not occur, but *kàn*[ε] may follow a free pronoun doing duty for a cb 15.1.

Examples after combining forms:

| *du̯'átà lā lɔ́r-kàŋā* | "this car of the doctor's" |
| *bʊ̀-kàŋā lā* | "that goat" |

After a quantifier:

| *bɛ̀dʊgū línā* | "this multitude" |

After a free pronoun form used as a cb:

| *fūn-kánì bùəl ...* | "you who call ..." |

Post-determining pronouns follow any adjectives:

nɔ̄-píə̀l-kàŋā   "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** 31.2.2. 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 *ňwà*⁺ (cf French *ça ci*.) This deictic use of *lā*⁺/ is enabled by the fact that Demonstratives automatically make the NP definite 19.3.

dàṳ-kàŋā sáàm   "this/that man's father"
dàṳ-kàn sáàm   "that (not visible) man's father"
dàṳ-kàŋā lā sáàm   "that man's father"
dàṳ-kàŋā ňwá sáàm   "this man's father"
tèŋ-kàn lā ná'àb   "the king of that country" (from a story)
sān-kán lā   "at that time"

15.3 Indefinite

	Animate sg	Inanimate sg	Plural
	sɔ̄'⁺	*sī'əl*ᵃ	*sīəba*⁺
Dependent-only	*sī'a*⁺	*sī'a*⁺	

The vowel is *not* glottalised in the plural. For NT WK, but not KT, the dependent-only inanimate sg is much commoner than *sī'əl*ᵃ used as a dependent. WK feels that for people *sī'a*⁺ is pejorative; NT occasionally has *sɔ̄'*⁺ for inanimate: *tèŋ-sɔ̄'* "a certain land." For indefinite pronouns in Relative Clauses see 31.2.1.

The sense is "some, someone, something", "a certain", indefinite but *specific*:

yà bì-sɔ̄'   "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' pʊn dɛŋi sig sa.
kà mán   tì   yɛ́ m̀ sīg   lā,
and **1SG:COMP** afterward say **1SG** descend **ART**,
kà sɔ̄'   pʊ́n   dèŋı‿ ø   sīg   sá.
and **INDF.AN** already before **SER** descend thither.
"when I'm then about to go down, someone else goes down first." (Jn 5:7)

Mɛɛri onɛ an Magdalen nɛ Mɛɛri sɔ'
Meeri ɔ́nì   àň Magdalen nē   Meeri sɔ̄'
Mary **REL.AN COP** Magdalen with Mary   **INDF.AN**
"Mary who was Magdalen and another Mary" (Mt 28:1)

Winnig mɔr o mɛŋ vɛnlim, ka nwadig mɛ mɔr vɛnlim si'a.
Wìnnıg mɔ́r ò   mēŋ véňllìm kà   ňwādıg   mɛ́ mɔ̄r véňllìm-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)

* M̀ ná tī̱   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:

Dàų̱-sɔ̄'   dāa bɛ́ ...   "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 19.3 33.4:

Dāų̱   dāa bɛ́ ...   "Once there was a man ..."
Man:**SG TNS EXIST** ...

Sɔ̄'/*sī'əl mɛ́-kàma* means "anyone, anything, everyone, everything":

O niŋid si'el mɛkama sʊ'ʊŋa.
Ò   nìŋıd sī'əl   mɛ́-kàma   sʊ́ŋā.
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   sɔ̄'   kūdım kʊ́   lēm ňyɛ́ɛ̱ lī   yá'asā ⁺ø.
And **INDF.AN** ever   **NEG.IRR** again see   **3INAN.OB** again   **NEG**.
"Nobody will ever see it again." (Rev 18:21, 1996)

Sɔ̄' kā'e ⁺ø.   "There's nobody there."
INDF.AN NEG.BE NEG.

M̀ pū yɛ́l sī'əla ⁺ø.   "I didn't say anything."
1SG NEG.IND say **INDF.INAN NEG**.

15.4 Interrogative

Animate		Inanimate	
*ànɔ́'ɔ̀n*ᵋ	"who?"	*bɔ̄*⁺	"what?"

Plurals with *nàm*ª may be used if a specifically plural answer is being sought.

The initial *à-* of *ànɔ́'ɔ̀n*ᵋ is Fixed-L and behaves like the Manner-Adverb prefix with regard to Liaison 8.2.2:

Nidib ayi' nwa, ya bɔɔd ye m bas anɔ'ɔnɛ?
Nīdɪb áyí n̆wà, yà bɔ́ɔ̀d yɛ́ m̀ bás ànɔ́'ɔnɛ̀ ⁺ø?
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)

15.5 Reciprocal

Tāaba⁺ "one another" appears as *tāab* clause-medially for some speakers.

Sʋ̀ŋɪmī‿ø tāaba.   "Help one another."
Help:**IMP 2PL.SUB** each.other.

Tì yúùg nē̄ tāaba.   "It's been a long time." KT
1PL delay with each.other.

Bà dɔ̀l nē̄ tāaba.   "They went together." (*dɔ̄l*ˡª⁄ "accompany")
3PL follow with each.other.

It occurs as an adjective in the meaning "fellow-"

ò tʋ̀m-tʋ̀m-tāaba   "His fellow-workers."

The stem also occurs as an always-bound *g*ª|*s*ᵋ Class noun in the same sense, seen after Imperfective Gerunds 13.1.1.4, and with nominal prefixes in *nìn-tāa*⁼ "co-wife" and *dàtāa*⁼ "enemy."

16 Quantifiers

16.1 Quantifiers: Overview

Formally, quantifiers resemble noun sg or pl forms, very frequently with Apocope Blocking 6.4; Numbers 16.2.1 are preceded by number prefixes.

Quantifiers can be classified as **count** or **mass**, 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:

	nīdıb bɛ́dʊgū	"a lot of people"
	nīdıb bábıgā	"many people"
	kù'ɵm bɛ́dʊgū	"a lot of water"
not	**kù'ɵm bábıgā*	*"many water"

Mass quantifiers are

bèdʊgū⁺ᐟ	"a lot"
pāmm SF *pāmnɛ́* LF	"a lot" (on the LF see 6.4)
fīıň⁼	"a little (liquid)"
bī'əlá⁺	"a little"
wūʊ⁼	"all"
wūsa⁺	"all"

Count quantifiers include the **numbers**, and also

bàbıgā⁺ᐟ	"many"
kàlıgā⁺ᐟ	"few"
fāaň⁼	"every"
zāň'a⁼	"every"
*kàm*ᵃ	"every"

*Kàm*ᵃ "every" occurs by itself as a quantifier and also before others:

sāŋá kám = sāŋá kám zāň'a	"all the time"

Quantifiers lack combining forms; when they appear as heads before post-determining pronouns the usual free form is used.

16.2 Number Words

16.2.1 Numbers: Overview

Number words function as quantifiers, and also have forms used as adverbs; for "one", there are also post-determiners meaning "first."

Many number words show Apocope Blocking 6.4.

In all uses, the numbers 2 to 9 begin with an inseparable **number prefix**. Forms with number prefixes are all Liaison Words 8.2.2. Although unprefixed forms are not available for comparison, the number prefixes are probably followed by 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 19.2.2 the old ᵃ|bᵃ Class agreement pronouns *ò bà* have been generalised for animate while the old *r*ᵉ|*a*⁺ Class singular pronoun *lì* has been adopted for inanimate gender. In Dagbani, where there has been a very similar change, the inanimate singular pronouns are similarly based on the equivalent of the *r*ᵉ|*a*⁺ Class, with the old plural pronoun *ŋa* 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 16.2.2 represents original *ŋa-.

Because of its origin from *ŋa-, t*he *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 *-ɩ* 8.2.2:

> *bīisá‿   àtáñ'*   "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*-:

> *Pὲɛdá‿   àlá*   ⁺*ø?*   "How many baskets?"
> Basket:**PL NUM:**how.many **CQ**?

> *nìŋɩ‿   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 bàtáň'	"we three"
yà bàyɔ́pɔ̀ẹ	"you seven"
bà bàyí	"they two"

The forms of the number words 2-9 used for counting <u>16.2.3</u> represent the old *m*^m Class agreement, in the "abstract" sense of *m*^m <u>9.1.1</u>:

ǹtáň'	"three"	(in counting)
ǹnāas	"four"	(in counting)
ǹnū	"five"	(in counting)

Compare Nawdm *mì-tâʔ* "three" *mì-ná:* "four" *mì-nûʔ* "five" etc in counting. When referring to a specific noun Nawdm numbers have a prefix agreeing with the noun class *nídbá bà-tâʔ* "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 <u>16.2.5</u>. It probably represents either an old *b*ɔ or *m*^m Class agreement.

àbùyí^+	"twice"
àbùtáň'^+	"three times"
àbùnāasí^+	"four times"
bùpīiga^+	"ten times"
nɔ̄ɔrím bùtáň'^+	"three times"

Numbers without prefixes show that, like all quantifiers, numbers are not subject to M Raising:

būʋg yīnní	"one goat"
kūgʋr yīnní	"one stone"
būʋs pīiga	"ten goats"

The noun, as here, is plural (except of course with *yīnní*^+) with the exception of units of measure which generally remain sg:

yɔ̄lʋgá àtáň'	"¢600 [cedis]"
	(*yɔ̄lʋg*ɔ/ "sack" for £100/¢200; Hausa *jàkaa*.)

16.2.2 Quantifiers

The numbers in their core rôle as quantifiers take the forms

1	*yīnní*⁺	10	*pīiga*⁺	100	*kɔ̀bɩgā*⁼
2	*àyí*⁺	20	*pīsí*⁺ [pʰisi]	200	*kɔ̀bɩsí*⁺ [kʰɔbɪsi]
3	*àtáñ'*⁺	30	*pīs táñ'*⁺	300	*kɔ̀bɩs táñ'*⁺
4	*ànāasí*⁺	40	*pīs nāasí*⁺	400	*kɔ̀bɩs nāasí*⁺
5	*ànū*⁺	50	*pīs nū*⁺	500	*kɔ̀bɩs nū*⁺
6	*àyúɵbʋ̀*⁺	60	*pīs yúɵbʋ̀*⁺	600	*kɔ̀bɩs yúɵbʋ̀*⁺
7	*àyɔ́pɔ̀e̞*⁺	70	*pīs yɔ́pɔ̀e̞*⁺	700	*kɔ̀bɩs yɔ́pɔ̀e̞*⁺
8	*àníi*⁼	80	*pīs níi*⁼	800	*kɔ̀bɩs níi*⁼
9	*àwāe̞*⁺	90	*pīs wāe̞*⁺	900	*kɔ̀bɩs wāe̞*⁺

The forms for 1, 4, 6, 8, 10, and 100 show Apocope Blocking; the forms for 20 and 200 are not Apocope Blocked but are combinations with the stem of *àyí*⁺.

kɔ̀bɩgā⁼ has LF like the SF, not **kɔ̀bɩgáa*, contrary to the usual rule for forms with Apocope Blocking.

"Thousand" is a regular *r*^ε|*a*⁺ Class noun, *tūsɩr*^{ε/}: *tūsá àtáñ'* "3000."

"Half" is *pū-súk*^a pl *pū-súgʋ̀s*^ε.

Other numbers are formed with *nɛ̄* "with, and":

kɔ̀bɩs táñ' nɛ̄ pīs yúɵbʋ̀ nɛ̄ nū   "three hundred and sixty-five"

11 to 19 have the special contracted forms

pīi nɛ̄ yīnní, pīi nɛ̄ yí, pīi nɛ̄ táñ' ... pīi nɛ̄ wāe̞   or alternatively
pīi nā yīnní, pīi nā yí, pīi nā táñ' ... pīi nā wāe̞

The clitic *à-* is omitted after *nɛ̄* "with", and sometimes also after focus *nɛ̄*^{+/}:

Lì à nɛ̄ nāasí. / Lì à nɛ́ ànāasí.   "They're four."

The forms *àyíŋā*^{+/} *àtáŋā*^{+/} mean "two, three exactly." If I have four children

M̀ mɔ́r bīisá‿ àtáñ'.   "I have three children."
1SG have child**:PL NUM:**three.   is true, though misleading

but   *M̀ mɔ́r bīisá àtáŋā.*   "I have exactly three children." is false.

These forms can also be used after *nɛ̄* "and", as in *pīi nɛ̄ yíŋā* "twelve exactly." They are exceptional in not permitting focus with the particle *nɛ̄⁺/* 33.1.2.2.

Yīnní⁺ can also be construed with a preceding noun cb:

	kūg-yínnì⁺	"one stone" (M Raising	8.4)
cf	*kūgʋr yīnní⁺*	"one stone" (no M Raising	19.9.1)

In Dagbani both "one" and "ten" can be used after a combining form, but Kusaal has only a few isolated forms like *dà-pīiga* "ten days".

After personal pronouns the number prefix is *bà-* instead of *à-* 16.2.1:

tì bàtáñ'	"we three"
yà bàyɔ́pɔ̀ę̣	"you seven"
bà bàyí	"they two"

16.2.3 Counting Forms

1 to 9 have different forms used in counting, lacking Apocope Blocking and using the number prefix *ǹ-* instead of *à-* 16.2.1. The *ǹ* is syllabic, and assimilates its position of articulation to the following consonant.

1	*yɛ̄óŋ* or *àdàkɔ́ñ'*	6	*ǹyúὲb*
2	*ǹyí*	7	*ǹpɔ̀ę̣* [tone sic]
3	*ǹtáñ'*	8	*ǹníi*
4	*ǹnāas*	9	*ǹwāę̣*
5	*ǹnū*		continuing *pīiga*, *pīi nɛ̄ yí* as with quantifiers

Àdàkɔ́ñ' can also be used as a quantifier:

náaf àdàkɔ́ñ'	"one cow"
būʋg àdàkɔ́ñ'	"one goat"

Lì   ká'   àdàkɔ́ñ'ɔ ⁺ø.   "It's not one."
3INAN NEG.BE NUM:one   **NEG**.

Referring to the numbers in the abstract, as in performing arithmetic, the quantifier forms are used, not the counting forms:

Àyí   námá‿ àyí   á nɛ̄ nāasí.
NUM:two **PL**   **NUM:**two **COP FOC** four.
"Two two's are four."

16.2.4 Adjectives and Ordinal Constructions

> *yīmmír*ᵉ   *yīmmá*⁺   *yīm-*   "single, alone"

e.g.   *bì-yīmmír*   "only child"
       wāb-yímmìr   "solitary elephant"

There are two words meaning "one of a pair."
*ňyàu̯k*ᵓ pl *ňyà'ad*ᵉ is only used for eyes:

> *nīf-ňyáu̯k*   "one eye"
> *bà-nīf-ňyáu̯k*   "one-eyed dog"

*yīu̯ŋ*ᵓ/ pl *yīná*⁺ is used for other normally paired body parts:

> *tòb-yīu̯ŋ*   "one ear"
> *bì-tòb-yīná*   "one-eared children"

The only single-word ordinal is

> *dɛ̄ɛŋ*ᵃ   *dɛ̄ɛňs*ᵉ   *dɛ̀ɛŋ-*   "first"
>   or *dɛ̄ɛmιs*ᵉ
>   or *dɛ̄ɛna*⁺

as in *sɔ̄b-dɛ́ɛ̀ŋ* "first census" (Lk 2:2, 1976.)
       The concept "first" can also be expressed by using *yīigá*⁺ "firstly" as a pre-
determiner:

> *yīigá kùm-vū̄'ʋgír*   "first resurrection" NT.

For other ordinals two constructions occur.
One is to use a periphrasis with *pàas*ᵉ or *pɛ̀'ɛs*ᵉ "add up to":

> *dàu̯-kànι pɛ̀'ɛsa‿ àyí   lā*
> man-**REL.SG** add.up.to **NUM:**two **ART**
> "the second man" ("man who has added up to two")

> *lìnι   pàasa‿ àtáň'   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:

àyí dāan lā   "the second one"
būʋgá àtáň' dāan lā   "the third goat"

Yīigá dāan may be used for "first."
In a story in "*Kusaal Solima ne Siilima*" ordinal forms used in counting "first, second, third ..." appear without Apocope Blocking:

kɔň' daan, ayi daan, ataň' daan, anaas daan, anu daan, ayuɵb daan, apɔe̯ daan, anii daan, awae̯ daan, piig daan

My informants use the ordinary quantifier forms here.

16.2.5 Adverbs

Multiplicatives (answering *àbʋ̀lá?* "how many-fold?") are expressed

yīmmʋ́[+]   "straight away, at once"
àbʋ̀yí[+]   "twice"
àbʋ̀táň'[+]   "three times"
àbʋ̀nāasí[+]   "four times"

and so on, with the same stems after the prefixes as for the quantifiers, up to

bʋ̀pīiga[+]   "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 *-ɩ* not *-a*; its attachment only to 2-9 is presumably therefore analogical.
Answers to *nɔ̄ɔrá àlá* "how many times?" have forms of the pattern

nɔ̄ɔr yīnní[+]   "once"
nɔ̄ɔrá àtáň'[+]   "three times"
or   *nɔ̄ɔrím bʋ̀táň'*[+]   "three times" NT

This *nɔ̄ɔr* is not "mouth" (= Mooré *nóorè*) but corresponds to Mooré *náooré* "times", homophonous with Mooré *náooré* "leg"; cf Toende Kusaal *nɔ̄'ɔt* = Agolle *nɔ́bɩr* "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 *nɔ́'ɔt* (tone *sic*) in the sense "*fois*" and even has *nɔba ayi* beside *nɔ'ɔt ayi* "*deux fois*." Agolle *nɔ̄ɔr* "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	*yīn yīn*	10	*pīi pîig*	100	*kɔ̀bıg kɔ́bìg*
2	*àyí yí*	20	*pīsí pīsí*	200	*kɔ̀bısí kɔ́bısí* or *kɔ̀bıs yí yí*
3	*àtáǹ' táǹ'*	30	*pīs táǹ' táǹ'*	300	*kɔ̀bıs táǹ' táǹ'*
4	*ànāas nāas*	40	*pīs nāas nāas*		*etc*
5	*ànū nū*	50	*pīs nū nū*	1000	*tūsır túsìr*
6	*àyúèb yúèb*	60	*pīs yúèb yúèb*		
7	*àyɔ́pɔ̀ȩ pɔ́ȩ*	70	*pīs yɔ́pɔ̀ȩ pɔ́ȩ*		
8	*àníi níi*	80	*pīs níi níi*		
9	*àwāȩ wāȩ*	90	*pīs wāȩ wāȩ*		

Intermediate numbers are made by replacing the last part of the usual quantifier phrase with a distributive:

pīs nū nɛ̄ nāas nāas   "by fifty-fours"

The distributives can have a preceding NP as a determiner:

dābá àyɔ́pɔ̀ȩ pɔ́ȩ   "weekly" ("by sevens of days")

16.3 Proquantifiers

Quantifiers have corresponding proforms; the *à-* is the *number* prefix, and induces preceding LF-final *-a* not *-ı* 8.2.2; contrast the Proadverbs 17.1.

Demonstrative	Indefinite	Interrogative
àlá+	*sī'əm*ᵐ	*àlá+*
"so much/many"	"some amount"	"how much/many?"

17 Adverbs

Adverbs can be broadly categorised as adverbs of time, place or manner.

Many adverbs are formally identical to nouns, and the question may arise in such cases as to whether they should be regarded as simply adverbial uses of words which are in fact primarily nouns; the matter is rendered more complicated by the fact that AdvPs can be arguments of verbs in some circumstances 20.5, and that adverbs other than proforms may also appear as modifiers and determiners within NPs 19.7.2.3 19.8.2.3.

Unequivocal adverbs include the proadverbs listed in 17.1, along with various types which do not conform to ordinary noun structure.

Among time adverbs, these include

zīná[+]	"today"
sù'ɵs[a]	"yesterday"
dūnná[+]	"this year"

Various time words which resemble nouns in form nevertheless are distinguishable morphologically from nouns be the fact that they lack cb or pl forms, and syntactically in that they cannot be referred to by pronouns; these include

bɛ̄og[ɔ]	"tomorrow"

The word

dāar[ɛ]	"day after tomorrow/day before yesterday"

behaves similarly in this sense, but is homophonous with *dāar*[ɛ] "day", which is a noun. Other words usable as time adverbs are also capable of being employed as full-fledged nouns 35.9:

yʊ́'ʋŋ[ɔ]	"night"
nīntāŋ[a/]	"heat of the day, early afternoon"
úun[nɛ]	"dry season"

On the whole, such nouns are likely to appear with dependents of their own when used in time AdvPs, and words of this type can be treated as special instances of the general principle that any NP with reference to a time may be used as a time AdvP. Categorisation as true time adverbs can be restricted to those which (like manner adverbs) do not accept any dependents.

Locative adverbs comprise proforms along with Kusaasi place names; other locative AdvPs use the locative particle *nī*[+]/~ *n*ᵉ 20.3. 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 20.6, most notably *zūg*ᵊ/ "head" in the sense "on, onto, owing to." Although the origin of such postpositions is transparent, synchronically the postpostions are separate lexical items from the homophonous nouns, and the process of zero-derivation that created them is no longer active.

Manner adverbs again include proforms; besides these there are several distinctive formations. Although various NP types can be used as manner AdvPs, as with time adverbs, true manner-adverbs cannot take any dependents.

Several adjective stems form manner-adverbs with an ending **-ga**[+], i.e *g*ᵃ|*s*ᵉ Class sg along with Apocope Blocking 6.4:

sʋ̀ŋā[+]/	"well; very much"
mā'asígā[+]/	"coolly"
tūʋlígā[+]/	"hotly"
gīŋa[+]	"shortly"
būgʋsígā[+]/	"softly"
sàalíŋā[+]/	"smoothly"
ňyɛ̀ɛsíŋā[+]/	"self-confidently"

Cf also *yīigá*[+] "firstly" see 16.2.4.

Other manner-adverbs with Apocope Blocking include *pāalʋ́*[+] "openly", and

*ňyāe*ⁿᵉ/	"brightly, clearly"

Even prior to 2016, the NT always writes the SF of *ňyāe*ⁿᵉ/ as *nyain*. This is probably simply a traditional orthographic anomaly; if it represents an actual variant, it might be a form containing the locative particle: *ňyāen*ᵉ/, but not only my informants but also the audio version of the NT always have [j̃ã́ĩ]; cf Toende *yã́ɩí id* (though *ɩ* actually is the usual Toende equivalent of Agolle Locative *n*ᵉ.) The LF *ňyāenɛ́* is an instance of the addition of *-nɛ* 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 *àe̯ň*ᵃ "be something" and as an adjunct:

Wina'am a su'um nyain.
Wínà'am áň   sʋ́m   ňyāe.
God   **COP** good:**ABSTR** brightly.
"God is light." (1 Jn 1:5, 1996)

... kɛ ka ti lieb nyain.
... kɛ́   kà   tì   líə̀b   ňyāe.
... cause and **1PL** become brightly.
"... make us light." (1 Jn 1:7)

... na nye lini nie nyain pamm
... nà   ňyɛ̄ línì   nìe   ňyāe   pāmm
... **IRR** see   **REL.INAN** appear brightly much
"...will see a great light" ["what appears very brightly"] (Mt 4:16, 1976)

The **manner-adverb prefix** *à-* appears before some nominal stems which are also followed by Apocope Blocking 20.4:

àmɛ̄ŋá+	"truly"
àsīda+	"truly"
àníŋà+	"promptly"

The same prefix is also seen in a number of proadverbs and in the locative *àgɔ́l*$^{|ɛ}$ "upwards" 20.3. 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.

A number of manner-adverbs are formed by **reduplication of roots**.

nà'anā+/	"easily"
tɔ̀'ɔtɔ̄+/	"straight away" (Mooré *taotao id*)
kɔ̄ň'ɔkɔ̄+	"solely, by oneself"

Conversion of abstract non-count nouns can produce Manner adverbs; so particularly with *m*^{m} Class abstracts. Some Adverbial Phrases of manner are formed by conversion of abstract nouns:

pāalím^m	"recently" (*pāalíg*^{a} "new")

When noun forms are used as manner-adverbs in this way, they are like basic manner-adverbs in not accepting dependents. It this seems reasonable to regard this process as word-level zero-derivation.

Even concrete count nouns employed in an abstract generic sense can be used adverbially 20.4 but this is a syntactic rather than morphological process.

17.1 Proadverbs

Adverbs have corresponding proforms.

	Demonstrative		Indefinite		Interrogative	
Place	*kpɛ̄*[+]	"here"	*zìň'-sī'a*[+]		*yáa ní*[+]	"where?"
	kpɛ̄lá[+]	"there"	"somewhere"		*yáa*	"whither
	àní[+]	"there"				/whence?"
	ànínā[+/]	"there"				
Time	*nānná*[+]	"now"	*sān-sí'a*[+]		*sān-kán*[ɛ]	"when?"
	nānná-nā[+/]	"now"	"sometime"		*būn-dáàr*[ɛ]	"which day?"
	sān-kán[ɛ]	"then"			*bɔ̀-wìn*[nɛ]	"what time
						of day?"
Manner	*àňwá*[+]	"like this"	*sī'əm*[m]		*wɛ̄lá*[+]	"how?"
	àwá nā[+/]	"like this"	"somehow"			
	àlá[+]	"like that"				

The indefinites are used in Relative Clauses 31.2.1.

The *à-* of the Manner forms is the manner-adverb prefix and is preceded by the LF-final vowel *-ι*, while the *à-* of proquantifiers is the *number* prefix, and induces preceding LF-final *-a* not *-ι* 8.2.2 16.3.

Proforms expressing reason are formed with the postposition *zūg*[ɔ/] 20.6:
àlá zùg[ɔ] "because of that", *bɔ̄zúgɔ̀?* "why?" (cf *bɔ̄ zúgɔ̄* "because" 27.1.3.)

18 Unanalysable Complex Stems

Numerous words in Kusaal (including the very name of the language, *Kūsáàlᵉ*) have stems which are more complex structurally than the ordinary unprefixed type but are simply unanalysable units. Tonally, they most often resemble forms with nominal 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

*Kūsáàs*ᵉ	"Kusaasi"	
*Ňwāmpūrɪs*ᵉ/	"Mamprussi"	
*Kʋ̀tām*ᵐᵃ/	WK's clan	
gbáñyà'a⁼	"lazy person" *gonya'am* "idleness" 1976 NT	
	cf Dagbani *gbinyaɣli* "laziness"	

18.1 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*⁺ *àrazàk*ᵃ below 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

dāká⁺	"box"	← *àdakàa* (← Portuguese *arca*)
gādʋ⁺	"bed"	← *gadoo*
kɛ̀ɛkɛ̀⁺	"bicycle"	← *kèekè*
bákpàe̯⁺	"week"	← *bakwài* (Hausa "seven")

Identifiable verb loanwords are much less common. They are subject to the usual constraints on possible Kusaal verb shapes 13.2:

*dàam*ᵐ	"disturb, trouble"	← *dàamaa*
*bùg*ᵉ	"get drunk"	← *bùgu;* a Hausa idiom: literally
		"get thoroughly beaten"

Several function words are loans, most probably from Hausa:

àsɛ́ɛ	"except"	← *sai*
kʊ̄ʊ	"or"	← *koo*
báa	"not a..." <u>32.4</u>	← *bâa*

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 *ħatta:* (Heath 2005); *lɔ̀mbɔ̀'ɔgᵓ* "garden", Hausa *làmbuu*, Humburi Senni *làmbò* "enclosed vegetable garden"; *làbɪ*[ya] "be crouching, hiding behind something", Hausa *laɓèe id*, Kikara Songhay *lá:bú* "hide behind or under something." With Kusaal *làbɪ*[ya] and Hausa *laɓèe*, 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 <u>13.2.1.1</u>.

However, 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:

láafɪya[+]	"health"	Hausa	*laafiyàa*	*id*
		Mooré	*làafí*	*id*
		Kikara Songhay	*ʔàlà:fíyà*	*id*
		Arabic	العافية *ʔal-ʕa:fiya(tu)*	
			"(the) wellness"	

àrazàk[a]	"riches"	Hausa	*arzìkii*	*id*
		Mooré	*àrzɛ́ká*	*id*
		Kikara Songhay	*ʔárzúkù*	"good luck"
		Arabic	الرزق *ʔar-rizq(u)*	
			"(the) livelihood"	
		cf plural	ارزاق *ʔarza:q(un)*	

Tàláatà[+]	"Tuesday"	Hausa	*Tàlaatàa*	
		Arabic	الثلاثاء *ʔaθ-θala:θa:ʔ(i)*	

àrazánà⁺	"heaven, sky"		
	Hausa	*àljannàa*	"heaven, paradise"
	Mooré	*àrzãnà*	*id*
	Kikara Songhay	*ʔàljánnà*	*id*
	Arabic	الجنة *ʔal-ɟanna(tu)*	
		"(the) garden, paradise"	

yàddā⁺ᐟ	"assent"	Hausa	*yàrda*	(verb) "consent"
yàdā WK		Gao Songhay	*yarda/yadda*	*id*
		Kikara Songhay	*yárrɛ̀*	*id*
		probably Arabic	يرضى *yardˤa:*	3sg m ipfv of
			رضى *radˤiy(a)*	"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 *màli̯āk*ᵃᐟ "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 *màlɛ́kà* and Toende *màlɛ́k*; the word is usually found in Christian materials, which would be consistent with this pathway (see below.) The forms clearly do not match Hausa *màlaaꞌikàa*, which is from the Arabic plural ملائكة *mala:ʔika(tu)*. A similar case in the realm of religion is *Sūtáanà*⁺ "Satan", matching Mooré *Sʊtãana* rather than Hausa *shàidân*, which is a learned borrowing of the Arabic شيطان *ʃaytˤa: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 *bọ̀rọ̀kìnní* "gentleman"; cf Kikara Songhay *bòrkĭn* "noble (caste.)" The word *bàu̯ŋʊ* is used only in *kpɛ̀ñꞌ bàu̯ŋʊ* "get circumcised" (*kpɛ̀ñꞌ*⁺ "enter"), Mooré *kẽ bãongó id*; cf Kikara Songhay *bàŋgù* "pool, spring", *à húró bàŋgù* "he entered the pool", i.e. "he was circumcised" (Trimingham 1959.)

Loans from other **Western Oti-Volta languages** are difficult to distinguish from cognates; the vast majority of similar words are due to common inheritance and not borrowing. Kusaal speakers themselves very often ascribe forms which are not part of their own usage to **Mooré** influence.

One word revealed as a loan by its phonology is *Wínnàꞌam*ᵐ (WK) *Wínàꞌam*ᵐ (always *Winaꞌam* NT/KB) "God." It is common in Christian materials; the Creator of traditional religion often appears simply as *Wīn*ⁿᵋᐟ in proverbs etc. *Wínnàꞌam* looks analysable as a compound of *wīn*ⁿᵋᐟ "god" and the stem of *nàꞌab*ᵃ "chief" or *nāꞌam*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 _Wĕnnàám_ 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 _Wīnā'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:g̚ʲɪd] by my informants; preservation of _g_ in this position <u>6.3.1</u> is almost completely isolated within Agolle Kusaal; apart from the corresponding gerund _faangir_ "salvation", the only other case in my data is the gerund _zīˀəg_^{a} of _zìˀe_^{ya} "be standing" used by DK KT instead of KED _zīˀa_$^+$ <u>12.1.1.2</u>.) The expected agent noun from _fāeň_$^{+/}$ "save" is _fāaňd_$^{a/}$, presumably avoided as identical to the agent noun of _fāň_$^+$ "rob, snatch", found in NT/KB as _faand_ "robber." WK has the identical agent noun _fāaňd_$^{a/}$ 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 _fãagdá_ "_sauveur_", or from Toende Kusaal, where loss of *_g_ is consistent word-finally after _all_ long vowels (_bíi_ "child" = _bīig_^{a}, _bʋ̄ʋ̄_ "goat" = _bʋ̄ʋg_^{a}), but optional elsewhere, with variation between speakers (Niggli, "La phonologie du kusaal"):

páa	"_arriver_" (Agolle _pāe_$^+$ "reach")
Õ bʋ paage.	"_Il n'est pas arrivé._" (Agolle _Ò pū pāée._)

Niggli's "Dictionnaire" has both _fãagıt_ and _fãat_ for "_sauveur_", with _fãat_ also glossed as "_voleur, brigand._"

A more everyday example is WK's _kīibʋ́_$^+$ cb _kīib-_ "soap." Written sources have _ki'ib_, probably _kīˀɩb_$^{ɔ/}$ = Toende _kíˀɩp_. The length and quality of the vowels clearly identify the source as **Mampruli** _kyiibu_: contrast Farefare _kíˀíbɔ́_, Dagbani _chibo_.

Other words with singulars ending in _-ɩ_$^+$ or _-ʋ_$^+$ <u>9.6</u> like _kābɩrí_$^+$ "permission for entry" and _sūgʋrʋ́_$^+$ "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

_kɔ̄dʋ́_$^+$	"banana"	← _kwadu_
sāafɩ$^+$(?tones)	"lock, key"	← _safẽ_ "key" (← Portuguese _chave_)
būrɩyá$^+$	"Christmas"	← _bronya_ (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:

*àlɔ́pìr*ᵉ	"aeroplane"	? back-formation from [alɔpɪɭɪn] taken as locative *àlɔ́pìrī-n*ᵉ/
du̯'átà⁺	"doctor"	(cf Dagbani *dɔ́ɣtɛ́ id*)
tɔ́klàe⁺	"torch"	← "torchlight"
*lɔ́r*ᵉ	"car, lorry"	(often borrowed even in Francophone Africa: cf Kabiyè *lɔɔríɣɛ*, Mooré *lórè*)

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: *lɔ́yà* "cars", not **lɔ̄yá* 9.7.

Several loanwords of English origin have probably been transmitted via Hausa:

kɔ́tʋ̀⁺	"court"	Hausa *kootù*
*sɔ́gi̯à*ᵃ	"soldier"	Hausa *soojà*
*tɛ́ɛbʋ̀l*ᵉ	"table"	Hausa *teebùr*
wādá⁺	"law"	Hausa *oodà* (← English "order") sg *wādɪr*ᵉ/ cb *wād-* created by back-formation

One **French** loan in Agolle Kusaal is *làmpɔ̄* (i.e. *l'impôt*) "tax", as in *làmpɔ̄-dí'ès*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 *kàsɛ̄t*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

19 Noun Phrases

19.1 Noun Phrases: Overview

A Noun Phrase has a noun, pronoun or quantifier as head. If present, the **article** *lā*$^{+/}$ occurs last in a NP 19.3. (For the sole exception, see 23.7.)

Dependent Nominal Phrases may precede the head, possibly recursively, as **Pre-determiners**. The meaning depends on the nature of the head: some heads have specialised rôles 19.9.3; with Quantifiers or pronoun heads the sense is **partitive** 19.9.1; pre-determiners of gerunds and similar nouns are subjects 19.9.2; pre-determiners of all other heads are **possessors** 19.7.3.

A Nominal Phrase may be a Relative Clause 31.2. No dependents may occur with a Relative Clause apart from the article or a pre-determiner. Nominal Phrases may be formed by **Coordination** 19.4 or by **Apposition** 19.5.

As is characteristic of Oti-Volta, **compounding** 19.6 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 19.6.1. 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.

19.2 Noun Phrase Categories

19.2.1 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 28.2.3.) However, in noun + adjective and noun + post-determining pronoun compounds, it is the dependent which inflects to show the number of the head noun cb 19.8.1.

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:

zɔ̄ɔgꞬ	*zɔ̄ɔsᵋ*		"race"
bū'əsʊ́gꞬ	*bū'əsá⁺*	*bū'əs-*	"question"
zàaǎsʊ́ŋꞬ	*zàaǎsímà⁺*	*zàaǎsʊ́ŋ-*	"dream"

Some abstract count nouns are formally plural but construed as singular <u>9.5</u>

dì'əma⁺	"festival"
pi̯àǎ'adᵋ	"word, language"
tɛ̄ǎ'ɛsá⁺	"thought"

Cf *tɛ̄ǎ'ɛsá yīnní* "one thought" (Acts 4:32).

Typical underived mass nouns belong to the *bꞬ* and *mᵐ* Noun Classes, which do not have paired sg/pl suffixes <u>9.1</u>, but some are formally plural <u>9.5</u>, and gerunds of 3-mora stem verbs regularly show sg *rᵋ* or *gꞬ* suffixes <u>12.1.1.1</u>.

The count/mass distinction is significant in the choice of quantifiers <u>16.1</u> and when plurals are formed with *nàm*ᵃ <u>9.4</u>, and it affects the meaning of constructions with preceding NPs as dependents <u>19.7</u>.

Mass nouns can be used in count senses <u>9.4</u> (as in English):

dāam nám	"beers"

Count nouns can be used in mass senses, where number distinctions are irrelevant <u>19.7.2.2</u>:

	fūug dɔ́ɔ̀g	"tent" (cloth hut)
cf	*fūug*	"item of clothing, shirt"
	dàad bʊ́n-nám	"wooden things"
cf	*dàad*	"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 <u>20.4</u>:

M̀	*kɛ́ŋ*	*nɔ̄bá.*	"I went on foot." SB
1SG go		leg:**PL**.	WK corrected this to
			M̀ kɛ́ŋ nɛ̄ nɔ̄bá, (*nɛ̄* "with")

19.2.2 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

Ò à nɛ̄ náaf.   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.*
Bʋ̀ŋ   yá' bɔ̀ɔd yɛ́   ò   lūbʋ́‿   f,
Donkey**:SG** if   want that **3AN** throw.off **2SG.OB**,
fù pʋ̄   ňyɛ̄tí‿   ò   tʋ̀bāa ⁺ø.
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 zulʋŋ na paae **o** salibir.*
Kà wìəf   yá' sīgí‿   lì   nī, lì   zùlʋŋ ná pāe   ò   sàlɩbɩr.
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.
Tìɩg   wélà   bìgɩsɩd   ɔ́n   àň sɪ̄'əm.
Tree**:SG** fruit**:PL** show**:DIPF 3AN:COMP 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.
Tìɩg   wélà   bìgɩsɩd   lín   àň tí-sɪ̄'a.
Tree**:SG** fruit**:PL** show**:IMPF 3INAN:COMP COP** tree-**INDF.INAN**.
"The fruit of the tree shows what tree it is." (Mt 12:33, 1996)

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' niŋgbiŋ nii, lin ku nyaŋin keen ka o ka' niŋgbiŋ nii.

Nɔ́b�ìr yá' yèlī-n   yē, ɔ́n   pū   áň nú'ùg   lā zúg,
Leg**:SG** if   say-**REM** that **3AN:COMP NEG.IND COP** hand**:SG ART** upon,

ò   kā' nín-gbīŋ   níɩ ⁺ø̄, līn   kú   ňyāŋɩ-n‿   ø̄
3AN NEG.BE body-skin**:SG LOC NEG**, **DEM.INAN NEG.IRR** accomplish-**REM SER**

kɛ̄ɛ-n   kà ò kā' nín-gbīŋ   níɩ ⁺ø̄.
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.)

Babies may be counted as animate or inanimate gender:

Ò/Lì   à   nē̄ bí-līa.   "He/she/it is a baby."
3AN/3INAN COP FOC child-baby**:SG**.

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*ᵃ Class has exclusively human reference. Only human-reference nouns can be used as modifiers after a head cb like adjectives [19.8.1.5](#); probably only human-reference heads can be used with appositional Relative Clauses [31.2.3](#). Cf also *nīn-* (human) and *būn-* (non-human) as "dummy" cbs with following adjectives [19.9.3](#).

There has been a change over the past decades in the **alignment of gender and number**. An earlier opposition of an animate gender which distinguished singular from plural over against an inanimate gender which used the same forms for both numbers (resembling that described for modern Dagbani by Olawsky) has been replaced by a system which distinguishes animate/inanimate in the singular but has no gender distinction in the plural. In older sources inanimate pronoun forms are used indifferently for sg or pl, occasionally with *nàm*ᵃ plurals to avoid ambiguity. Although the 1976 NT uses the independent inanimate gender demonstrative pronoun *nē̄'*⁺/ as sg and pl, with *nē̄'-nám*ᵃ also as a plural form, it already consistently uses the animate plurals *bàmmā*⁺/ *bàn*ᵋ of the *dependent* pronouns for inanimate, and my informants use all animate plural forms freely for both genders:

Bà   à   nɛ̄   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,   ɔ̄n   sáň'àm nɛ̄.
Eye-**DEM.DEI.SG**, **3AN.CNTR** spoil   **FOC**.
"This eye, it's spoilt." KT

M̀   pū   ňyɛ̄·ó-o   ⁺ø.   "I can't find it [a stethoscope]" (Overheard)
1SG NEG.IND see-**3AN.OB NEG**.

sālɩma lá'àd   nɛ́   ò   būtɩɩs   "gold stuff and (gold) cups" WK
gold   item:**PL** with **3AN** cup:**PL**

Speakers correct the gender to inanimate if their attention is drawn 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 *àẹň*[a] "be something":

Li anɛ Zugsɔb la.   "It is the Lord." (Jn 21:7)
Lì   à   nɛ̄   Zūg-sɔ́b   lā.
3INAN COP FOC head-one:**SG ART**.

19.2.3 Person

Person is a category confined to personal pronouns. The Verbal Predicator shows no agreement with any argument 22.1 (with a marginal exception for some speakers with plural commands 28.2.3.) 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' bɔ̀ɔd yɛ́   ò   lūbʋ́‿   f,
Donkey:**SG** if   want that **3AN** throw.off **2SG.OB**,
fù   pū   ňyɛ̄tí‿   ò   tùbāa ⁺ø.
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 yɔ̀ɔdī‿ f   sʊ́ŋàa   ⁺ø?*
> **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 the the object can be construed as the grammatical subject in a Serial VP construction 26.1, e.g.

> *Diib wʊsa nari ba di.*   "All foods may be eaten." (Rom 14:20)
> *Dīɩb wōsa nárì‿ø   bà dí.*
> Food all   must **SER 3PL** eat.

There are formal means of distinguishing different third persons by the use of pronoun ellipsis 27.1.5.2 and logophoric use of the free pronouns 29.3.2.

19.3 The Article *lā*⁺/

The two words *lā*⁺/ and *ňwà*⁺ presumably originated as corresponding deictics "that" and "this." Although *ňwà* retains this sense, *lā*⁺/ in the great majority of its occurrences is a definite article. It retains a deictic sense, in opposition to *ňwà*⁺, in the Non-verbal Predicators *n lā*, *n ňwà* 25 and after demonstratives 15.2.

Unlike *lā*⁺/, *ňwà*⁺ can stand alone as a NP:

> *Ňwà á   nɛ̄   bīig.*   "This is a child." WK; tones *sic*.
> This **COP FOC** child:**SG**.

Both *lā*⁺/ and *ňwà*⁺ 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 *ǹ*-Clause, when it may follow the article attached to the clause 23.7.

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:

> *Wìnnɩg 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"
Bɔ̀k	"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 19.7.2.2):

Nɔŋilim pʋ naada.   "Love does not come to an end." (1 Cor 13:8)
Nɔ̀ŋιlím pū   nāadá   +ø.
Love   **NEG.IND** finish**:DIPF NEG**.

Lā+/ is not used in vocatives:

Bīiga   +ø!   "Child!"
Child**:SG VOC**!

This contrasts with *ňwà+*, which is common in vocatives 28.2.4:

Bīis ňwá!   "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

M̀   bīig   kā'e   +ø.   "I've no child" WK
1SG child**:SG NEG.BE NEG**.

and with the complement of *àe̯ň*[a] "be something" when used ascriptively 24.2:

Ò   à   nɛ̄   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 33.4:

Dau da be mori o biribing
Dāu̯   dá bɛ̀‿ ø   mɔ̄rí‿ ò   bī-díbìŋ
Man:**SG TNS EXIST SER** have   **3AN** child-boy:**SG**
"Once there was a man who had a son ..." KSS p35

Anina ka o nyɛ dau ka o yʊ'ʊr buon Aneas.
Àníná   kà   ò   ňyɛ̄ dáu̯   kà   ò   yʊ̄'ʊr   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:

Tʊmtʊm pʊ gat o zugdaana.
*Tùm-tūm   pʊ̄   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.
Tììg   wɛ́làa‿ ø bìgɪsɪd   lín   àň tí-sɪ̄'a.
Tree:**SG** fruit:**PL SER** show:**IMPF 3INAN:COMP 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 Verbal Predicator
with the particle *nɛ̄*[+/] in its aspectual sense [33.1.2.3].
    A possessive pre-determining NP ending in *lā*[+/] makes the following head
definite, and the head does not itself take the article:

du̯'átà lā bîig   "the doctor's child"
  not **du̯'átà lā bîig lā*

Pronouns and personal names as possessive pre-determiners do *not* have this
effect; only pre-determiners *with the article,* and demonstrative pronouns [15.2],
automatically make their NPs definite:

Wínà'am máli̯āk   "an angel of God"
Wínà'am máli̯āk lā   "the angel of God"

      m̀ bīig   "my child" (at first mention)

      m̀ bīig lā   "my child" (previously mentioned)

In the passage

    *Pu'a sɔ' da bɛ mɔr **o bipuŋ** ka kikirig dɔl o. Ka o wʊm Yesu yɛla, ka keŋ*
    *igin o tuon. Ka sɔs Yesu ye o kadim kikirig la yis **o biig la** ni.*
    Pʋ̠'à-sɔ̄'   *dá bɛ̀‿ ø mɔ́r ò bī-pʋ́ŋ*   *kà kìkīrɪg*
    Woman-**INDF.AN TNS EXIST SER** have **3AN** child-girl:**SG** and fairy:**SG**
    dɔ̄ll·ó‿ ø.   *Kà ò wúm Yesu yɛ́là, kà kɛ̄ŋ‿ ø ígìn*
    follow **3AN.OB**. And **3AN** hear Jesus about, and go   **SER** kneel.down
    ò tùɵn.   *Kà sɔ́s Yesu yɛ́ ò kàdɪm*   *kíkīrɪg lā‿ ø yís*
    3AN in.front. And beg Jesus that **3AN** drive.out:**IMP** fairy:**SG ART SER** 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-pʋ́ŋ* "her daughter" on first introduction, but does
occur in *ò bīig lā* "her child" after the reference is established.
    Compare

    M̀ bīig kā'e ⁺ø.   "I've no child" WK
    1SG child:**SG NEG.BE NEG**.

    M̀ 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 bɛ mɔr o bipuŋ
    Pʋ̠'à-sɔ̄'   *dá bɛ̀‿ ø mɔ́r ò bī-pʋ́ŋ*
    Woman-**INDF.AN TNS EXIST SER** have **3AN** child-girl:**SG**
    "There was a woman who had a [literally "her"] daughter..." (Mk 7:25)

    Dau da be mori o biribing
    Dāʋ̠   *dá bɛ̀‿ ø mɔ̄rí‿ ò bī-díbìŋ*
    Man:**SG TNS EXIST SER** 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 *yɛ̄lá*⁺ "about" of as a pre-modifier in NPs even when it has a definite pre-determiner itself 19.7.2.3, and the fact that postpositions (including the null allomorph of the locative marker 20.3) may function for focus purposes as pragmatically non-recoverable despite following a definite pre-determiner 33.1.2.4.

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 *nɛ̄* which follows complements of comparisons 21.1 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 15.3.

Nā'-síəbà   ɔ́ňbìd   nɛ̄ mɔ̄ɔd.
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:

dṳ'átà   lā bí-sɔ̄'   "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 bɛ
Farisee   dím   nìd   yīnní dà bɛ̀ ...
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‿ àtáň'   n   dá bɛ̀.
Man:**PL NUM:**three **SER TNS EXIST**

19.4 Coordination

Coordination is characteristically a feature of NPs, but also occurs with AdvPs, with the exception of those headed by manner adverbs.

The coordinating particles for "or" are *bɛ̄ɛ* or the Hausa loanword *kūʋ*. Here the two words are synonymous; the only place where they consistently have different senses is in the formation of polar questions 28.2.2. 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   kūʋ dāu̯   lā   kūʋ bà wūsa*
> child:**SG ART** or   man:**SG ART** or   **3PL** all
> "The man, or the child, or both" WK

The particle for "and" for Nominal Phrases is *nɛ̄*. This *nɛ̄* is fundamentally the same word as the preposition "with" 21.1; the conjunctions *bɛ̄ɛ* and *kūʋ* can be used in a parallel way, but the categories of (true) Conjunction and Preposition could probably in any case be conflated 27.1.3. *Nɛ̄* links only nominal words and phrases, and never clauses unless they are first nominalised, so it is not possible to merge Conjunctions-Prepositions with Clause Linker Particles (*kà yɛ̄*.)

Consistent with this analysis of *nɛ̄* "and", it is not possible to omit coordinating particles in a series of three or more items, or to use *nɛ̄* to join two words with the same referent:

> *À-Wīn nɛ́ À-Būgʋr nɛ́ À-Nà'ab*   "Awini, Abugri and Anaba"
> *du̯'átà nɛ̄ ná'àb*   "a doctor and a chief" (necessarily two people)

Coordinated dependents are not permitted within compounds:

> **[bɛ̄ŋíd nɛ̄ kī] kúès*   not possible for "seller of *bɛ̄ŋíd nɛ̄ kī*"
>   (beanleaf-and-millet, a conceptual unity like
>   "fish and chips", "lox and bagels")

They are permitted when not compounded:

> *o nya'andɔlib pii nɛ yi*   "his twelve disciples" (Mt 26:20)
> *ò   ňyà'an-dɔ̀llıb   pīi nɛ̄ yí*
> **3AN** after-follower:**PL** ten with two

> *du̯'átà   nɛ̄   ná'àb lā lɔ́yà*   "Doctor's and the chief's cars"
> doctor:**SG** with chief:**SG ART** car:**PL**

sālıma nɛ̄   ānzúrıfà 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 27.1.5.1):

[*dʊ̠'átà nɛ̄ ná'àb lā*] *lɔ́yà*   "the cars of [Doctor-and-the-chief]"
[*dʊ̠'átà lɔ́yà*] *nɛ̄* [*ná'àb lā lɔ́yà*]   "[Doctor's cars] and [the chief's cars]"
[*sālıma nɛ̄ ānzúrıfà*] *lá'àd*   "[gold-and-silver] goods"
[*sālıma lá'àd*] *nɛ̄* [*ānzúrıfà lá'àd*]   "[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

ānzúrıfà nɛ̄   sālıma 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 *nɛ̄* cannot join two NPs with the same reference.

*ānzúrıfà lá'- nɛ̄ sālıma lá'-māan
(impossible)
ānzúrıfà lá'-māan nɛ̄ sālıma lá'-māan
(necessarily two different people)

Coordinated heads may not share articles, determiners or cb pre-modifiers. Both articles are necessary in:

pʊ̠'ā   lā nɛ̄ dāʊ̠   lā   "the woman and the man"
woman**:SG ART** with man**:SG ART**

Both instances of *m̀* "my" are needed in

m ba'abiis nɛ m saamnama
m̀ bā'-bîis   nɛ́   m̀ sàam-nàmā [+]ø
1SG father-child**:PL** with **1SG** father**-PL**   **VOC**
"my siblings and [my] fathers!" (Acts 7:2)

Yīigá⁺ "firstly" 19.7.3 is an exception:

yiiga saŋgbauŋ nɛ teŋgbauŋ nɛ atɛuk
yīigá   sàŋ-gbàṷŋ   nɛ̄   tɛ́ŋ-gbàṷŋ   nɛ́   àtìṷk
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 nyɛ saŋgbauŋ nɛ teŋgbaung paal.
Kà   m̀   ňyɛ̄ sáŋ-gbàṷŋ-   nɛ̄   tɛ́ŋ-gbàṷŋ-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 sɔ́lιmà   nɛ̄   síílímà   "Kusaasi stories and proverbs"
Kusaal story:**PL** with proverb:**PL**

Kūsáàs   kúèb   nɛ̄   yīr   "Kusaasi agriculture and housing"
Kusaasi:**PL** hoeing with house:**SG**

sālιma bútìιs nɛ̄   díιsímà   "gold cups and spoons"
gold   cup:**PL** with spoon:**PL**   ("all of them gold", KT)

However, KT WK both agreed that

sālιma lá'àd nɛ̄ būtιιs

must mean "gold goods and [not gold] cups", WK offering the correction

sālιma lá'àd   nɛ́   ò   būtιιs   "gold goods and (gold) cups" WK
gold   item:**PL** with **3AN** cup:**PL**

where *ò* refers to *sālιma*. (See 19.2.2 on the unexpected gender of the pronoun.) The difference from *sālιma bútìιs nɛ̄ díιsímà* (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 *sālιma bútìιs nɛ̄* [*sālιma*] *díιsímà* "gold cups and [gold] spoons" (I am grateful to Tony Naden for this suggestion.)

19.5 Apposition

For apposition in Locative AdvPs see 20.3.

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   yɛ́   fù   dí   fù   bā'-bîg   pu̯'á   Herodiasɛ ⁺ø.
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.
... ø   lὲbɪs yɛ̄, Ɛ̄ɛ̌ň, ò   zu̯à   À-Sībɪgı̯   n   kābɪríd.
...**SER** reply that, Yes, **3AN** friend:**SG PERS**-termite:**SG SER** 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 19.10.

Personal pronouns in apposition use free forms 33.5:

Man Paul [...] *pʋ'ʋsidi ya.*   "I, Paul ... greet you." (2 Thess 3:17)
Mān Paul [...] *pʋ́'ʋsìdī̯ 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 19.8.1.5. Appositional Relative Clauses probably must have human reference; again the second element has adjectival function 31.2.3. 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 separate combining form, as with quantifiers, or coordinated structures 19.4, or where a Combining Form has the segmental, but not tonal, form of the singular 9.2.2 15.2. 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:

Nonaar Paal for *Nonapaal*   *Nɔ̄-ná-pāal*   "New Testament"
Siig Suŋ   for *Sisuŋ*   *Sì-sʋ̀ŋ*   "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:

lànnɪg-kàŋā	"this squirrel"	WK
dàp-bàmmā	"these men"	WK

The many examples of *Siig Suŋ* in the <u>1996 NT audio version</u> are likewise clearly read as *Sìɪg-sòŋ* (or *Síɪg-sòŋ* with L Raising) or *Sì-sòŋ*, not **Sīɪg-súŋ*.

Among my informants, SB showed a much greater tendency to produce segmental sg forms before post-determining pronouns, and even adjectives, than my other informants, who generally rejected such formations.

19.6 Compounding

Like other Oti-Volta languages, Kusaal shows abundant productive formation of compound nominals. 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 <u>19.8.1</u> <u>19.8.2.1</u>:

*būʋg*ᵃ	"goat"
*bʋ̀-pìəlɪg*ᵃ	"white goat"
bʋ̀-kàŋā⁺ᐟ	"this goat"
bʋ̀-pìəl-kàŋā⁺ᐟ	"this white goat"

It is also the normal construction for a generic concrete noun when preceding a head as a modifier <u>19.7.2.1</u> or as a generic argument to a deverbal noun <u>19.7.1</u>:

	nà'ab lā wíə̀f zūʋr	"the chief's horse's tail"
but	*nà'ab lā wíd-zūʋr*	"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, characteristically in the shape of bare stems which have undergone Apocope, though analogical remodelling based on the form of the singular is common, and indeed regular with some stem types <u>9.2.2</u>. Compounding is so productive that the combining form is a regular part of noun and adjective flexion <u>9.1</u>, treated under nominal morphology.

For the tone sandhi rules which affect the component following the combining form see <u>8.3</u> <u>8.4</u>. They are not sensitive to whether the cb is head or modifier.

19.6.1 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:

[*bù-pìəl-*]*kàŋā*	"this [white goat]"
[*nīn-wɔ́k-*]*pìəlɪg*	"white [tall person]"
[*zà'-nɔ̄-*]*píəlìg*	"white gate" ("white [compound-mouth]")

A compound may appear as a generic argument to a following deverbal noun:

[*zà'-nɔ̄-*]*gúr*	"gate-keeper"
[[*zà'-nɔ̄-*]*gúr-*]*kàŋā*	"this [gate-keeper]"

Kusaal also possesses bahuvrihi adjectives 19.8.1.4 formed by zero-derivation of a noun-adjective compound to an adjective:

nīf-ňyáṳk	"one eye"
bù-[*nīf-ňyáṳk*]	"[one-eyed] goat"
nɔ̄b-wɔ́k	"long leg"
kùg-[*nɔ̄b-wɔ́k*]	"[long-legged] stool"

The bahuvrihi meaning is also possible when the compound is used as the complement of *àe̯ň*ᵃ "be something":

> *Kùg-kàŋā* 　　　　 *á* 　 *nē̄* *nɔ̄b-wɔ́k.*
> 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-zéňdà kùəs	"seller of red (i.e. dyed) cloth"
not	**fū-zéň'-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 19.7.2.2:

    sālıma bútìŋ   "gold cup"
    ānzúrıfà nɛ̄ sālıma lá'àd   "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:

    [*ānzúrıfà lá'-*]*māan*   "silversmith" ("[silver goods]-maker")
    [*ānzúrıfà nɛ̄ sālıma lá'-*]*māan* "silver- and goldsmith"

cf   [*fū-zɛ́ňdà*] *kùɵs*   "[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:

    sālıma [*zá'-nɔ̄ɔr*]   "golden gate" ("golden [compound-mouth]")
    zūgʊ́-n [*níf-gbáŭŋ*]   "upper eyelid" ("upper [eye-skin]")

    Determiners, whether preceding or following the head, and whether compounded or uncompounded, have the loosest binding:

    [*sālıma bútìŋ-*]*kàŋā*   "this [gold cup]"
    [[*sālıma lá'-*]*màan-*]*kàŋā* "this [[gold-item]-maker]"
    ò [[*sālıma lá'-*]*māan*]   "her [[gold-item]-maker]"

19.7 Dependents Preceding the Head

    The head of a NP may be preceded by dependents, which may be nominal 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 [*pʊ́'ʊsʊ̀g* [*fúùg dɔ́ɔ̀g*]]
    "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 19.9.

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.

19.7.1 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.

dā-núùr[ɛ]	"beer-drinking"
gɛ̄l-kúɘ̀s[a]	"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:

bùl-sīgɪd[a/]	"well-diver"	(*bùlɩg*[a] "well")
tùɘn-gāt[a]	"leader"	(*Ò gàad túɘ̀n* "He's gone ahead")
ňyà'an-dɔ̀l[la]	"disciple"	(*ňyá'aŋ*[a] "behind")
		(*dɔ̄l*[la/] "accompany")
pu̯'à-lā'ad[a]	"laugher at women" WK	
	(*Ò là'ad pɵ̄'ab* "He laughs at women")	

These compounds can be freely coined, and their meanings are generally transparent:

nīn-kʊ́ʊ̀d[a]	"murderer"
bʊ̀-kūʊd[a/]	"goat-killer"
nɔ̄-kʊ́ʊ̀d[a]	"hen-killer"
pu̯'à-kūʊd[a/]	"woman-killer"
nɔ̄-záñ[lɛ]	"holder of hens"
wìd-kùɘs[a]	"horse-seller"

bʊ̀-kùɵs[a]	"goat-seller"
sàlɪm-kùɵs[a]	"gold-seller"
dā-núùd[a]	"beer-drinker"

However, there are many idiomatic or set expressions. Further examples:

zīm-gbáň'àd[a]	"fisherman" ("fish-catcher")
nɔ̄-díˈə̀s[a]	"chief's spokesman" ("command-receiver")
	Ghanaian English "linguist"
tàn-mɛ̄ɛd[a]	"builder" (*tān*[nɛ] "earth")
làmpɔ̄-díˈə̀s[a]	"tax collector" (French *l'impôt*)
gbàn-mɪ̄ˈid[a/]	"scribe" NT ("book-knower")
pʊ̠ˈà-sāň'am[ma]	"adulterer" ("woman-spoiler")
zà'-nɔ̄-gúr[a]	"gate-keeper" (*zà'-nɔ̄ɔr*[ɛ/] "gate")
dà-kīəd[a]	"wood-cutter"
kɔ̀ňb-kīm[na]	"herdsman"
	(*kɔ̀ňb-* as cb of *būn-kɔ́ňbʊ̀g*[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 *bāŋɪd*[a] "wise man", *sɪ̠̄ākɪd*[a] "believer", *sūŋɪd*[a] "helper" (of the Holy Spirit, NT), *fāaňd*[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:

màal-māan[na]	"sacrificer"
zī-zîîd[a]	"carrier-on-head"

but generally it seems to be simply a reduplication of the agent noun stem:

tʊ̀'as-tʊ̀'as[a]	"talker"
zàb-zàb[a]	"warrior" (tone *sic*)
zɔ̀t-zɔ̄t[a]	"racer, athlete"
tʊ̀m-tūm[na]	"worker"
lèm-lɛ̄m[ma]	"taster, sipper"
zàm-zām[ma]	"cheat"
dàm-dām[ma]	"shaker"
tàm-tām[ma]	"forgetful person"

Cb pre-dependents occur with deverbal instrument nouns, in object or adverbial senses:

si̧à-lɔ̄ɔdíŋ[a]	"belt" (waist-tying thing)
nīn-gɔ́tìŋ[a]	"mirror" (eye-looking thing)
nīn-gɔ́tìs[ɛ]	"spectacles"

If the head is a gerund, a cb pre-dependent may represent a subject or complement. For the *-r*[ɛ] (not *-b*[ɔ]) 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:

pu̧'à-dīιr[ɛ]	"marriage" (*Ò dì pu̧'ā* "He's married a wife")
nīn-kúùr[ɛ]	"murder"
dā-núùr[ɛ]	"beer-drinking"
Sāmán-pīə́r[ɛ]	Traditional New Year ("Courtyard Cleaning")
bùgúm-tɔ̄ɔňr[ɛ]	Fire Festival ("Fire Throwing")
nɔ̄-lɔ́ɔ̀r[ɛ]	"fasting" ("mouth-tying")
nɔ̄-pɔ́ɔ̀r[ɛ]	"oath" (*pɔ̄*[+] "swear")
nɔ̄-náàr[ɛ]	"covenant" (*nā*[+] "join")
nīn-báàl-zɔ̄ɔr[ɛ]	"pity" (*Ò zɔ̀t·ō nīn-báalì.* "He has pity on him")

It may represent an AdvP:

mɔ̀-pīl[lɛ]	"grass roof" ("covering with grass")
kùm-vū'ʋgír[ɛ]	"resurrection"
	(*Ò vù'ʋg kūmιn.* "He came alive from death.")

Although many of these are set forms, free creation of nonce-forms is possible:

fū-yέèr[ɛ]	"shirt-wearing" WK

Cbs as subjects are thus confined to verbs which can be used intransitively:

nɔ̄b-kɔ́ɔ̀r[ɛ]	"breaking a leg" (*kɔ̀*[+] is intransitive)
nū'-mɔ́dìr[ɛ]	"swelling of the hand"
wìn-līir[ɛ]	"sunset"
	(*Wìnnιg lí yā.* "The sun has set/fallen.")
sūň-sáň'ὺŋ[ɔ]	"sorrow"
	(*Ǹ sūňf sáň'àm nɛ̄.* "My heart is spoilt"
	= "I'm sad.")
sūň-pέèn[nɛ]	"anger" (*Ǹ sūňf pélìg nɛ̄.* "My heart is white.")

19.7.2 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.

19.7.2.1 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 19.8. 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.

bīig fúùg	"a child's shirt" (belonging to some child)
bì-fūug	"a children's shirt" (perhaps a small woman's)
nà'ab lā wíə̀f zūʋr	"the chief's horse's tail" (the chief has a horse)
nà'ab lā wíd-zūʋr	"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:

wāb-mɔ́ɔgū-n WK	"in elephant-bush, where there are elephants"
zà'-nɔ̄ɔr	"gate" ("compound-mouth")
mà-bīig	"sibling" ("child by [same] mother")
bā'-bîig	"half-sibling" ("child by [same] father")
tèŋ-bīig	"native" ("child of a country")
nàsàa-sìlʋg	"aeroplane" (European hawk) ILK
kṵ'à-ŋ̌wīig	"current" ("water-rope")
	[cb from a mass noun, see below]

WK has the exceptional forms

náaf-bì'isím	"cow's milk"
būʋg-bí'isím	"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:

*sūň-kpí'òŋ*ᵓ	"boldness" ("heart-strength")
*sūň-má'asìm*ᵐ	"joy" ("heart-coolness")
	(*M̀ sūňf má'e yā.* "I'm joyful.")
*nìn-tūllím*ᵐ	"fever" ("body-heat")
*wīn-tɔ́ɔ̀g*ᵓ	"ill fate" ("fate-bitterness")

Cases like these resemble those where the second element is a gerund 19.7.1, but deadjectival nouns are not gerunds 12.2, and such constructions are not limited to cases where corresponding Adjectival Verbs exist:

*pʋ̀-pìəlɩm*ᵐ	"holiness" ("inside-whiteness")

19.7.2.2 Generic Non-count NPs

Pre-modifers may also consist of Nominal Phrases with generic non-count reference. If they have *abstract* senses, they ascribe a quality to the head:

nā'am kʋ́k	"throne" ("chieftaincy chair")
nā'am sʋ́'ʋlìm	"kingdom" ("chieftaincy possession")
pʋ̀'ʋsʋg dɔ́ɔ̀g	"temple" ("worship house")
tūlɩgír bún	"heater" ("heating thing" = *būn-tʋ́lɩgìr*ᵋ)
dūgʋb dʋ́t	"cooking pots"
līgɩdɩ tʋ́ʋmà	"expensive work" (*līgɩdɩ*⁺ "money")

Language names may appear as abstract nouns describing an ethnic group:

Kūsáàl yír nē kūəb	"Kusaasi houses and agriculture"
Nàsāal búgʋ́m	"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:

sālɩma bútìŋ	"golden cup"

Count nouns may appear if used in a mass sense 19.2.1:

fūug dɔ́ɔ̀g	"tent" (cloth hut)
dàad bún-nám	"wooden things" (*dàʋg*ᵓ "piece of wood")

NPs formed by coordination may occur in this use:

sālıma nɛ̄ ānzúrıfà lá'àd	"gold and silver goods"

Such pre-modifiers are referential, and can be the antecedents of pronouns:

sālıma lá'àd nɛ́ ò būtııs	"gold goods and [gold] cups" WK 19.4

Contrast the non-referential use of mass nouns as generic arguments to deverbal nouns:

sàlım-kùθs	"gold-seller"
dā-núùd	"beer-drinker"

Cb forms of abstract non-count nouns do sometimes occur as pre-modifiers:

	*tàn̆p-sɔ̄b*ᵃ	"warrior"	(*tān̆p*ᵓ "war")
	*pʋ̀-pìəl-nīd*ᵃ/	"holy person"	(Rom 5:7, 1996)
	*pʋ̀-pìəl-sɔ̄b*ᵃ	"holy person"	(Rom 3:10, 1996)
but	*pʋ̀-pìəlım sɔ́b*ᵃ	"holy person"	(Mt 10:41, 1996) etc
	pʋ̀-pìəl-tūʋma⁺	"holy actions"	(Rom 6:13, 1996)
but	*pʋ̀-pìəlım túʋmà*⁺	"holy actions"	(Mt 5:10, 1996)

An interesting case involving a concrete mass noun is the compound *kṵ'à-n̆wīig* "current" ("water" + "rope.") This perhaps represents "aquatic rope" in contrast to **kù'əm n̆wîîg* "a rope made of water"; the construction with concrete mass pre-modifiers may be limited to the specific sense "made of …"

19.7.2.3 Adverbial Phrases

Like indefinite mass nouns, AdvPs as pre-dependents are pre-modifiers (contrast the determiner sense of AdvPs *following* the head 19.8.2.3.)

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:

būgʋsígā dáàn	"softly-softly sort of person"
dūnıya ní nìn-gbīŋ	"earthly body"

kù'ɵmī-n bún	"water creature"
kù'ɵmī-n dín	"aquatic one"
kɔ̄lʋgʋ-n nɔ́-dáʋ̀g	"crayfish" ("in-the-river cock")

Although the AdvPs in cases like

dàtìʊ̯ŋ níf	"right eye"
dàgɔ̀bɪg níf	"left eye"
zūgʋ́-n níf-gbáʊ̯ŋ	"upper eyelid"
tɛ̄ŋɪ-n níf-gbáʊ̯ŋ	"lower eyelid"

seem to answer "which?" rather than "what kind of?", the possibility of indefinite plurals like *dàtìʊ̯ŋ nínì* "right eyes" or *tɛ̄ŋɪ-n níf-gbánà* "lower eyelids" shows that the construction is actually modifying, not determining.

Postpostional phrases with *yɛ̄lá*+ "about" <u>20.6</u> 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:

| *Kūsáàs kúɵb nɛ̄ yīr yɛ́là gbàʊ̯ŋ* | "A book about Kusaasi houses and agriculture" |
| *dàʊ̯-kàŋā lā yɛ́là gbàʊ̯ŋ* | "a book about that man" WK |

In the same way, locative AdvPs, including Kusaal place names with no locative particle <u>20.3</u>, may occur as uncompounded pre-modifiers:

| *Bɔ̀k dím* | "Bawku people" |

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" <u>20.3</u>; 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 <u>33.1.2.4</u>.

19.7.3 Determiners

The **quantifier** *yīigá⁺* "firstly" appears as a pre-determiner "first", e.g.

yīigá sāa zúg nɛ̄ tɛ̀ŋ   "the first heaven and earth"

Count and/or definite reference NPs as preceding dependents before noun heads are also **determiners**.

If the head itself is a determiner (i.e. a pronoun or quantifier) the construction is **partitive** 19.9.1.

NP pre-determiners before **gerunds** and other abstract nouns describing events or processes are interpreted as **subjects**:

Dāu̯   lā   kúlʋ̀g   dāa mālɪsí‿   m.
Man:**SG ART** return.home:**GER TNS** be.sweet **1SG.OB**.
"The man's return home pleased me."

Jesus kúm   dá-pūʋdá zug   "Jesus' death on the cross"
Jesus death cross:**SG** upon

Further expansion of such NPs is possible 19.9.2.

The words *mɛ̄ŋ*ᵃ/ "self", *dāan*ᵃ "owner", *sɔ̄b*ᵃ "individual" and *būn*ⁿɛ/ "thing" as heads have specialised senses with pre-determiners 19.9.3.

In all other cases, pre-determiners express **possessors**.

m̀ bīig   "my child"
dāu̯ lā bîig   "the man's child"
dāu̯ lā bíɛ̀r bīig náàf zūʋr   "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 19.3.

The partitive sense with determiner heads is not possible with noun heads:

nīdɪb lā gígìs   "the dumb ones belonging to the people"
                                      Not possible as "among the people" WK.

19.8 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 19.8.1 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*ᵉ *kàŋā*⁺/ of the Demonstratives 15.2 (cf on apposition 19.5.) For Quantifiers as post-determiners see 19.9.1.

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 the nominal paradigm, 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.

*bōʋg*ᵃ	"goat"
*bù-pìəlıg*ᵃ	"white goat"
bù-kàŋā⁺/	"this goat"
bù-pìəl-kàŋā⁺/	"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:

?*náaf-kàŋā*	"this cow"	cf *náaf-bì'isím* 19.7.2.1
?*nāaf-káŋā*		

but	*nā'-káŋā*	"this cow"	WK DK SB

19.8.1 Adjectives

Adjectives as modifiers always follow the head.

Adjectives do not appear without a preceding noun head, except to a very limited extent as complements to *àe̯ň*[a] "be something/somehow" 24.2.

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 can sometimes be induced to accept sg + adjective but never produce such forms spontaneously.

būʋg[a]	"goat"	*būʋs*[ɛ]	"goats"
bʋ̀-pìəlɪg[a]	"white goat"	*bʋ̀-pìəlɪs*[ɛ]	"white goats"
bʋ̀-sʋ̀ŋ[ɔ]	"good goat"	*bʋ̀-sʋ̀ma*[+]	"good goats"
nūa[+/]	"hen"	*nɔ̄ɔs*[ɛ/]	"hens"
nɔ̄-píəlìg[a]	"white hen"	*nɔ̄-píəlìs*[ɛ]	"white hens"
nɔ̄-sʋ́ŋ[ɔ]	"good hen"	*nɔ̄-sʋ́mà*[+]	"good hens"

A second adjective or a post-determining pronoun can follow a first adjective, which thus itself appears as a cb:

nīn-wɔ́k-pìəlɪg[a]	"white tall person"
nɔ̄-píə̀l-kàŋā[+/]	"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:

fū-zéňdà kùəs[a]	"seller of red (i.e. dyed) cloth"
not **fū-zéň'-kùəs*[a]	

i.e. adjective cbs may only precede other adjectives or post-determining pronouns.

Compounds with adjectives occasionally develop specialised lexical meanings:

nū'-bíl[a]	"finger" ("small hand")
tì-sābɪlím[m]	a traditional remedy ("black medicine")

Several names of plant and tree species are formed in this way:

gɔ̀ň'-sābɪlíg[a]	Haaf *gosabliga* "Acacia Hockii" ("black thorn")

19.8.1.1 Class Agreement

There are isolated set forms showing traces of the old agreement system:

	là'-bīəlífᵓ	NT	"small coin" (*lā'afᵓ* "cowrie")
cf	*bī'əlá⁺*		"a little"
	*dà-sī'ər*ᵋ		"some day; perhaps" (*dāar*ᵋ "day")
cf	*sī'a⁺*		"some"
	*dàbɪs-sī'ər*ᵋ		"some day" (*dàbɪsɪr*ᵋ "day")
cf	*sī'a⁺*		"some"
	*pṵ'à-pāal*ᵃ/		"bride" (*pṵ'ā*ᵃ "wife")
cf	*pāalíg*ᵃ		"new"
	*dà-pāal*ᵃ/		"young man, son" (*dāṵ⁺* "man")
cf	*pāalíg*ᵃ		"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 *bῡn* "thing" when it has abstract rather than concrete sense:

	*dā-páalìm*ᵐ	"new millet beer"
		WK does not accept **dā-páàl*, **dā-páalìg*.
	*tì-sābɪlím*ᵐ	"black medicine", a specific traditional remedy
	*tì-vῡnním*ᵐ	"oral medication" ("swallowing medicine")
	*tì-kῡʋdím*ᵐ	"poison" ("killing medicine")
	*kpāň-sɔ́ɔňdìm*ᵐ	"anointing oil" (*kpāaňm*ᵐ/ "oil, grease")
	*bῡn-bɔ́ɔdìm*ᵐ	"desirable thing" (1 Cor 14:1: *nɔ̀ŋɪlím*ᵐ "love")
but	*bῡn-bɔ́ɔdìr*ᵋ	"desirable thing" (BNY p17: a sheep)
	*bῡn-ňyɛ́tìm*ᵐ	"the visible world"
but	*bῡn-ňyɛ́tìr*ᵋ	"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."

19.8.1.2 Downtoning

Adjectives may show Apocope Blocking 6.4 as a downtoner (all examples KT):

Lì à nē fū-píəlìgā.	"It's a whitish shirt."
Lì à nē fū-píəlìgā lā.	"It's the whitish shirt."
Lì à nē wíùg.	"It's red."
Lì à nē wíugū.	"It's reddish."
fū-wíugū lā	"the reddish shirt"
Lì à nē tītā'arι.	"It's biggish."

This seems to be possible only with singular forms.

19.8.1.3 Ideophones

Adjectives cannot themselves take adverbs as modifiers. In e.g.

Lì à nē píəlìg pāmm.	"It's very white"

the adverb *pāmm* must be taken with the copula verb rather than the adjective; it is not possible to say

*fū-píəlìg pāmm lā	attempted "the very white shirt"

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.

Lì à nē píəlìg fáss fáss.	"It's very white."
Lì à nē sābιlíg zím zím.	"It's deep black."
Lì à nē zíñ'a wím wím.	"It's deep red."

Ideophones are not limited to use with adjectives as complements of *àẹñ*[a] "be something/somehow" but occur with adjectives in their normal modifier rôle:

Lì à nē fū-zíñ'a wím wím.	"It's a deep red shirt."	WK
M̀ ňyέ fū-zíñ'a wím wím.	"I've seen a deep red shirt."	WK
Fū-zíñ'a wím wím bέ.	"There's a deep red shirt."	WK
M̀ bɔ́ɔ̀d fū-zíñ'a wím wím lā.	"I want the deep red shirt."	WK

Adjectival Verbs may take ideophones as intensifiers; they share the ideophone of the corresponding adjective:

Ò à nɛ̄ wɔ̄k tɔ́lɪlìlɪ.	"She's very tall."
Ò à nɛ̄ gīŋ tírɪgà.	"She's very short."
Ò wà'am tɔ́lɪlìlɪ.	"She's very tall."
Ò gìm nɛ̄ tírɪgà.	"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

Lì à súŋā pāmm.	"It's very good."
Lì à nɛ̄ bɛ̄'ɛd pāmm.	"It's very bad."
Lì zùlɪm pāmm.	"It's very deep."
Lì mà'as pāmm.	"It's very damp."

Apart from Adjectival Verbs, I have found no unequivocal ideophones in use with verbs; thus only

Ò tòm pāmm.	"She's worked hard."
Ò tòm hālí.	"She's worked hard." 21.2
Ò zɔ̀ pāmm.	"She's run a lot."
Ò zɔ̀ hālí.	"She's run a lot."

However, many verbs can be followed by "onomatopoeic" words which resemble ideophones at least in phonology:

Ò zɔ̀t nɛ̄ tɔ́lìb tɔ́lìb.	"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.

19.8.1.4 Bahuvrihis

The combination noun + adjective may be used as a bahuvrihi adjective itself:

Lì à nɛ̄ nū'-kpíilʋ́ŋ.   "It's a dead hand."
Bīig lā á nɛ̄ nū'-kpíilʋ́ŋ.   "The child is dead-handed."
Ò à nɛ̄ bí-[nū'-kpíilʋ́ŋ].   "He's a dead-handed child."

In constructions like *bì-nū'-kpíilʋ́ŋ*ᵓ "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'-kpîim*ᵐ, and in such constructions the adjective may even be plural despite singular reference of the whole noun + adjective compound:

bì-tʋ̀b-kpīda⁺   "deaf child" (*tʋ̀bʋr*ᵋ "ear", *kpì*⁺ "die")
plural *bì-tʋ̀b-kpīda nám*ᵃ
or   *bì-tʋ̀b-kpīdɪs*ᵋ

*bì-tʋ̀b-līɪd*ᵋ   "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:

*kʋ̀g-nɔ̄b-wɔ́k*ᵓ   "long-legged stool"
*kʋ̀g-nɔ̄b-wá'àd*ᵋ   "long-legged stools"

*zūg-máʋ̤k*ᵓ
plural *zūg-má'àd*ᵋ   "crushed-headed"

*zʋ̀-wɔ̄k*ᵓ/   "long-tailed"
*nɔ̄b-gíŋ*ᵃ   "short-legged"

*zū-pɛ́ɛlʋ̀g*ᵓ
plural *zū-pɛ́ɛlà*⁺   "bald; grey haired"; etymologically
                                             "white headed" with *pɛ̀ɛlʋg*ᵓ for *pìəlɪg*ᵃ
*lām-fɔ́ɔ̀g*ᵓ
plural *lām-fɔ́ɔ̀d*ᵋ   "toothless" (*lām*ᵐᵋ/ "gum" *fʋ̀e*+ "draw out")
       (Plural analogical from sg, which shows the regular change **uɵgʋ → ɔɔgʋ*)

The two adjectives "one of a pair" <u>16.2.4</u> are often used in bahuvrihis:
ňyàu̯k[ɔ] pl *ňyà'ad*[ɛ] for eyes:

nīf-ňyáu̯k[ɔ]	"one eye"
bà-nīf-ňyáu̯k[ɔ]	"one-eyed dog"

yīu̯ŋ[ɔ/] pl *yīná*[+] of other paired body parts:

tùb-yīu̯ŋ[ɔ/]	"one ear"
bì-tùb-yīná[+]	"one-eared children"
nɔ̄b-yíu̯ŋ[ɔ]	"one-legged"
nū'-yíu̯ŋ[ɔ]	"one-handed"

19.8.1.5 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:

	bì-sāan[a/] or *bì-sáaŋ*[a]	"stranger-child"
only	*bù-sáaŋ*[a]	"stranger goat"
	bì-kpī'im[m/]	
or	*bì-kpìilúŋ*[ɔ]	"dead child"
only	*bù-kpìilúŋ*[ɔ]	"dead goat"
	bì-dāu̯[+]	
or	*bì-dāʊg*[ɔ]	"male child"
only	*bù-dāʊg*[ɔ]	"male goat"
	bì-pu̯'ā[a] or *bì-pu̯āk*[a]	"female child"
	bì-zū'əm[m/]	
or	*bì-zùnzɔ̀ŋ*[a]	"blind child"

The same behaviour is also seen with some Agent Nouns:

	pu̯'à-zàaňs[a]	"dreamy woman" KT
	nīn-nέn[na]	"envious person"
	bì-sīn[na/] or *bì-sīnníg*[a]	"silent child"
only	*bù-sīnníg*[a] or *bù-sīnnʊ́g*[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
$g^a|s^ɛ$ or $r^ɛ|a^+$ Class:

pu̯'à-kūʋdíg[a]	"murderous woman, murderess"
pu̯'à-kūʋd[a/]	only "killer of women"

This is true also of forms derived from verbs which are usually intransitive:

pu̯'à-lā'adıg[a]	"woman given to laughing"
pu̯'à-lā'ad[a]	"laugher at women"

Nouns (of any Class) expressing bodily defects can be used adjectivally:

bì-zùnzɔ̀ŋ[a]	"blind child"
bì-gìk[a]	"dumb child"
bì-wàbır[ɛ]	"lame child"
bì-bālɛ̄rʋg[ɔ]	"ugly child"
bì-pɔ̀ň'ɔr[ɛ]	"crippled child"

Other examples include:

nàsàa-bīig[a]	"European child"
yàmmʋg-bī-pʋ́ŋ[a]	"girl slave"
	(written *yamug bipuŋ* Acts 16:16, 1976 9.2.2)
yàm-bī-pʋ́ŋ[a]	"girl slave" (WK's preferred form)
cf *yàmmʋg bí-pʋ́ŋ*[a]	"slave's girl"
bī-pʋ́ŋ-yàmmʋg[a]	"slave girl"
nà'-bīig[a]	"prince" ("royal child" not "boy king")
bì-nà'ab[a]	*id*
dàu̯-bīig[a]	"male child"
cf *bì-dāu̯*[+]	*id* (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.

19.8.2 Determiners

19.8.2.1 Pronouns

Pronouns may follow a NP head as post-determining pronouns. The head then normally appears as a combining form. Demonstrative, Indefinite and Interrogative pronouns occur in this construction.

Like Quantifiers, pronouns also occur as NP heads. Some pronouns have forms used only as heads or only as post-determiners 15.2 15.3.

19.8.2.2 Quantifiers

Quantifiers as NP dependents follow the head, except for *yīigá⁺* "firstly" 19.7.3. The head only appears as a cb, optionally, with in a few cases with *yīnní⁺* "one" and in a few fixed expressions 16.2.2; uncompounded post-dependents are not subject to M Raising 16.2.2:

	kūgʋr yīnní⁺	"one stone"
but	*kūg-yínnì⁺*	"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.

nīdɪb bɛ́dʋgū	"a lot of people"
nīdɪb bɛ́dʋgū lā	"the lot of people, the crowd"
nīdɪbá àyí	"two people"
nīdɪbá àyí lā	"the two people"

The head + post-dependent quantifier construction contrasts in meaning with the *partitive* sense of a pre-determiner + Quantifier Phrase head 19.9.1.

Quantifiers as post-dependents can be coordinated: this is the mechanism for the creation of numbers other than simple digits, tens or hundreds 16.2.2.

> *o nya'andɔlib pii nɛ yi*
> *ò   ňyà'an-dɔ̀llɪb   pīi nɛ̄ yí*
> **3AN** after-follower:**PL** ten with two
> "his twelve disciples" (Mt 26:20)

19.8.2.3 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

	mɔ̄ɔgʋ-n wábʋ̀g lā	"the wild elephant" ("What kind of elephant?")
but	*wābʋg mɔ̄ɔgʋ-n lā*	"the elephant in the bush" ("Which elephant?")

I do not have any unequivocal examples of time adverbs in this position; in

ňwādɩs yʋ́ʋ̀m lā pʋ́ʋgʋ̄-n   "months in the year" SB

the postposition phrase is formally locative, though used in a metaphorical temporal sense.

The manner-adverb *amɛ̄ŋá* "really, truly" occurs meaning "genuine, real":

Ɔ̄n   sɔ̄b   á nɛ̄ dṵ'átà   amɛ̄ŋá   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, resulting in a type of clause nominalisation 19.7.3, a following AdvP may occur which represents an adjunct in the corresponding clause structure, but such adjuncts may also even be prepositional phrases, which are not found elsewhere as NP dependents, and even VP-final particles may occur. Accordingly, this is best regarded as a distinct clause nominalisation process rather than part of NP structure as such; see further 19.9.2.

ya antu'a morim koto ni ne taaba la
yà àntṵ'à-mɔ̄rím kɔ́tʋ̀   ní nɛ̄   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)

19.9 Specialised NP Heads

19.9.1 Determiners

Pronouns and quantifiers are determiners. They occur as post-dependents 19.8.2, but also frequently as NP heads.

NPs headed by determiners are equivalent syntactically to other NPs in their abilities to form arguments of VPs:

Ɔ̀ŋā lā kɛ́ nā.	"That one came."
Bàmmā lā kɛ́ nā	"Those ones came.".
Pāmm kɛ́ nā.	"Many came."
Bɛ̀dʊgū kɛ́ nā.	"Many came."
Bɛ̀dʊgū lā kɛ́ nā.	"The crowd came"
Àyí kɛ́ nā.	"Two came."
Àyí lā kɛ́ nā.	"The two came."

They manifest the NP category of number.
Quantifier heads pluralise with *nàm*[a]:

màli̯āk-nám túsà pīiga nám   "tens of thousands of angels"

Àyí   námá̱ àyí   á   nɛ̄ nāasí.
NUM:two **PL**   **NUM**:two **COP FOC** four.
"Two two's are four."

NPs headed by Quantifiers 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   yɛ́ tì   ňyɛ̄ dīιb yáa   ní   mɔ̄ɔgʊ-n   ňwá
And **3PL** say **3PL** find food where **LOC** grass:**SG-LOC** this
ø   dììs nīdιb   bɛ́dʊgū bámā   ňwá ⁺ø?
SER 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 wʊsa* "all these people")

nīdιb   bɛ́dʊgū bánì   kɛ̄   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, not NPs with quantifiers as dependents.
    There is a contrast between a NP with a noun head and a post-determiner
(pronoun or quantifier) as a dependent 19.8.2, and a NP with a determiner head
which is itself preceded by a NP pre-determiner; the latter construction is **partitive**.
The position of the article *lā*⁺/ may distinguish the two constructions.
    NP with a post-determiner:

nīdıb bédʋgū	"a lot of people"	*bèdʋgū*	dependent
nīdıb bédʋgū lā	"the lot of people, the crowd"	*bèdʋgū*	dependent
nīdıbá àyí	"two people"	*àyí*	dependent
nīdıbá àyí lā	"the two people"	*àyí*	dependent
nīn-síəbà	"certain people"	*síəbà*	dependent

NP with a determiner head and a NP pre-determiner:

nīdıb lā bédʋgū	"a lot of the people"	*bèdʋgū*	head
nīdıb lá àyí	"two of the people"	*àyí*	head
yà sɔ̄'	"some one among you"	*sɔ̄'*	head
nīdıb lā síəbà	"certain of the people"	*síəbà*	head
nīdıb síəbà	"certain ones among people"	*síəbà*	head

nīdıbá‿   àtáň'   lá   ànɔ́'ɔ̀n ...
person:**PL NUM:**three **ART** who ...
"who, among the three people ...?"

The determiner head can be a *ǹ*-Clause:

Pa'alimi ti nidiba ayi' nwa fʋn gaŋ sɔ'
Pà'alımī   tí   nīdıbá‿   àyí   ňwá fún   gāŋ   sɔ̄'
Teach:**IMP 1PL.OB** person:**PL NUM:**two this   **2SG:COMP** choose **INDF.AN**
"Tell us which of these two people you have chosen" (Acts 1:24)

19.9.2 Gerunds and Deverbal Abstract Nouns

Gerunds can take NP pre-determiners as subjects 19.7.3.

Dāu̱   lā   kúlʋ̀g   dāa mālısí‿   m.
Man:**SG ART** return.home:**GER TNS** be.pleasing **1SG.OB**.
"The man's return home pleased me."

A generic object argument may also occur as a Combining Form, and adjunct AdvPs 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 àntu̯'à-mɔ̄rím kɔ́tʋ̀   ní nɛ̄ 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)

VP-final particles may occur too [23.7](#):

Ninsaal Biig la lɛbʋg la na

Nīn-sáàl   Bîg   lā lɛ́bʋ̀g   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-pūʋdír   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.

19.9.3 *Mɛ̄ŋ*ᵃ/ *dāan*ᵃ *sɔ̄b*ᵃ *būn*ⁿᵉ/

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 [20.6](#).) *Mɛ̄ŋ*ᵃ/ "self" is used indifferently for sg/pl, always with a pre-determiner:

m̀ mɛ̄ŋ   "myself"

yà mɛ̄ŋ   "yourselves"

nà'ab lā mɛ́ŋ   "the chief himself"

chief:**SG ART** self

Bà ŏyɛ́ɛ‿ bà mɛ̄ŋ.   "They've seen for themselves."

3PL see   **3PL** self.

"Self" forms must be used for verb arguments referring back to the clause subject :

Ṁ ňwɛ́'ɛ‿ m mɛ̄ŋ.   "I hit myself."
1SG hit   **1SG** self.

not **Ṁ ňwɛ́'ɛ̄ m* or **Ṁ ňwɛ́' 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 pʊ piesidi ba nu'us wʊʊ lin nar si'em la ka ditta.
Bà pʊ̄   pīəsídí‿ bà nú'ùs wʊ̄ʊ lín   nār   sī'əm lá
3PL NEG.IND clean:**DIPF 3PL** hand:**PL** like **3INAN:COMP** be.proper **INDF.ADV ART**
kà dítā   ⁺ø.
and eat:**DIPF NEG**.
"They don't wash their hands properly before they eat." (Mt 15:1)

    When ordinary pronouns are permissible, using *mɛ̄ŋ* implies contrast:

Ṁ   píə‿   m̀ mɛ̄ŋ nú'ùs.   "I washed my own hands."
1SG wash **1SG** self   hand:**PL**.

Fʊ̀ mɛ̄ŋ kʊ̄ʊ bí-lìaa   ⁺ø?   "Yourself or the baby?"
2SG self or   child-baby:**SG CQ**?   ("Which of you needs the doctor?")

    The derived manner-adverb *amɛ̄ŋá*⁺ "really, truly" can be used after a sg or pl to mean "genuine, real" and there is an adjectival form *mɛ̄ŋír*ᵋ seen in e.g.

*yɛ̄l-mɛ́ŋìr*ᵋ   "truth" ("genuine matter")

Dāanᵃ "owner of …", *nàm*ᵃ pl, always has a preceding dependent NP or AdvP. In a few set forms this is a generic count noun cb:

*yī-dáàn*ᵃ   "householder" = *yī-sɔ́b*ᵃ   Hausa *mài gidaa*
*tɛ̀ŋ-dāan*ᵃ   literally "land-owner": traditional earth-priest

    Normally, the possession is expressed by a free NP, definite or indefinite:

*lɔ́r dáàn*ᵃ   "car owner"
*bʊ̄ʊg dáàn*ᵃ   "goat owner"
*kù'əm dáàn*ᵃ   "water owner"
*tìəŋ dáàn*ᵃ   "bearded man" Hausa *mài geemùu*
*dāam dáàn*ᵃ   "beer owner"
*pɔ̄ɔg lā dáàn*ᵃ   "the owner of the field" (Mt 21:40)

Zu-wok daan po gangid bugum.
Zʋ̀-wɔ̄k   dáàn   pū   gáŋìd   búgʋ́mm [+]ø.
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 *mài*, or Arabic ذو

pʋ̀-pìəlɪm dáàn[a]   "holy person"

Manner-adverbs can appear in the same sense as abstracts before *dāan*[a]:

būgʋsígā dáàn[a]   "softly-softly sort of person" WK

See <u>16.2.4</u> on the use of *dāan*[a] with numbers to make ordinal expressions.

Sɔ̄b[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	*sɔ̄b*[a]
Animate	pl	*dìm*[a]
Inanimate	sg/pl	*dìn*[nɛ]

With noun or pronoun pre-determiners <u>19.7.3</u> the meaning is possessive:

māŋ dín[nɛ]   "my one, mine"
À-Wīn dím   "Awini's family"

Fūŋ   pɪ̣áň'àd   nɛ̄ 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 <u>19.7.2.2</u> <u>19.7.2.3</u> preceding *sɔ̄b*[a] are pre-modifiers:

pʋ̀-pìəlɪm sɔ́b[a]
pl *pʋ̀-pìəlɪm dím*[a]   "holy person" (*pʋ̀-pìəlɪm*[m] "holiness")

dūnɪya ní dìn[nɛ]   "earthly one" (1 Cor 15:44)
Bɔ̀k dím   "Bawku people"

The quantifier *yīigá⁺* "first" is a pre-determiner, as always <u>19.7.3</u>:

*yīigá sɔ̄b*ᵃ   "first (person)"   beside *yīig-sɔ́b*ᵃ *id*

Specialised senses may be found with cb pre-modifiers:

*yī-sɔ́b*ᵃ   "householder"   (*yīr*ᵋ⁾ "house")
pl *yī-sɔ́b-nàm*ᵃ
*yī-dím*ᵃ   "members of the household"
*nīf-sɔ́b*ᵃ   "miser"   (*nīf*ᵓ⁾   "eye")
*tàn̆p-sɔ̄b*ᵃ   "warrior"   (*tān̆p*ᵓ "war")
*zūg-sɔ́b*ᵃ   "boss" NT "Lord"   (*zūg*ᵓ⁾ "head")
pl *zūg-sɔ́b-nàm*ᵃ

The expression *ɔ̄n sɔ̄b*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 ŏyɛ̄tá   ⁺ø?
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 *àe̯n̆*ᵃ "be" <u>24.2</u>.

Dīιb á   nɛ̄ būn-sύŋ.   "Food is good." ("Food is a good thing.")
Food **COP FOC** thing-good:**SG**.

Some adjectives cannot be used as NP heads at all, so *būn-* is necessary in:

*būn-vύr*ᵋ   "living thing"

Even those that can, cannot have any dependents apart from ideophones or articles, so *būn-* is also necessary in:

būn-píəl-kàŋā⁺⁾   "this white one"

Deverbal Adjectives cannot be used as NP heads while retaining adjectival meaning; with no preceding cb they are interpreted as Agent Nouns <u>13.1.1.2.1</u>. Thus

	*būn-kʊ́ʊdìr*ᵋ	"thing to do with killing"
but	*kūʊdír*ᵋ	"killer"

WK requires an adjective to take the *m*ᵐ Class suffix if the sense is abstract <u>19.8.1.1</u>.

Note the idioms

*būn-gíŋ*ᵃ	"short chap" (informal, humorous)
*būn-kʊ́dʊ̀g*ᵓ	"old man" (the normal expression)
	(but *pʊ̰'à-ñyá'aŋ*ᵃ "old woman")

Būn also occurs with abstract <u>19.7.2.2</u> pre-modifiers:

*tūlɩgír bún*ⁿᵋ	"heating thing, heater" = *būn-tʊ́lɩgìr*ᵋ

With an AdvP pre-modifier:

*kù'ɵmīn bún*ⁿᵋ	"water creature"

Note that while *būn* is a "thing", tangible or abstract, *dìn* is purely a semantically empty head, with only number and gender specified:

*kù'ɵmīn dín*ⁿᵋ	"the (non-human) one in the water, aquatic one"

19.10 Personifier Clitics

Indigenous Kusaasi personal names are always preceded by the personifier clitics *À-* or *Ǹ-/Ḿ-*; *À-* is the default, with *Ǹ-/Ḿ-* appearing before adjective stems. *Ḿ-* is found before labial consonants. These are all Liaison Words. This *À-*, like the manner-adverb prefix *à-*, is preceded by word-final *-ɩ*, 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 *Ǹ-/Ḿ-*, 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.)"

À-Wīn	"Awini"
tì Wīn	"our Awini"

Ǹ Wīn	"my Awini"
À-Wīn-káŋā	"this Awini"
À-Wīn nám	"Awinis"
Ǹ-Dāʋg	"Ndago"
tì Ǹ-Dāʋg	"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.)

À-Mūusa	"Moses"
À-Yīisa	"Jesus"
À-Sīimɔ́ɔ̀n	"Simon"

For examples of Kusaasi names see 35.2.

NT has some personifications of abstractions: *À-Sàň'ʋŋ* "Destruction, Abaddon."

In stories where animals are characters, animal names take *À-*:

À-Bāa	"Mr Dog"

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-gáʋ̀ŋ*ɔ "pied crow" *à-kɔ̄ra-díɛ̀m*ma "praying mantis" and the loanword *à-mús*ɛ "cat."

Examples:

à-dàalúŋ	"a stork"
ǹ/mān dáalúŋ	"my stork"
1SG/1SG.CNTR stork:**SG**	
dāu̯ lā dáalúŋ	"the man's stork"
man:**SG ART** stork:**SG**	
Lì à nɛ́ à-dàalúŋ.	"It's a stork"
3INAN COP FOC PERS-stork:**SG**.	
Ǹ ňyɛ́ à-dàalúŋ.	"I've seen a stork."
1SG see **PERS**-stork:**SG**.	

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 19.10.1. *À-* is also *phonologically* similar to the clitic pronouns 15.1 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 *yẽ~a*.

19.10.1 With VPs and Clauses

Verb Phrases can be nominalised by the Personifier Clitic *À-* 19.10, which takes the place of a subject pronoun, in the sense "someone who ...":

Atʋm sɔ'
À-tʋ̀m   sɔ̄'
PERS-send **INDF.AN**
"Siloam" ("Someone sent someone else") 23.1 (Jn 9:7)

Apʋ-kpɛn'-baŋʋ dim
À-pʋ̄   kpɛ́ň' bàu̯ŋʋ   dím
PERS-**NEG.IND** enter circumcision individual:**PL**
"the Uncircumcised" 18.1 (Eph 2:11)

This is common in proverbs and similar set expressions:

À-dāa   yɛ́l kā'   tíīmm   ⁺ø.
PERS-**TNS** say **NEG.HAVE** medicine **NEG.**
"Did-say has no remedy." (No use crying over spilt milk.)

À-ňyɛ̄   nɛ̄   nīf   sɔ́ň'ɔ‿   À-wʋ̀m   tʋ̀ba.
PERS-see with eye:**SG** be.better.than **PERS**-hear ear:**PL**
"Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)

À-Kīdɩgɩ‿ ø Bū'ɵs
PERS-cross **SER** ask
"Crossed over and asked" (name of the constellation Orion.)

Apozotyel   "Doesn't-fear-trouble", character in KSS p35.
À-Pʋ̄-zɔ́t-yɛ̄l
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-zɔ́t-yēl   *dá   à   nɛ́   ò   sàam   bîig   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 kὲn   nɛ́ À-nà   kúʋ m̀ nūa   yír,   kà bà pū   kɛ́n
3PL go:**DIPF FOC PERS-IRR** kill   **1SG** chicken:**SG** house:**SG** and **3PL NEG.IND** go:**DIPF**
À-nɔ̄ɔs   bɛ́   yírē   +ø.
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 *Nɔ̄ɔs bɛ́.* "There are chickens, chickens exist."]

À-Tìιm   bɔ́dìg   yā
PERS-medicine get.lost **PFV**
Personal name [35.2], literally "Someone's medicine has got lost."

Nominalisations with *à-* can pluralise with *nàm*[a]:

À-zī'   ø   kpí   nàm kpîid   nɛ́ kà tɛ́ňbìd.
PERS -**NEG.KNOW SER** 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.")

20 Adverbial Phrases

20.1 Adverbial Phrases: Overview

Adverbial Phrases characteristically appear as Adjuncts within clauses and VPs. To a more limited extent they may appear as arguments of verbs 20.5, or (with the exception of proadverbs) within NPs as determiners or modifiers 19.7.2.3 19.8.2.3.

Adverbial Phrases may have morphologically distinctive Adverbs as heads, or may represent adverbial *uses* of NPs; such NPs 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 20.6. Absolute Clauses occur as Adverbs of Time/Circumstance 31.1, while Relative Clauses with pronouns expressing place or manner occur as corresponding types of AdvP. Coordination of AdvPs is possible only for those expressing time and place.

There is a basic syntactic distinction between AdvPs expressing Time, Circumstance or Reason on the one hand, and AdvPs expressing Place or Manner on the other. AdvPs expressing time, circumstance or reason usually appear as Clause adjuncts 28.1.1 before the clause subject, or as VP Adjuncts 23.6. 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* 33.2.

Thus **Mɔ̄ɔgʊ-n   mām   bɛ́.*   for "I'm in the bush."
       Grass:**SG-LOC 1SG.CNTR EXIST**.

is corrected by WK to

       Mɔ̄ɔgʊ́-n   kà mām   bɛ́.   "I'm in the bush."
       Grass:**SG-LOC** and **1SG.CNTR EXIST**.

20.2 Time and Circumstance

Adverbial Phrases expressing **time** may be instantiated by time Adverbs 17, but are very often simply nouns or NPs with temporal meanings, and no special marking; for examples see 35.9.

No formal distinction is made between a point in time and a period over which a state of affairs persists:

       Fʊ̀ ná kūl   bɛ̄og.
       2SG IRR return.home tomorrow.
       "You'll go home tomorrow."

Tì   kpɛ́lìm ànínā   dábɪsà bí'əlà.
1PL remain **ADV:**there day**:PL** few.
"We stayed there a few days."

Time AdvPs can be **coordinated**:

Bɛ̄ogʊ-n   nɛ̄ 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 31.1.1.

20.3 Place

The core adverb of place is 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 19.7.2.3 and by the behaviour of focus marking with locative complements in the verb phrase 33.1.2.4.

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:

mʊ̀'arī-n   "in a lake"
yʊ̄dá nī   "among names"
m̀ nī   "in me"
mān nī   "in me"

la'asʊg dɔɔdin nɛ suoya ni
là'asʊg   dɔ́ɔdī-n   nɛ̄   su̯ēyá   nī
assembly**:SG** house**:PL-LOC** with road**:PL LOC**
"in the synagogues and in the streets" (Mt 6:2)

Yīr$^{ε/}$ "house" has the exceptional sg and pl locative forms *yín^{nε} yáa-n^ε* which have the particular nuance "home", as in the parting formula 34:

Pʊ̀'ʊsɪm 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:

mʊ̀'arī-n lā

or   *mʊ̀'ar lā ní*   "in the lake"

Quantifiers may also follow the locative particle:

m gbana ni wusa   "in all my letters" (2 Thess 3:17, 1996)
m̀ gbàna ní 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 fʊ nini.
Kɛ̀m   Siloam búlʊgū-nι‿ ø   pía‿ fʊ̀   nīní.
Go:**IMP** Siloam well:**SG-LOC SER** wash **2SG** eye:**PL**.
"Go to the well of Siloam and wash your eyes." (Jn 9:7)

Ka Sʊntaana kpɛn' Judas [...] sʊnfʊn.
Kà Sūtáanà kpέň' Judas [...] súňfī-n.
And Satan   enter Judas [...] heart:**SG-LOC**.
"Satan entered Judas' heart." (Lk 22:3)

Ka Pailet lɛn yi nidibin la na ya'asi yɛli ba ye...
Kà Pailet lέm yī   nīdιbí-n   lā nā   yá'àsι‿ ø yέlì‿ bā   yɛ̄...
And Pilate again emerge person:**PL-LOC ART** hither again   **SER** 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 bɛ̀ dá'ā-n.   "He's at market."
Ò bɛ̀ sι̣á'arī-n.   "He's at the bush."
Ò bɛ̀ pɔ̄ɔgú-n.   "He's at the farm."
Ò bɛ̀ yín.   "He's at home."
Ò bɛ̀ sākulí-n.   "He's at school."
Ò bɛ̀ mɔ̄ɔgʊ-n.   "He's in the grasslands."
Ò bɛ̀ kɔ̄lιgι-n   "He's at the stream."
Ò bɛ̀ tūʊmι-n.   "He's at work."

More precise locative meanings are expressed with postpositions, many of which themselves include the locative particle 20.6.

> *Ò   dìgɩl   gbáṵ̀ŋ lā tɛ́ɛbʋ̀l lā zúg.*
> **3AN** lay.down book:**SG ART** table:**SG ART** upon.
> "She's put the book on the table."

> *Dāṵ   lā bɛ́ nɛ̄ dɔ́-kàŋā   lā pʋ́ʋgʋ̄-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 17.1 are "intrinsically locative." Syntactic considerations 19.7.2.3 33.1.2.4 suggest such words should in fact be regarded as accompanied by a zero allomorph of the locative particle:

> *Ò bɛ̀ Bɔ́k.*   "He's at Bawku." ILK
> *Ò bɛ̀ Tɛ́mpáan.*   "He's at Tempane." ILK
> *Ò kɛ̀ŋ Bɔ́k.*   "He's gone to Bawku."
> *Ò dìgɩl gbáṵ̀ŋ lā tɛ́ɛbʋ̀l lā zúg.* "She's put the book on the table." (above)

> *dàtìṵŋ*ᵓ or *dìtʋ́ŋ*ᵓ   "righthand"
> *dàgɔ̀bɩg*ᵃ   "lefthand"
> *àgɔ́l*ᴵᴱ or *àgɔ̄lá*⁺   "upwards"
> *lāllí*⁺   "far off"   (? *lāl ní*⁺)

Place names often have a locative proform in apposition, particularly to express rest at a place, as opposed to movement towards or away:

> *M̀ ná kɛ̄ŋ Bɔ́k.*   "I'm going to Bawku."
> *Fʋ̀ yúùg Bɔ́k kpɛ̄láa?*   "Have you been long in Bawku (here)?"
> *Fʋ̀ yúùg Bɔ́kàa?* SB   (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*⁺ᐟ or paraphrases like

> *Jerusalem tɛ́ŋī-n*   "in Jerusalem-land"

For examples of Kusaasi place names see 35.3.

Proforms used in locative heads of Relative Clauses are intrinsically locative, and consequently so is the Relative Clause as a whole 31.2:

biig la n be si'el la
bīig   lá   ǹ   bɛ̀   sīʼəl   lā
child:**SG ART COMP EXIST INDF.INAN ART**
"the place where the child was" (Mt 2:9, 1976)

ka mɔri fʊ keŋ zin'ikanɛ ka fʊ pʊ bɔɔda.
kà   mɔ̄rí‿ fʊ̀‿   ø   kɛ̄ŋ zíñ'-kànɪ   kà fʊ̀ pʊ̄   bɔ́ɔdā ⁺ø.
and have   **2SG.OB SER** 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:

*tèŋ-pʊ̄ʊgʊ-n*ᵋ/	"village"
pl *tèŋ-pʊ̄ʊdɪ-n*ᵋ/	

Note also the *time* expressions:

*bɛ̄og*ɔ	"tomorrow"
*bɛ̄ogʊ-n*ᵋ/	"morning"
sān-síʼə̄-n lā	"at one time, once..." 27.1.3
*yīigí-n*ᵋ	"at first"

Locative forms with or without the locative particle may appear as modifiers or determiners within a NP 19.7.2.3 19.8.2.3.

Locative AdvPs can be coordinated:

Nyalima na bɛ winnigin nɛ nwadigin nɛ nwadbibisin.
Ňyālɪmá   nà   bɛ̄   wínnìgī-n nɛ̄   ňwādɪgí-n   nɛ̄   ňwād-bíbɪsī-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" 20.6; similarly for proforms:

*àlá zùg*ɔ	"therefore"	*bɔ̄ zúg*ɔ	"why?"
*dìn zúg*ɔ	"therefore"		

20.4 Manner

Adverbial Phrases expressing manner may again be instantiated by proforms; there are also morphologically distinctive manner-adverb word types 17.

Manner AdvPs cannot be coordinated.

Reduplication of nouns forms a number of **distributive** Manner AdvPs:

dàbɪsɪr dábɪsìr	"day by day"
zīñ'ig zíñ'ìg	"place by place"

Reduplication of number words is similarly distributive 16.2.5.
Reduplication of manner-adverb *words* themselves is intensifying:

àmɛ̄ŋá mɛ̄ŋá	"very truly"
àsídà sídà	"very truly"

M̀ wʊ́m Kūsáàl bī'əlá.	"I know Kusaal a little."
1SG hear:**DIPF** Kusaal slightly,	

M̀ wʊ́m bī'əl bī'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 *sī'əm*m "somehow" as head: see 31.2.1.

Manner-adverbs resemble generic mass nouns in their syntactic behaviour in some respects, and conversely some *m*m Class abstract nouns derived from adjective stems are zero-derived to manner adverbs 17. On a syntactic level, even count nouns used in generic senses are encountered as AdvPs:

M̀   kɛ́ŋ nɔ̄bá.
1SG go   leg:**PL**.
"I went on foot." SB; WK corrected this to *M̀ kɛ́ŋ nɛ̄ nɔ̄bá*, using *nɛ̄* "with."

A prepositional phrase with *nɛ̄* occurs parallel to a count plural used adverbially in

À-ňyɛ̄   nɛ̄   nīf   sɔ́ñ'ɔ‿   À-wʊ̀m   tùba.
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 tʋ̀m bɛ́dʋgʋ̄.   "She's worked a lot."
Ò tʋ̀m pāmm.   "She's worked a lot."

Wūsa "all" readily switches from quantifying an object to adverbial use:

Bà gɔ̀sī‿ tí   wūsa.
3PL look.at **1PL.OB** all.
"They've looked at us all." WK (for: *Bà gɔ̀sí tì wūsa.* **3PL** look.at **1PL** all.)

This is not a universal property of quantifiers:

Bà gɔ̀sī tí bɛ́dʋgʋ̄.   "They've looked at us a lot." WK
Bà gɔ̀sí tì bɛ̀dʋgʋ̄.   "They've looked at a lot of us." WK

Numbers have specific forms for the adverbial meaning "so many times"
16.2.5; the other count quantifiers sometimes appear similarly as adverbs:

Bà gɔ̀sī tí bábɪgā.   "They've looked at us many times." WK
Bà gɔ̀sí tì bàbɪgā.   "They've looked at many of us." WK

20.5 AdvPs as Verb Arguments

The prototypical use of AdvPs is as adjuncts within the VP, or for Time or
Circumstance AdvPs, as Clause Adjuncts:

Fʋ̀ dúɵ wɛ̄lá ⁺ɵ?
2SG rise how   **CQ**?
literally "How did you rise?"; morning greeting.
(The form *dúɵ* of the verb *dūe* "rise" shows that the following word is part of
the same phrase 8.5.3.)

Bɛ̄ogʋ́‿   fʋ̀ ná kūl.
Tomorrow **2SG IRR** return.home.
"You're going home tomorrow." SB

However, AdvPs also occur as verb arguments.

AdvPs of all types can appear as subjects of the verb *àe̯ñ*[a] "be something
/somehow" 24.2. Adjectival verbs may also have an AdvP subject:

Yiŋ venl, ka poogin ka'a su'um.
Yìŋ   *véňl*   *kà*   *pōʊgʋ-n*   *kā'*   *súmm*   ⁺ø.
Outside be.beautiful and inside:**SG-LOC NEG.BE** good:**ABSTR NEG**.
"Outside is beautiful but inside is not good." (Acts 23:3, 1996)

Absolute Clauses may appear as subjects:

Kristo da kpii ti yɛla la kɛ ka ti baŋ nɔŋilim an si'em.
Kristo‿ø   *dà kpìi‿*   *tì*   *yēlá*   *lā kɛ́*   *kà tì báŋ*
Christ   **COMP TNS** die   **1PL** about **ART** cause and **1PL** realise
nɔ̀ŋılím‿ø   *àň*   *sī'əm.*
love   **COMP COP INDF.ADV**
"Christ dying for us makes us understand what love is like." (1 Jn 3:16)

Apart from this AdvPs do not usually appear as subjects: the sentence

Sʋ̀ŋā   *bɛ́.*   "OK it is." WK
Good:**ADV EXIST**.

 is probably to be analysed as involving a metalinguistic use of *sʋ̀ŋā*.

The verb *àe̱ň*ᵃ characteristically takes a manner-adverb or derived abstract noun complement in preference to an adjective <u>24.2</u>.

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.

Dā   *níŋì‿*   *àláa*   ⁺ø!   "Don't do that!" ("thus")
NEG.IMP do   **ADV**:thus **NEG**!

Relative Clauses with the proform *sī'əm*ᵐ "somehow" as head are accordingly used after verbs of cognition, reporting and perception of the type that take Content Clause complements <u>29.3</u>, to express the sense "say [etc] what ...":

Fʋ wʋm ban yɛt si'em laa?
Fʋ̀ *wʋ́m*   *bán*   *yɛ̀t*   *sī'əm*   *láa* ⁺ø?
2SG hear:**DIPF 3PL:COMP** say:**DIPF INDF.ADV ART**   **PQ**?
"Do you hear what they are saying?" (Mt 21:16)

Tiig wela bigisid on a si'em.

Tìig   wélà   bìgɪsɪd   ɔ́n   àň sī'əm.

Tree:**SG** fruit:**PL** show:**DIPF 3AN:COMP 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 23.3. Differing sandhi behaviour of *kā'ę̄* "not be" with respect to losing the final *ę̄* 8.5.3 may reflect whether a following locative AdvP is a VP complement or an adjunct:

Dāų̄   lā kā'   dɔ́ɔgū̄-n   láa ⁺ø.

Man:**SG ART NEG.BE** room:**SG-LOC ART NEG**.

"The man is not in the room."

Dāų̄   kā'ę̄ dɔ́ɔgū̄-n   láa ⁺ø.

Man:**SG NEG.BE** room:**SG-LOC ART NEG.**

"There's no man in the room."

20.6 Postpositions

Postpositions are adverbs with a pre-determiner 19.7.3. Most such adverbs are either literal locatives or metaphorical extensions of locatives. Postpositional phrases are AdvPs and can be preposed with *kà* 33.2 freely, unlike prepositional phrases with *nɛ̄* 21.1. 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 19.7.2.3.

Postpositions may not be coordinated, but their pre-determiners may be:

tinam nɛ fʋn sʋʋginɛ?   "between us and you?" (Mt 8:29)

tīnám nɛ̄   fūn sʋ́ʋgū̄-nɛ́   ⁺ø?

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")

   tɛ́ɛbʋ̀l lā zúg   "onto the table"

*Zūg*ᵓ˩ is frequently used metaphorically to express a **reason** "because of ..."

mān zūg	"on account of me"
dāṳ lā zúg	"on account of the man"
bɔ̄-zúgɔ̀?	"why?" (cf *bɔ̄ zúgɔ̄* "because" 27.1.3)

With an Absolute Clause as pre-determiner:

Mán   ňwɛ̀' dāṳ   lā zúg kà   police gbáň'a‿ m.
1SG:COMP strike man:**SG ART** upon and police seize   **1SG.OB**.
"Because I struck the man the police arrested me."

Although Reason AdvPs are, as here, frequently preposed with *kà* 33.2, they may occur as clause-level presubject adjuncts 28.1.1:

Pian'akanɛ ka m pian' tisi ya la zug, ya anɛ nyain.
Pi̯àň'-kànɪ   kà m̀ pi̯āň'‿ø   tísì yā   lā zúg, yà á   nɛ̄ ňyāe.
Word-**REL.SG** and **1SG** speak **SER** 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)

*zūgʋ́-n*ᵋ	"on"
tɛ́ɛbʋ̀l lā zúgū-n	"on the table"
*tɛ̄ŋír*ᵋ	"under" (*tɛ̄ŋ*ᵃ "ground")
tɛ́ɛbʋ̀l lā tɛ́ŋìr	"under the table"

Also as a locative adverb by itself:

Gɔ̀sɪm tɛ̄ŋír!	"Look down!", more commonly *Gɔ̀sɪm tɛ̄ŋɪ-n!*
*pūʋgʋ-n*ᵋ/	"inside" (*pūʋg*ᵃ "belly, inside")
dūk lā púʋgū-n	"in the pot"

Metaphorical:

ňwādɪs yúʋ̀m lā púʋgū-n	"months in the year"
bābá⁺	"beside" (*bābɪr*ᵋ/ "sphere of activity")
m̀ nɔ̄bá bàba	"beside my feet"
*sìsʋ̀ʋgū-n*ᵋ/	"between"
	replaced by *sʋ̀ʋgū-n*ᵋ/ in KB
tīnám nɛ̄ fūn sísʋ̀ʋgū-n	"between us and you"

tùən[ⁿɛ]	"in front of"
dāká lā túèn	"in front of the box"

As an adverb with no pre-determiner:

Gɔ̀sɩm túèn!	"Look to the front"

gbìn[ⁿɛ]	"at the bottom of" (*gbìn*[ⁿɛ] "buttock")
zūər lā gbín	"at the foot of the mountain"

ňyá'aŋ[ᵃ]	"behind; after (time)" (*ňyá'aŋ*[ᵃ] "back")
lì ňyá'aŋ[ᵃ]	"afterwards" as a presubject adjunct 28.1.1

   Nɛ̄'ŋá   ňyá'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"

   Fʋ̀ ná dı̄'e   tíìm   pʋ̱'á-bàmmā   lā sá'àn.
   2SG IRR receive medicine woman-**DEM.DEI.PL ART** among.
   "You'll get the medicine from those women."

yēlá[+]	"about, concerning" (pl of *yēl*[ˡɛ/] "matter, affair")
Bà yɛ̀l·ō‿ ø mān yēlá wūsa.	

   3PL say   **3AN.OB 1SG.CNTR** about all
   "They told him all about me."

kɔ̄ň'ɔkɔ̄	cf *àdàkɔ́ň'* "one" 16.2.3
m̀ kɔ̄ňʼɔkɔ̄	"by myself"
1SG by.self	

21 Prepositions

There are two basic prepositions: *nɛ̄* "with" and *wōʋ* "like"; others are either loanwords or originated from serial-verb constructions. Prepositional phrases function as clause adjuncts. They do not form components of Noun Phrases (except for *báa yīnní* 21.2.)

Neither prepositions, nor their objects, can be coordinated.

For prepositional phrases as verb complements see 23.4.

21.1 Core Prepositions

nɛ̄ is "with" in both the "accompanying" and instrumental senses. The *nɛ̄* "and" which coordinates NPs and AdvPs 19.4 is presumably fundamentally the same word, although in that sense it is parallel in usage to *bɛ̄ɛ* and *kōʋ* "or", which do not behave as prepositions.

WK has forms of *nɛ̄* with bound personal pronouns:

*ní m*ᵃ	*ní tī*⁺ᐟ
*ní f*ᵓ	*ní yā*⁺ᐟ
n·ó⁻ᵒ [nŏ(:)]	*ní bā*⁺ᐟ
ní lī⁺ᐟ	

The *ne o* of the 1996 NT version is frequently read [nŏ] in the audio version.

Other speakers only use *nɛ̄* with free pronouns; WK has alternative forms also with *nɛ́* before those clitic pronouns which have a vowel in SF: *nɛ́ lì*, *nɛ́ tì*, *nɛ́ yà*, *nɛ́ 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 *nɛ̄*:

Lìgɩním‿ fʋ̀ nīf nɛ́ fʋ̀ nú'ùg.
Cover:**IMP 2SG** eye:**SG** with **2SG** hand:**SG**.
"Cover your eye with your hand."

Bà kèŋ nɛ̄ nɔ̄bá.   "They've gone on foot." WK
3PL go with leg:**PL**.

Dìm nɛ̄ Wīn, dā tʋ́'às nɛ̄ Wīnnɛ́ ⁺ø.
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 nɛ sumbʋgʋsʋm.
Kùlɪm   nɛ̄ sùmbūgʋsím.
Return.home:**IMP** with peace.
"Go home in peace." (Mk 5:34)

[*Bárɪkà   nɛ́   fʋ̀*] *kɛ̄n   kɛ̄n.*
[Blessing with **2SG**] arrival arrival.
"Welcome!" (a greeting template 34)

M̀   gɛ́ñ'   nɛ́   fʋ̀.   "I'm angry with you." SB
1SG get.angry:**PRV** with **2SG**.

wūʋ "like" occurs often after *wɛ̄n*^na/ "resemble" introducing its complement; the preposition *nɛ̄* also frequently occurs instead of *wūʋ*.

The object of comparison, whether introduced by *wūʋ* or by *nɛ̄* after *wɛ̄n*^na/, is followed by an empty particle *nɛ̄* after any object which does not already have the article *lā*^+/, even if it is a pronoun, or is specific:

wūʋ mān nɛ̄   "like me"
wūʋ búŋ nɛ̄   "like a donkey"

Ka o nindaa wenne nintaŋ ne.
Kà   ò   nīn-dáa   wɛ̄n   nɛ̄ nīntāŋ nɛ̄.
And **3AN** eye-face:**SG** resemble with sun:**SG** like.
"His face is like the sun." (Rev 10:1, 1996)

Alazugɔ mɔri ya'am wʋʋ wiigi nɛ...
Àlá zùgɔ̄,   mɔ̀rī yā'm wūʋ wīigí   nɛ̄...
Therefore, have sense like snake:**PL** like...
"Therefore, be wise as serpents ..." (Mt 10:16)

Wūʋ, *wɛ̄n wūʋ*, and *wɛ̄n nɛ̄* can also be used for "about" with numbers. The object is not followed by the redundant *nɛ̄* in this case:

wūʋ tūsá   àyí   "about 2000"
like thousand:**PL NUM:**two

The object of a comparison is often a *sɪ̄'əm* Relative Clause:

> *Ò   zɔ̀t   wōʋ búŋ   ǹ   zɔ̀t   sīˀəm   lā.*
> **3AN** run:**DIPF** like donkey:**SG COMP** run:**DIPF INDF.ADV ART**.
> "He runs like a donkey runs."

With pronoun objects WK has

> *wōʋ mān* LF *mánɛ̄*   *wúʋ tì*
> *wōʋ fūn*   LF *fúnɛ̄*   *wúʋ yà*
> *wōʋ ɔ̄n*ᴱ   *wúʋ bà*
> *wúʋ lì*

H toneme again appears before the Fixed-L pronouns.

WK permits phrases introduced by *wōʋ* to be preposed with *kà* [33.2](#), but rejects this construction for *nɛ̄* + NP:

> *Wōʋ búŋ   nɛ́ kà ò   zɔ́t.*
> Like donkey:**SG** like and **3AN** run:**DIPF**.
> "Like a donkey, he runs."

But   **Nɛ́ ḿ nú'ùg   kà ḿ sī'ɩs.*
> With **1SG** hand:**SG** and **1SG** touch.
> is not possible for "With my hand, I touched it."

A clausal object of *wōʋ* is typically a relative clause with *sīˀəm* [31.2.1](#), but *wōʋ* can also be construed with a following Content Clause [29.3](#):

> *M pian'adi tisidi ya wʋʋ ya anɛ m biis nɛ.*
> *Ḿ   pi̯áň'adī‿ø tísìdī‿ yá   wōʋ yà á nɛ́ ḿ bīis   nɛ̄.*
> **1SG** speak:**DIPF SER** 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)

21.2 Loanwords

Báa (Hausa *bâa* "not exist") is used to express constituent negation. It takes an object like a preposition; see further [32.4](#).

Two Hausa loanwords which are used as conjunctions [27.1.3](#) are also used as prepositions. For pronoun objects they use the free forms.

àsɛ́ɛ= "except for" (← Hausa *sai*)

> *àsɛ́ɛ Wínà'am*   "except for God" (calquing the Twi *gye Nyame*)

hālí⁺ "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 *ħatta:* (Heath 2005.)

> *O daa pʊn anɛ ninkʊʊd hali pin'ilʊgʊn sa.*
> *Ò   dāa pún   à   nɛ̄ nīn-kʊ́ʊ̀d   hālí   pīň'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)

Before a manner-adverb *hālí* means "even" or just "very"

> *Lì   tɔ̀ȩ   hālí bɛ́dʊgū.*   "It's very difficult."
> **3INAN** be.bitter until much.

The adverb itself may be ellipted:

> *Lì tɔ̀ȩ hālí.*   "It's very difficult."

Hālí in the adverbial sense "even" may be preposed with *kà* 33.2:

> *Hali ka nidib mɔr ban'adnam na.*
> *Hālí   kà   nīdɪb   mɔ̄r báň'àd-nàm   nā.*
> Even and person:**PL** have sick.person-**PL** hither.
> "People even brought the sick" (Acts 5:15)

21.3 Compound Prepositions

Expressions deriving from Serial VP constructions with an auxiliary following the main VP 26.3.2 have given rise to compound prepositions:

Wɛ̄n nɛ̄ *X* and **wɛ̄n wūʋ** *X* have become prepositional phrases, to the extent that the entire sequence *wɛ̄n* + preposition + object can be preposed with *kà* 33.2, and a change of polarity can occur before it:

> *Da lo ya nindaase, wenne foosug dim la niŋid si'em la.*
> *Dā   lɔ́ yà nīn-dáasɛ̄ ⁺ø, wɛ̄n   nɛ̄   fɔ̄ɔsúg dím   lá‿ ø*
> **NEG.IMP** tie **2PL** eye-face:**PL NEG**, resemble with puff:**GER** individual.**PL ART COMP**
> *nìŋɪd   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 nɛ̄** "together with" likewise derives from a serial-verb construction:

...mɔr ya'am yinne la'am nɛ tɛn'ɛsa yinne.
... mɔ̄r yā'm yīnní là'am   nɛ̄   tɛ̄ň'ɛsá yīnní.
... have sense one   together with thought one.
"... had one mind together with one thought." (Acts 4:32)

Hālí also forms compound prepositions:
Hālí nɛ̄ and **hālí là'am nɛ̄** are found before *ǹ*-Clauses with the meaning "despite, even though":

hali nɛ man daa sɔbi tisi ya si'em la, m daa pʋ sɔbi li
hālí nɛ̄ mán   dāa sɔ̄bɩ‿ø tísì‿yā   sī'əm   lā
even with **1SG:COMP TNS** write   **SER** give   **2PL.OB INDF.ADV ART**
ǹ̄ dāa pʋ̄   sɔ̄bí‿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 nɛ on daa an yɛlsʋm wʋsa daan la, o da lieb nɔŋdaan...
Hālí là'am   nɛ̄ ɔ́n   dāa áň yɛ̄l-súm   wūsa dáàn   lā,
Even together with **3AN:COMP TNS COP** matter-goodness all   owner:**SG ART**,
ò   dà lìəb   nɔ̄ŋ-dáàn...
3AN TNS become poverty-owner:**SG**...
"Although he possessed every blessing, he became poor..." (2 Cor 8:9)

Hālí báa means "even":

Hali baa lampɔdi'esidib mɛ niŋid ala.
Hālí báa làmpɔ̄-dí'əsìdɪb mɛ́   nìŋɪd   àlá.
Even   tax-receiver:**PL**   also do:**DIPF ADV:**thus.
"Even tax-collectors do that." (Mt 5:46)

Hali baa bama wʋsa ya'a na zɔ ka basif, man kʋ basi fɔ.
Hālí báa bàmmā   wūsa yá' nà zɔ́   kà   básì‿   f,
Even   **DEM.DEI.PL** all   if **IRR** run and abandon **2SG.OB**,
mān   kʋ́   bāsɩ‿   fɔ́   ⁺ø.
1SG.CNTR NEG.IRR abandon **2SG.OB NEG**.
"Even if they all run away and leave you, *I* will not leave you." (Mt 26:33)

22 Verbal Predicators

22.1 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 Verbal Predicator; as they may intervene between the verb and the predicator category particles, they are also described in this section 22.7, although they are not part of the Verbal Predicator syntactically. They comprise "Particle-Verbs", 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 Verbal Predicator is subject to Independency Marking 22.6. This is primarily a tone overlay 22.6.1.1, but there are associated segmental features: the particle *yā*[+] after phrase-final Perfective forms 22.6.2.1 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 verb flexion *-m*[a] of Variable Verbs is a portmanteau marker of Imperative Mood along with positive polarity and Independency 22.6.2.2 11.1.

The Verbal Predicator shows no agreement. Apparent number agreement in imperatives is due to the incorporation of the postposed 2nd pl subject pronoun [ya].

The Verbal Predicator thus consists of a single verb word, along with proclitic and enclitic particles which occur in a fixed order:

	Tense		Mood		P/Vb		LE1	LE2
lɛ̀ɛ	*dàa*	*nàm*	ø ↔ *pū̄*	*pòn*	VERB	*n*[ɛ]	*m*[a]
	sàa		ø ↔ *dā*	*lɛ̀m*		[ya]	*ɾ*[ɔ]
	ø		*nà* ↔ *kʊ̀*	*tì*			o
	pà'			*kpɛ̀lɪm*			*lɪ*[+]
	sà			*là'am*			*tɪ*[+]
	dāa			*dɛ̀ŋɪm*			*ya*[+]
	dà			*ňyɛ̄ɛ(tɪ)*			*ba*[+]
				...			

All elements other than the verb are optional; however, the ø 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 ↔ Negative.

P/Vb "Particle-Verbs" 22.7.2; LE1, LE2 are Liaison Enclitic slots 22.7.3.

For *lɛ̀ɛ* "but" see 22.7.1; for *nàm* "still" see 22.3.

Aspect-focussing *nɛ̄*$^{+/}$ is formally a Verb Phrase particle which immediately follows the Verbal Predicator 33.1.2.1.

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.

22.2 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 22.6.1.1. 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 *nɛ̄*$^{+/}$** 33.1.2 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 *nɛ̄*$^{+/}$) and "habitual" (without *nɛ̄*$^{+/}$) aspects; for Stative Imperfectives see 22.2.2.1.

This aspectual use of *nɛ̄*$^{+/}$ 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 *nɛ̄*$^{+/}$ may not occur 33.1.2.3.

The focus particle *nɛ̄*$^{+/}$ 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 33.1.2.1.

22.2.1 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 22.2.2.1.

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 22.3.3. 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   kpì yā.*   "She's died."
> **3AN** die **PFV**.

> *Sāa dāa ní.*   "It rained." (before yesterday.)
> Rain **TNS** rain.

> *Sāa pá' nì   yā.*   "It rained." (earlier today.)
> Rain **TNS** rain **PFV**.

but *Sāa ní yā.*   "It has rained."
> Rain rain **PFV**.   The time is unspecified: "Perhaps the grass is
>   still wet, or I am explaining that the area is not
>   really a desert." (WK)

Other events and processes can be conceptualised as being simultaneous with the moment of utterance, so that the Perfective is appropriate. This resembles the English use of the simple present as an **instantaneous present**:

> *Ò   yèl yɛ̄ ...*   "He says ...." (translating for the foreign doctor)
> **3AN** say that ...

Performatives naturally fall into this category:

M̀ pʊ́'ʊ̀s yā.   "Thankyou", "I thank you."
1SG greet **PFV**.   (cf Hausa *Naa goodèe*, also perfective)

M̀ sI̯ák yā.   "I agree."
1SG agree **PFV**.

Verbs of perception and cognition (often correponding to English "stative" verbs that do not use the progressive present) frequently appear as present perfectives, once again corresponding to English simple present:

M̀ ňyɛ́ nū'-bíbɪsá‿ àtáň'.
1SG see hand-small:**PL NUM**:three.
"I can see three fingers."

M̀ tɛ́ň'ɛ̀s kà ...   "I think that ..."
1SG think and ...

In Serial VP constructions and in complex clauses, the choice of Perfective over Imperfective implies that the event is complete. Consequently, with Serial VPs the order of VPs when the first has perfective aspect is iconic, with constituent order constrained to follow event order <u>26.1</u>. Thus while English might say: "Two men stood with them, dressed in white", Kusaal must have

Ka dapa ayi' yɛ fupiela zi'e ba san'an.
Kà dāpá‿ àyí   yɛ́   fū-píəlà‿   ø   zì'e   bà   sā'an.
And man:**PL NUM**:two dress shirt-white:**PL SER** 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:

Ňwādɪsá‿ àtáň'   kà fʊ̀ ná mɔ̄r bīig   lā   n   kɛ̄   nā.
Month   **NUM**:three and **2SG IRR** have child:**SG ART SER** 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 <u>31.1.1</u>. In the same way, narrative generally features chains of tense-unmarked Sequential Clauses <u>28.3.2</u> with Perfectives describing events strictly in order.

22.2.2 Imperfective

22.2.2.1 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 zùlɪm.	"It's deep."
3INAN be.deep.	

M̀ mɔ́r pu̯'ā.	"I have a wife."
1SG have wife:**SG**.	

M̀ bɔ́ɔdī‿ f.	"I love you."
1SG want **2SG.OB**.	

In English, "stative" verbs characteristically do not use the progressive aspect: "I have a car", not *"I am having a car." Kusaal Descriptive Verbs similarly do not usually appear with the particle *nɛ̄*⁺ᐟ in its aspectual sense:

M̀ mɔ́r lɔ́r.	"I have a car."
1SG have car:**SG**.	
not *M̀ mɔ́r nɛ̄ lɔ́r.*	

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 *nɛ̄*⁺ᐟ follows such a verb it is interpreted as *focussing* either a VP constituent or the VP as a whole; *nɛ̄*⁺ᐟ can only be aspectual if there is an explicit time reference in the clause itself 33.1.2.3 or if the following constituent does not permit focussing with *nɛ̄*⁺ᐟ 33.1.2.2.

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 bɔ̀dɪg yā .	"It's got lost."
3INAN lose **PFV**.	

Lì   bɔ̀dɪg nɛ̄ .   "It's lost."
3INAN lose   **FOC**.

Resultative Statives, as expressing contingent or temporary states, are typically followed by the particle *nɛ̄*[+/] in its aspectual sense:

Ò   kpì nɛ̄.   "He's dead."
3AN die **FOC**.   (Not temporary, but still contingent.)

Lì   sàñ'am nɛ̄.   "It's spoilt."
3INAN spoil   **FOC**.

Ṁ   gɛ́ñ   nɛ̄.   "I'm tired."
1SG get.tired **FOC**.

Ṁ   gɛ́ñ'   nɛ̄.   "I'm angry."
1SG get.angry **FOC**.

Bà kʋ̀dʋg   nɛ̄.   "They're old."
3PL grow.old **FOC**.

Lì   bɔ̀dɪg nɛ̄.   "It's lost."
3INAN lose   **FOC**.

Ò   wàbɪlɪm nɛ̄.   "She's lame."
3AN lame   **FOC**.

Ò   gɛ̀ɛñm nɛ̄.   "She's mad."
3AN madden **FOC**.

Lì   pɛ̀'ɛl nɛ̄.   "It's full."
3INAN fill   **FOC**.

Lì   yɔ̀ nɛ̄.   "It's closed."
3INAN close **FOC**.

Ṁ   bʋ́g   nɛ̄.   "I'm drunk."
1SG get.drunk **FOC**.   [calque/borrowing of Hausa *bùgu*]

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 *nɛ̄*⁺/ is not compatible with the Perfective Aspect, so a Variable Verb Base Form followed by aspectual *nɛ̄*⁺/ 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   nɛ̄.*   "He's ugly."
> **3AN** get.ugly **FOC**.

> *Lì   pɛ̀lɪg nɛ̄.*   "It's white."
> **3INAN** whiten **FOC**.

> *Lì   sɔ̀bɪg nɛ̄.*   "It's black."
> **3INAN** blacken **FOC**.

> *Lì   mùɵ   nɛ̄.*   "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 *kpì*⁺ "die" or Patientive Ambitransitives 23.1 like *bɔ̀dɪg*ᵉ "lose, get lost." The only other transitive verbs I have found in this category express putting on clothing:

> *M̀ yɛ́   fūug.*   "I've put a shirt on."
> **1SG** put.on shirt**:SG**.

> *M̀ yɛ́   nɛ̄ fūug.*   "I'm wearing a shirt."
> **1SG** put.on **FOC** shirt**:SG**.

With Variable Verbs, only those expressing a change of state in the subject can have Resultative aspect, with the sole exception of the irregular verb *nɔ̀ŋ*ᵉ "love", which has a Base Form with Descriptive Aspect 11.1.1. After all other Variable Verb Base Forms, *nɛ̄*⁺/ cannot be aspectual and must be interpreted as focussing either a VP constituent or the entire VP 33.1.2.3.

22.2.2.2 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 *nɛ̄*⁺ᐟ in its aspectual sense "at the time referred to in particular."

Without *nɛ̄*⁺ᐟ, this aspect implies that the subject has a propensity to the achievement, accomplishment or activity expressed by the verb (often called "habitual aspect"):

Ò   ɔ̀ñbɪd.   "He chews."
3AN chew:**DIPF**.

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

Nīigí   ɔ̀ñbɪd   mɔ̄ɔd.   "Cows eat grass."
Cow:**PL** chew:**DIPF** grass:**PL**.

Nīigí   ɔ̀ñbɪd   nɛ̄ mɔ̄ɔd.   "Cows eat *grass*." ("What do cows eat?")
Cow:**PL** chew:**DIPF FOC** grass:**PL**.   Aspectual *nɛ̄*⁺ᐟ is not possible with a generic
                                          subject: Constituent focus 33.1.2.4.

Nīigí   lā   ɔ́ñbìd   mɔ̄ɔd.   "The cows eat grass."
Cow:**PL ART** chew:**DIPF** grass:**PL**.

Nīigí   lā   ɔ́ñbìd   mɔ̄ɔd   lā.
Cow:**PL ART** chew:**DIPF** grass:**PL ART**.
"The cows eat the grass."

Nā'-síəbà   ɔ́ñbìd   mɔ̄ɔd.   "Some cows eat grass."
Cow-**INDF.PL** chew:**IPF** grass:**PL**.

Nā'-síəbà   ɔ́ñbìd   mɔ̄ɔd   lā.
Cow-**INDF.PL** chew:**DIPF** grass:**PL ART**.
"Some cows eat the grass."

M̀   zíñ'i.   "I sit."
1SG be.sitting.

Ṁ   záñl   dāká lā.   "I carry the box in my hands."
1SG carry.in.hands box**:SG ART**.

With *nɛ̄⁺ᐟ*, Dynamic Imperfective typically has a meaning analogous to the English "progressive" or "continuous."

Ò   ̀ǹbıd   nɛ̄.   "He's chewing."
3AN chew**:DIPF FOC**.

Ṁ   zíñ'i   nɛ̄.   "I'm sitting."
1SG be.sitting **FOC**.

Ṁ   záñl   nɛ̄ 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* 19.3 contributes to making this the natural interpretation in

Nīdıb   kpîd   nɛ̄.   "People are dying."
Person**:PL** die**:DIPF FOC**.

22.3 Tense

22.3.1 Tense Particles

Tense particles come first in the Verbal Predicator, preceded only by *lɛ̀ɛ* "but." They are mutually exclusive. The markers are

dàa	"day after tomorrow"
sàa	"tomorrow"
ø	present, or unmarked 22.3.3
pà'	"earlier today"
sà	"yesterday"
dāa	before yesterday
dà	before the time marked by *dāa*

The day begins at sunrise. Thus the common morning greeting:

Fʋ̀ sá gbìs wɛ̄lá ⁺ø?   "How did you sleep yesterday?" i.e."last night"
2SG TNS sleep how   **CQ**?

The future tense markers require Irrealis Mood, except for cases where the main clause has been ellipted before a subordinate clause of purpose; in this case the verb may have future tense marking with the Imperative Mood:

> *Ò   sáa zàb nà'ab   lā.*   "Let him fight the chief tomorrow."
> **3AN TNS** fight chief:**SG ART**.

The tense particle *dāa* means "before yesterday" but can be used freely for even remote past. Some speakers seem not to use *dà* at all; the NT has numerous parallel passages where the same events are narrated in one passage with *dāa* and in another with *dà*. 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 29.3.2, relative tense marking in *ǹ*-Clauses within Sequential Clauses 28.3.2 and the use of the particle-verb *tì* 22.7.2.)

The auxiliary tense particle *nàm* means "still" or with a negative "yet." It can occur after the tense marker *ø*:

> *Tìɩm   lā nám bὲε ⁺ø?*   "Is there any medicine left?"
> Medicine **ART** still **EXIST PQ**?   ("Does the medicine still exist?")

> *dunia nam pʋ pin'il la*
> *dūnɩyá‿ ø   nàm pū   pīň'il lā*
> world:**SG COMP** still **NEG.IND** begin **ART**
> "before the world began" (Mt 25:34) ("The world having not yet begun.")

> *M̀ nám zī'‿   ø   ňyē̄ gbīgɩmnε ⁺ø.*
> **1SG** still **NEG.KNOW SER** see lion:**SG**   **NEG**.
> "I've never seen a lion." SB (see 26.3 on serial-verb idioms)

22.3.2 Other Constructions for Tense

My informants use the Remoteness Marker *n*ε 30.1.1 to make an earlier-today past with indicative meaning:

> *M̀ ɔ́ňbɩdī-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

 M̀   kúl   yā.   equivalent in usage to "I'm going home."
1SG return.home **PFV**.

instead uses a perfective verb form as an instantaneous present 22.2.1.

There are two periphrastic Indicative constructions for "to be about to ...":

(a) *bɔ̀ɔd*[a] "want" + gerund. The subject need not be animate.

Tìɩg   lā bɔ́ɔ̀d līig.   "The tree is about to fall."
Tree:**SG ART** want fall:**GER**.

Yʋ'ʋŋ bɔɔd gaadʋg, ka bɛog bɔɔd nier.
Yʋ́'ʋŋ bɔ́ɔ̀d gáadʋ̀g   kà bɛ̄og   bɔ́ɔ̀d níɘ̀r.
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 + *yɛ̄*-Purpose Clause. (Compare subject + *yɛ̄*-Content Clause 29.3.) This construction does require an animate subject.

M̀   yɛ́   m̀ ku̠ā sūmma.   "I'm going to hoe groundnuts."
1SG say **1SG** hoe groundnut:**PL**.

M̀   yɛ́   m̀ ki̠á nīm.   "I'm going to cut meat"
1SG say **1SG** cut meat:**SG**.

22.3.3 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 constrast with ø.

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:

Nīdɩb   kpîd   nɛ̄.   "People are dying."
Person:**PL** die:**DIPF FOC**.

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

* M̀   zíñ'i   nɛ̄.*   "I'm sitting down."
1SG be.sitting **FOC**.

Ò   gìm.   "She's short."
3AN be.short.

M̀   mɔ́r   pṵ'ā.   "I have a wife."
1SG have wife:**SG**.

Ò   kpì nɛ̄.   "She's dead."
3AN die **FOC**.

In isolation, it 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 <u>22.2.1</u>:

Ò   kpì yā.   "She's died."
3AN die **PFV**.

Ò   yèl yɛ̄ ...   "He says ...." (translating for the foreign doctor)
3AN say that ...

M̀   pʊ́'ʊ̀s yā.   "(I) thank you." cf Hausa *Naa goodèe*.
1SG greet **PFV**.

M̀   sḭák yā.   "I agree."
1SG agree **PFV**.

M̀   ňyɛ́ nū'-bíbɩsá‿   àtáñ'.   "I can see three fingers."
1SG see hand-small:**PL NUM**:three.

M̀   tɛ́ñ'ɛ̀s kà ...   "I think that ..."
1SG think and ...

Tense-markers can, however, be omitted if there is another time reference in the clause itself, such as a time adverb, or with the Irrealis Mood, or with the today-past usage of the Remoteness Marker:

    M̀   sá zàb   ná'àb   lā   sú'ə̀s.
    1SG TNS fight chief:**SG ART** yesterday.

and *M̀   záb   ná'àb   lā   sú'ə̀s.*
    1SG fight   chief:**SG ART** yesterday.
    both acceptable as "I fought the chief yesterday."

    Fʊ̀ sáa nà kūl.
    2SG TNS IRR return.home.

and *Fʊ̀ sáa nà kūl   bēog.*
    2SG TNS IRR return.home tomorrow.

and *Fʊ̀ nà kūl   bēog.*
    2SG IRR return.home tomorrow.
    ... all acceptable for "You'll go home tomorrow."

cf   *Fʊ̀ ná kūl.*
    2SG IRR return.home.
    "You will go home." (later today, tomorrow, next week ...)

    M̀   pá' ɔ̀ňbɪdī-n   sūmma.
    1SG TNS chew:**DIPF-REM** groundnut:**PL**.

and *M̀   ɔ́ňbɪdī-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 28.3.2.

22.4 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*ᵉ see 30.1.1.

Indicative is the unmarked mood. It uses the negative particle *pū*. 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 22.3.2. It is used instead of the Irrealis in clauses with *yà*' "if", though with some exceptions in negative polarity 30.1. It is the only mood which permits the use of the particle *nɛ̄*[+/] 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] 22.6.2.2 11.1 but otherwise the verb word coincides in form with the Indicative.

> *Ò   vòl   tíìm   kà   ò   nɔ́bìr pū   zábɛ̄* [+]*ø.*
> **3AN** swallow medicine and **3AN** leg:**SG NEG.IND** fight **NEG**.
> "She took medicine and her leg didn't hurt." WK

> *Ò   vòl   tíìm   kà   ò   nɔ́bìr dā   zábɛ̄* [+]*ø.*
> **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 27.1.2. The **-*m***[a] imperative of Variable Verbs is Perfective by default:

> *Kɔ̀ňsɪm!*   "Cough!"

Imperatives without tone overlay from Independency Marking make perfective/dynamic imperfective distinctions in the usual way by verb flexion:

> *Dā   kɔ́ňsɛ̄* [+]*ø!*   "Don't cough!"
> **NEG.IMP** cough **NEG**!
> (To a patient during an eye operation under local anaesthetic, who just has coughed.)

> *Dā   kɔ́ňsɪdā* [+]*ø!*   "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 28.2.3.

The particle *nɛ̄*[+/] 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-* [dɪmɪla] [dɪmala]

Dìmī-ní‿   àlá!   "Keep ye on eating!"   [dɪmɪnɪla] [dɪmɪnala]
Eat:**IMP-2PL.SUB ADV:**thus!

Kùɵsɪmī-ní‿   àlá   kī   n   tísɪdī‿   bá.
Sell:**IMP-2PL.SUB ADV:**thus millet **SER** 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!"   [dɪgɪla] [dɪgala]

Zì'é àlá!   text *zi'ela*   "Be still!" (Jesus to the storm, Mk 4:39, 1976)

Dìgī-ní‿   àlá!   "Keep (ye) on lying down." [dɪgɪnɪla] [dɪgɪnala]
Be.lying.down-**2PL.SUB ADV:**thus!

Āa-ní‿   àlá   bāaňlím!   "Be (ye) quiet!"
COP-2PL.SUB ADV:thus quiet:**ABSTR**!

Bɛ̄e-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 the serial-verb construction.

Gɔ̀sɪm!   "Look!"
Look:**IMP**!

Gɔ̀sɪmī‿ ø!   "Look ye!"
Look:**IMP 2PL.SUB**!

Dā   gɔ̄sɛ ⁺ø!   "Don't look!"
NEG.IMP look **NEG**!

Kɛ̀l   kà ò gɔ̄s!   "Let her look!"
Cause:**IMP** and **3AN** look!

Kὲm   nā   n   gɔ̄s!   "Come and look!"
Come:**IMP** hither **SER** look!

Dɔ̀l!   "Follow!"
Follow!

Dɔ̀llī‿ ø!   "Follow ye!"
Follow **2PL.SUB**!

Dɔ̀llī‿ m!   "Follow me!"
Follow **1SG.OB**!

Dɔ̀llī-ní‿   m!   "Follow ye me!"
Follow-**2PL.SUB 1SG.OB**!

Mɔ̀r   nīn-báalìg!   "Have pity!"
Have eye-pity!

Irrealis Mood expresses future statements and questions and has the preverbal mood markers *nà* (positive) *kὺ* (negative.) Tone Pattern LO verbs show a tone perturbation to all-M tonemes in this mood. <u>7.3</u>.

The Irrealis Mood distinguishes aspects by verb flexion like the Indicative, but *nɛ̄$^{+/}$* 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 <u>30.1</u>.

22.5 Polarity

Verbal Predicator negation markers are preverbal particles which combine this function with mood marking. They appear after tense markers but before Particle-Verbs. The negation markers induce the appearance of a clause final Negative Prosodic Clitic which causes the clause-final word to appear in Long Form <u>8.1</u>; on the position of the clitic see further <u>32.3</u>.

Aspectual use of *nɛ̄$^{+/}$* is not possible with Negative Polarity <u>33.1.2.3</u>.

Indicative Mood is negated by *pū* (for some speakers *bū*, as in Toende Kusaal.) Imperative Mood is negated by *dā*; conversely, forms which are negated by *dā* are Imperative. Irrealis Mood is negated by *kʋ̀*, which *replaces* the positive Irrealis marker *nà*. Younger speakers sometimes use *kʋ̀* for *pū*, but none of my informants accepts this.

> *Ò   zàb   ná'àb   lā.*   "He's fought the chief."
> **3AN** fight chief:**SG ART**.

> *Ò   pū   záb   nà'ab   láa* ⁺*ø.*
> **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**!

> *Dā   záb   nà'ab   láa* ⁺*ø!*   "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   kʋ̀   zāb ná'àb   láa* ⁺*ø.*
> **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 32.1.1 *mìt* "see that it doesn't happen that...", *zī'*⁺ "not know", *kā'ę̄*⁺ "not be, not have", and *kà'asɩgē* (LF only) "not exist."

22.6 Independency Marking

The Verbal Predicator of a main clause 28.1 or Content Clause 29.3 is marked as Independent. The marking is absent in all subordinate clause types other than Content Clauses, and all VPs in a Serial VP chain after the first. It is also absent in all clauses introduced by *kà* other than Content Clauses, regardless of whether they are subordinate or insubordinate 27.2 28.3.2. The marker is primarily a tonal overlay, but has associated segmental manifestations.

22.6.1 Tonal Features

22.6.1.1 Tone Overlay

The tone overlay of Independency Marking is manifested only on Verbal Predicators in Positive Polarity and Indicative or Imperative Mood. It affects only the *first* word in the Predicator capable of carrying it: first the preverbal particle *lɛ̀ɛ* "but" 22.7.1, next any Particle-Verb, then the verb itself. Preverbal particles which have intrinsic M tonemes (past tense marker *dāa*, Particle-Verb *ňyɛ̄ɛ*) 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" *gɔ̄s*ᵋ "look at" *nà'ab*ᵃ "chief"):

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 gɔ̄s ná'àb lā.	"And I've looked at the chief."
Kà ò gɔ̄s ná'àb lā.	"And he's looked at the chief."

Intrinsic tones with preverbal particles having intrinsic M tonemes:

Ò dāa záb nà'ab lā.	"He didn't fight the chief."
Ò dāa gɔ̄s ná'àb lā.	"He didn't look at the chief."

Intrinsic tones with Negative Polarity:

Ò pū záb nà'ab láa.	"He hasn't fought the chief."
Ò pū gɔ̄s ná'àb láa.	"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'e̱*⁺ "not be, not have" and *zī'*⁺ "not know":

Dā̱ṳ   lā kā'   ná'abā ⁺ø.   "The man isn't a chief."
Man:**SG ART NEG.BE** chief:**SG NEG.**

Bʋ̀ŋ-bāňʼad   zī'   yɛ̄ tɛ̄ŋ   tʋ́llā ⁺ø.
Donkey-rider:**SG NEG.KNOW** that ground:**SG** be.hot **NEG**.
"He who rides a donkey does not know the ground is hot." (Proverb)

Intrinsic tones in subordinate clauses, without Independency Marking:

Ò yá' zàb nà'ab lā.	"If he fights the chief."
Ò yá' gɔ̄s ná'àb lā.	"If he looks at the chief."
Ɔ́n zàb nà'ab lā.	"He having fought the chief"
Ɔ́n gɔ̄s ná'àb lā.	"He having looked at the chief."

Tone overlay manifesting Independency Marking in main clauses:

M̀ záb ná'àb lā.	"I've fought the chief."
Ò zàb ná'àb lā.	"He's fought the chief."
M̀ gɔ́s ná'àb lā.	"I've looked at the chief."
Ò gɔ̀s ná'àb lā.	"He's looked at the chief."
Ò sà zàb ná'àb lā.	"He fought the chief yesterday."
Ò sà gɔ̀s ná'àb lā.	"He looked at the chief yesterday."

Tone overlay in Content Clauses, which have Independency Marking 29.3:

Bà yèl yɛ́   ò   zàb   ná'àb   lā.
3PL say that **3AN** fight chief:**SG ART**.
"They say he's fought the chief."

Bʋ̀ŋ-bāň'ad   zī'   yɛ̄ tɛ̄ŋ   túllā ⁺ø.
Donkey-rider:**SG NEG.KNOW** that ground:**SG** be.hot **NEG**.
"The donkey-rider doesn't know the ground is hot."
(*Tɛ̄ŋ túl.* "The ground is hot." *tʋ̄l*^la/ "be hot")

Examples for the M of the final host mora before Liaison, using the verbs *bɔ̀dɪg*^ɛ "lose", *yādɪg*^ɛ/ "scatter" and the clitics *m*^a "me" *ba*⁺ "them":
Intrinsic tones:

bɔ̀dɪgɪ m^a	*bɔ̀dɪgɪdī m*^a/ (dipf)	*bɔ̀dɪgɪ bā*^+/
yādɪgí m^a	*yādɪgídī m*^a/ (dipf)	*yādɪgí bā*^+/

After tone overlay:

bɔ̀dɪgī m^a/	*bɔ̀dɪgɪdī m*^a/	*bɔ̀dɪgī bá*⁺
yàdɪgī m^a/	*yàdɪgɪdī m*^a/	*yàgɪdī bá*⁺

Before a Liaison Word with initial Fixed-L toneme 8.3.1: contrast

	Bà kʊ̀ʊdī‿ bá.	"They kill them."
	3PL kill:**DIPF 3PL.OB**.	

with	*Bà kʊ̀ʊdí‿ bà būʊs.*	"They kill their goats."
	3PL kill:**DIPF 3PL** goat:**PL**.	

and	*Bà gɔ̀s·ō‿ ø.*	"They looked at her."
	3PL look.at **3AN.OB**.	

with	*Bà gɔ̀sʊ́‿ 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.

22.6.1.2 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 Verbal Predicator has Independency Marking.

Examples with *zàb*ᵉ "fight" *gɔ̄s*ᵉ "look at" *nà'ab*ᵃ "chief":

Without Independency Marking (Sequential Clause 28.3.2):

*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 gɔ̄s** ná'àb lā.*	"And I've looked at the chief."
*Kà **ò gɔ̄s** ná'àb lā.*	"And he's looked at the chief."

With Independency Marking:

*M̀ **záb** ná'àb lā.*	"I've fought the chief."
*Ò **zàb** ná'àb lā.*	"He's fought the chief."
*M̀ **gɔ́s** ná'àb lā.*	"I've looked at the chief."
*Ò **gɔ̀s** ná'àb lā.*	"He's looked at the chief."

The first and second person bound subject pronouns *are* followed by L Raising before a Verbal Predicator with Independency Marking, *unless* they are immediately preceded by *yɛ̄* "that" (here introducing a Content Clause 29.3):

Ò   *tèň'ɛs kà*   ***ò***   ***zàb*** *ná'àb*   *lā.*
3AN think   and **3AN** fight chief**:SG ART**.
"He thinks he's fought the chief." WK

Ò   *tèň'ɛs kà*   ***m̀***   ***záb*** *ná'àb*   *lā.*
3AN think   and **1SG** fight chief**:SG ART**.
"He thinks I've fought the chief."

but   *Ò*   *yèl yɛ́*   ***ò***   ***zàb*** *ná'àb*   *lā.*
3AN say that **3AN** fight chief**:SG ART**.
"He says he's fought the chief."

and   *Ò*   *yèl*   ***yɛ́***   ***m̀***   ***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 Verbal Predicator has Irrealis Mood, or there is a preverbal particle carrying a M toneme:

Ò   ***kʊ̀***   *zāb*   *ná'àb*   *láa* ⁺*ø.*
3AN NEG.IRR fight chief**:SG ART NEG**.
"He will not fight the chief."

Ò   ***lὲɛ*** *dāa* *záb* *nà'ab*   *lā.*
3AN but **TNS** fight chief**:SG ART**.
"But he did fight the chief."

Ò   *yèl*   ***yɛ́***   ***m̀***   ***nà*** *zāb* *ná'àb*   *lā.*
3AN say that **1SG IRR** fight chief**:SG ART**.
"He says I'll fight the chief."

22.6.2   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 preverbal particle *lὲɛ* "but", by a particle verb, or by a preverbal 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.

22.6.2.1 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 bɔ̀dɪg yā.	"It's got lost."
3INAN get.lost **PFV**.	

Lì bɔ̀dɪg yàa ⁺ø?	"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 33.3:

Ya yidigya bɛdegʋ.	"You are very much mistaken." (Mk 12:27)
Yà yídìg yā bɛ́dʋgū.	
2PL go.astray **PFV** much.	

M̀ pʋ́'ʋ̀s yā bɛ́dʋgū.	"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 gɔ̀s yā.	"She's looked."
3AN look **PFV**.	

Ò sà zàb yā.	"She fought (yesterday.)"
3AN **TNS** fight **PFV**.	

M̀ téñ'ɛ̀s 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   gɔ̀sī‿   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   gɔ̄s.   "And he looked." (No Independency Marking)
And **3AN** look.

Ò pū   zábɛ̄ ⁺ø.   "He's not fought." (Negative Polarity)
3AN NEG.IND fight **NEG**.

Ò pū   gɔ̄sɛ ⁺ø.   "He's not looked." (Negative Polarity)
3AN NEG.IND look **NEG**.

Descriptive Stative, not perfective:

Ò gìm.   "She's short."
Ò mì'.   "She knows."
Ò nɔ̀ŋ.   "She loves him." <u>11.1.1</u>

22.6.2.2 Imperative -*m*ᵃ

Imperatives of Variable Verbs which are affected by the tone overlay of
Independency Marking adopt the flexion -*m*ᵃ 11.1.

Gɔ̀sɩm!	"Look!"
Gɔ̀sɩmī‿ m!	"Look at me!"
Look:**IMP** **1SG.OB**!	
Gɔ̀sīm.	"Look at me!" vowel absorbed 3
Gɔ̀sɩmí‿ fʊ̀ nú'ùg!	"Look at your hand!"
Look:**IMP** **2SG** hand:**SG**!	
Gɔ̀sím fʊ̀ nú'ùg!	*id* with ɩ-vowel absorbed 3

Without tone overlay on the verb word:

Dā gɔ̄sɛ ⁺ø!	"Don't look!" (Negative Polarity)
NEG.IMP look **NEG**!	
Kɛ̀l kà ò gɔ̄s!	"Let her look!"
Cause:**IMP** and **3AN** look!	(No Independency Marking: subordinate)
Kɛ̀m nā n gɔ̄s!	"Come and look!"
Come:**IMP** hither **SER** look!	(No Independency Marking after **SER**)

With overlay, but not a Variable Verb:

Dɔ̀llī‿ m!	"Follow me!"
Follow **1SG.OB**!	
Dɔ̀llī-ní‿ m!	"Follow ye me!"
Follow-**2PL.SUB 1SG.OB**!	(-*ní*- for -*ya* *ɲa before Liaison 8.2.1.2)
Dì'əm!	"Receive!"
Dì'əmī‿ ø!	"Receive ye!"
Receive:**IMP 2PL.SUB**!	

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!" 22.4
Receive:**IMP-2PL.SUB ADV:**thus!

22.7 Clitics Bound to the Predicator

Clitic Subject Pronouns 15.1 are bound to the predicator, and linked with it to the extent that they are involved in the tonal manifestations of Independency Marking 22.6.1.2. Post-subject particles 27.1.4 capable of following clitic subject pronouns are phonologically bound bound to the predicator.

In this section I will treat *lὲɛ* "but", along with Particle-Verbs, on the grounds that they intervene between tense/aspect markers and the verb, and Liaison Enclitics, which precede the focus particle *nɛ̄⁺ᐟ* when it is an enclitic aspect marker.

22.7.1 *Lὲɛ* "but"

lὲɛ "but", like a particle-verb, prevents the tone overlay of Independency Marking from falling on the verb, and is then itself followed by L Raising. *Lὲɛ* precedes even tense particles.

Kà   ò   lɛ́ɛ dāa záb   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   m̀   pi̱àǐn'ad lā   lɛ́ɛ kʋ̀   gāadɛ ⁺ø.
And **1SG** speech   **ART** but **NEG.IRR** pass   **NEG**.
"But my words will not pass away. (Mt 24:35, 1996)

Bà lὲɛ záb   nà'ab   lā.   "But they've fought the chief." WK
3PL but fight chief:**SG ART**.

Kà   bà lɛ́ɛ zàb   nà'ab   lā.   "But they've fought the chief." WK
And **3PL** but fight chief:**SG ART**.

Lὲɛ záb   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...
Lὲε ìəmī-ní‿   ò   nā'am   sʋ́'ʋlìm   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.

*Lὲε gɔ́sìm   ná'àb   lā!   attempted: "But look at the chief!"
 But look.at:**IMP** chief:**SG ART**!

to   *Lὲε gɔ̄s   ná'àb   lā.*
        But look.at chief:**SG ART**.

22.7.2 Particle-Verbs

Particle-verbs are of varied character, united only by their position immediately before the verb. Some, at least, originated from older serial-verb constructions. All carry the Independency Marking tone overlay in place of the following main verb (cf *lὲε* "but" 22.7.1.) A derivational suffix *-m-* is present in several Particle-Verbs 13.2.1.4.

pʋ̀n   "previously, already"

Ò   pʋ̀n   záb nà'ab lā.   "He's already fought the chief."
3AN already fight chief:**SG ART**.

Kà   ò   pʋ́n   zàb nà'ab lā.
And **3AN** already fight chief:**SG ART**.
"And he's already fought the chief."

lὲm   "again" (cf *lὲb*ᵋ "return")

Ò   lὲm   záb nà'ab lā.   "He's fought the chief again"
3AN again fight chief:**SG ART**.

Kà   ò   lɛ́m   zàb   nà'ab   lā. "And he's fought the chief again."
And **3AN** again fight chief:**SG ART**.

Ò pū   lέm zàb nà'ab láa ⁺ø.
3AN NEG.IND again fight chief:**SG ART NEG**.
"He hasn't fought the chief again."

Ò nà lɛ̄m záb nà'ab   lā. "He'll fight the chief again."
3AN IRR again fight chief:**SG ART**.

M̀ nīf   lέm zábìd nɛ̄.   "My eye is hurting again."
1SG eye:**SG** again fight   **FOC**.

Ka so' kudin ku len nyee li ya'asa.
Kà   sɔ̄'   kūdɩm kú   lɛ̄m ňyέɛ_ lī   yá'asā ⁺ø.
And **INDF.AN** ever   **NEG.IRR** again see   **3INAN.OB** again   **NEG**.
"Nobody will ever see it again." (Rev 18:21, 1996)

kpὲlɩm "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 ***kpὲn***.

Ka o kpelim zu'om.
Kà   ò   kpέlìm   zū'ɵm.
And **3AN** immediately go.blind.
"Immediately he went blind." (Acts 13:11, 1996: KB *Ka o kpεn zu'om.*)

m biig Josef nan kpεn vυe.
m̀ bīig   Josef nán kpὲn vūe̩.
1SG child:**SG** Joseph still still   be.alive.
"My child Joseph is still alive." (Genesis 45:28)

là'am "together" (cf *là'as*ᵋ "gather"); as a main verb *là'am*ᵐ is "associate with."

ka nidib wυsa da la'am kpi nε o.
kà   nīdɩb   wūsa dá là'am   kpì nέ   ò.
and person:**PL** all   **TNS** together die with **3AN**.
"so all people died together with him." (2 Cor 5:14)

dὲŋɩm "beforehand" (cf *dὲŋ*ᵋ "go, do first": *m̀ dέŋī f* "I've got there before you."
*Dὲŋ*ᵋ is used with the same meaning in serial-verb constructions 26.3.)

Ka Wina'am pun deŋim nye bunsuma ye o tisi ti.

Kà   Wínà'am pún   dèŋɪm   ǎyɛ̄ būn-súmà   yɛ́ 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)

màlɪgɪm "again" (cf Toende Kusaal *malig* "do again")

Amaa man pian'ad la kʊ maligim gaadɛ.

Àmáa m̀ pi̱àǎ'ad lā kʊ́   mālɪgɪm gáadɛ̄ ⁺ø.

But   **1SG** speech   **ART NEG.IRR** again   pass   **NEG**.

"But my words will not pass away. (Mt 24:35)

ǎyɛ̄ɛ or **ǎyɛ̄ɛ tí** "habitually" NT *nyii ti* KT *ɛ̄ɛǎ, ɛ̄ɛǎ tí*. The main verb is imperfective and displays no tone overlay from Independency Marking.

Ò ǎyɛ̄ɛ zábìd   ná'àb lā.

3AN usually fight:**DIPF** chief:**SG ART**.

"He's accustomed to fight the chief." WK

Ò ǎyɛ̄ɛ gɔ̄sɪd   ná'àb   lā.

3AN usually look.at:**DIPF** chief:**SG ART**.

"He's accustomed to look at the chief." WK

Ò dāa ǎyɛ̄ɛ   zábìd   ná'àb   lā.

3AN TNS usually fight:**DIPF** chief:**SG ART**.

"He was accustomed to fight the chief." WK

Ò ɛ̄ɛǎ tí zàbɪd   nɛ̄ ná'àb   lā.

3AN usually fight:**DIPF FOC** chief:**SG ART**.

"He's accustomed to fight the chief." KT

Ò ɛ̄ɛǎ tí zìǎ'i   kpɛ̄lá.   "She's accustomed to sit there." KT

3AN usually be.sitting there.

Ò ɛ̄ɛǎ tí dīgɪ   kpɛ̄lá.   "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 serial VPs; for *hālí tì pāa ...* "up until" see 31.1.2. It is common with the Irrealis, perhaps in a "future perfect" sense.

hali ka Herod ti kpi.
hālí   kà   Herod   tí   kpì.
Until and Herod afterwards die.
"Until Herod had died." (Mt 2:15)

Kὲm‿   ø   tí   ňyɛ̄ dṵ'átà.
Go:**IMP SER** afterwards see doctor:**SG**.
"Go to see the doctor." SB

Noraug kʋ ti kaas zina nwaa, ka fʋ na ki'isim nɔɔra atan'.
Nɔ̄-dáʋ̀g   kʊ́   tī   kāas   zīná ňwāa ⁺ø
Hen-male:**SG NEG.IRR** afterwards cry.out today this   **NEG**
kà   fʋ̀   ná   kī'ɩsí‿ m   nɔ̄ɔrá‿   àtáň'.
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)

22.7.3 Liaison Enclitics

Liaison Enclitics precede all other Verb Phrase complements and also precede the focus particle *nɛ̄*⁺/ 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*ᵋ the Remoteness Marker 30.1.1; 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 28.2.3.

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 23.1 or by periphrasis with a serial-verb construction using *tìs*ᵋ "give" 26.3.

23 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 in the Serial VP construction 26.

"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 23.1.

NP and AdvP complements can be classified as direct and indirect objects, as predicative complements, or as locative complements.

23.1 Transitivity and Objects

Indirect objects precede direct, and objects precede other complements, except in cases of extraposition or dislocation due to weight 33.3. A clitic pronoun before a noun object therefore cannot be the direct object:

> **M̀ dāa tísì⌣ 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   kū nīdá   ⁺ø, dā   zūudá   ⁺ø...*
> **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   zámm ⁺ø.*   "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 *àe̯ň*[a] "be
something/somehow":

> *Mānı‿   ø   áň du̯'átà   àmáa fōn   pō   áňyā ⁺ø.*
> **1SG.CNTR SER COP** doctor:**SG** but   **2SG.CNTR NEG.IND COP**   **NEG**.
> "I'm a doctor but you aren't."

> *Mānı‿   ø   áň du̯'átà   kà fōn   mɛ́n áe̯ň.*
> **1SG.CNTR SER 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*
33.2 31.2.2 and with Adnominal *kà*-Clauses 29.2.

In replies to questions and reponses to commands, null anaphora of
complements may refer to an antecedent in the previous speaker's words:

> Q.   *Fὺ mɔ́r gbāu̯ŋ   láa ⁺ø?*   "Do you have the letter?"
>   **2SG** have letter:**SG** **ART** **PQ**?

> A.   *Ɛ̄ɛň, m̀   mɔ́r.*   "Yes, I have it."
>   Yes, **1SG** have.

> Q.   *Fὺ bɔ́ɔd·ó-o   ⁺ø?*   "Do you love her?"
>   **2SG** want-**3AN.OB PQ**?

> A.   *Áyìι, m̀ pō   bɔ́ɔdā ⁺ø.*   "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

> *banɛ zuud nidibi gban'ad*
> *bànı   zūud   nīdıbı‿   ø   gbāň'ad*
> **REL.PL** steal:**DIPF** person:**PL** **SER**   seize:**DIPF**
> "those who steal people by force" (1 Tim 1:10)

> *onɛ daa zuud*   "he who used to steal" (Eph 4:28)
> *ɔ̀nı   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:

> *Fʋ̀   túm   bɔ́-tʋ̀ʋma ⁺ø?*   "What (work) are you doing?"
> **2SG** work:**DIPF** what-work **CQ**?

> *Ka ya ninkʋda zaansim zaansima.*
> *Kà yà nīn-kúdà   zàaňsɪm   záaňsímà.*
> 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

yɔ̀⁺	"close"	*nāe*⁺ᐟ	"finish"
*zà'mɪs*ᵋ	"learn/teach"	*nā'mɪs*ᵋᐟ	"suffer/make suffer"
*bɔ̀dɪg*ᵋ	"lose, get lost"	*bàs*ᵋ	"go/send away"
dūe⁺ᐟ	"raise/rise"	*mā'e*⁺ᐟ	"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 22.2.2.1:

> *Kʋ̀lɪŋ   lā   yɔ́   nɛ̄.*   "The door is closed."
> Door:**SG ART** close **FOC**.

> *M̀ náa   tʋ̄ʋma lā.*   "I've finished the work."
> **1SG** finish work **ART**.

> *Tʋ̄ʋma lā náa   nɛ̄.*   "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 *kpì*⁺ "die."

Almost any verb can potentially take an indirect object expressing benefit, interest etc (this could lead to ambiguity in principle):

> *Ò   dʋ̀gʋ̄‿ m.*   "He cooked (for) me."
> **3AN** cook   **1SG.OB**.

Lì   màlɪsī‿ m.   "I like it." ("It's sweet for me.")
3INAN be.sweet **1SG.OB**.

Àláafʊ̀ bɛ́ɛ‿ 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; *tìs*ᵋ "give" is the prototypical example, along with causatives from transitive verbs like *dìɪs*ᵋ "feed" *nūlʊs*ᵋ/ "give to drink."

M̀   tís   ná'àb   lā   dāká.   "I've given the chief a box."
1SG give chief:**SG ART** box:**SG**.

M̀   tís   ná'àb   lā.   "I've given it to the chief."
1SG give chief:**SG ART**.

*M̀ tís dāká.   impossible as "I've given him a box", which is
M̀   tís·ō‿ø   dāká.
1SG give   **3AN.OB** box:**SG**.

Dā   tís·ò‿ø   sī̀'əla   ⁺ø.
NEG.IMP give   **3AN.OB INDF.INAN NEG**.
"Don't give her anything!"

Dā   tísē̄ ⁺ø!   "Don't give it to her!"
NEG.IMP give **NEG**.

M̀   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", *mɔ̄r* X *nīn-báalìg* or *zɔ̀* X *nīn-báalìg* "have pity on X", *nìŋ* X *yàddā* "believe X, believe in X", *zɔ̀* X *dābíə̀m* "fear X" 11.2.2.1, *sḭàk* X *nɔ̄ɔr* "obey X", *ǹwɛ̀'* X *nú'ùg* "make an agreement with X."

Wina'am na kad nidib poten'esua'ada saria.
Wínà'am ná kād nīdɪb   pú-tɛ̀ǹ'-sū̄'adá   sàríyà.
God   **IRR** drive person:**PL** inside-mind-secret:**PL** judgment.
"God will judge people's secret thoughts." (Rom 2:16, 1996)

Biisɛ, siakimini ya du'adib nɔya.

Bīīsɛ ⁺ø, *si̯àkımī-ní*‿   *yà dū'adıb nɔ́yà.*

Child:**PL VOC**, agree:**IMP-2PL.SUB 2PL** parent:**PL** mouth:**PL**.

"Children, obey your parents." (Eph 6:1)

Ò zɔ̀t·ō‿   *ø   nīn-báalìg.*

3AN feel.emotion:**DIPF 3AN.OB** eye-pity.

"She has pity on him."

Bà zɔ̀t·ō‿   *ø   dābíə̀m.*

3PL feel.emotion:**DIPF 3AN.OB** fear.

"They are afraid of him."

Bà nìŋ·ō‿ *ø   yáddā.*   "They believed her."

3PL do   **3AN.OB** assent.

Ò ňwɛ̀' ná'àb lā nú'ùg.   "He made an agreement with the king."

3AN strike king:**SG ART** hand:**SG**.

23.1.1 Passives

For passive meaning expressed by an empty *bà* "they" as subject see .

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:

M̀ nú dāam lā.   "I've drunk the beer."

1SG drink beer   **ART**.

Dāam lā nú 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**.

With Invariable Verbs, only the Dynamic group may be used as Passives.
Passives are limited aspectually to expressing punctual events 33.1.2.3.
The verb sɔ̄bᵋ "write" is a specialised usage of sɔ̄bᵋ "make/go dark", and is
Patientive Ambitransitive despite the English translation. It can form a Resultative:

       Gbàu̯ŋ   lā sɔ́b yā.   "The letter has been written."
       Letter:**SG ART** write **PFV**.

       Gbàu̯ŋ   lā sɔ́b nɛ̄.   "The letter is written."
       Letter:**SG ART** write **FOC**.

The Dynamic Imperfective sɔ̄bɩdᵃ/ seems to accept intransitive use only when
some adverbial modification is present:

       Gbàna sɔ́bɩd   zīná.   "Letters get written today." WK
       Letter:**PL** write:**DIPF** today.

       Gbàu̯ŋ   lā sɔ́bɩd   sʊ́ŋā.   "The letter is writing well (i.e. easily.)" WK
       Letter:**SG ART** write:**DIPF** good:**ADV**.

23.1.2 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:

       Lìgɩním‿ fʊ̀ nīf   nɛ́   fʊ̀ nú'ùg.
       Cover:**IMP 2SG** eye:**SG** with **2SG** hand:**SG**.
       "Cover your eye with your hand."

Thus Dìgɩním‿   fʊ̀ nú'ùg.   "Put your hand down."
       Lie.down:**IMP 2SG** hand:**SG**.

is commoner than

       Dìgɩlím‿   fʊ̀ nú'ùg.   "Put your hand down."
       Lay.down:**IMP 2SG** hand:**SG**.

Similarly *nìe*⁺ "appear" is usually intransitive, corresponding to transitive *nɛ̀ɛl*ᵋ "reveal", but *nìe*⁺ is much more frequent than *nɛ̀ɛl*ᵋ before *ò mɛ̄ŋ*ᵃ/ "him/herself" etc.

> *Ka o nie o mɛŋ Jemes san'an ...*
> *Kà   ò   níe   ò   mɛ̄ŋ Jemes sá'àn ...*
> And **3AN** appear **3AN** self James among
> And he revealed himself to James (1 Cor 15:7)

23.2 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:

> *Kɛl ka m liebi fʋ tʋmtʋm yinne.*
> *Kɛ̀l   kà m̀ líəbì‿ fʋ̀ tʋ̀m-tʋ̄m   yīnní.*
> Cause:**IMP** and **1SG** become **2SG** work-worker:**SG** one.
> "Make me [become] one of your servants" (Lk 15:19); dynamic *lìəb*ᵋ

> *M̀   á nɛ́ fʋ̀ tʋ̀m-tʋ̄m.*   "I am your servant."; stative *àe̯ň*ᵃ
> **1SG COP FOC 2SG** work-worker:**SG**.

*Àe̯ň*ᵃ "be something/somehow" 24.2 takes a predicative complement:

> *Ò   à nɛ̄ bīig.*   "She is a child."
> **3AN COP FOC** child:**SG**.

> *M̀ kā'   dṵ'átāa ⁺ø.*   "I'm not a doctor."
> **1SG NEG.BE** doctor:**SG NEG**.

As with other transitive Invariable Verbs, the complement is obligatory 23.1.

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 *pʋ̀d*ᵋ "name, dub" has as first object a NP with the head *yʋ̄'ʋr*ᵋ/ "name", and the name itself as second object; this may be introduced by *yɛ̄* "that."

Ka fʋ na pʋd o yʋ'ʋr ye Yesu.
Kà   fʋ̀   ná   púd   ò   yʋ̄'ʋr   yɛ̄   Yesu.
And **2SG IRR** dub **3AN** name:**SG** that Jesus.
"And you will call him Jesus." (Mt 1:21)

Ka o pʋd biig la yʋ'ʋr Yesu.
Kà   ò   púd bīig   lā   yʋ́'ʋ̀r   Yesu.
And **3AN** dub child:**SG ART** name:**SG** Jesus.
"And he called the child Jesus. " (Mt 1:25)

The verb *bùəl*ᵉ "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 *yɛ̄*:

on ka ba buon ye Pita la
ɔ̀n   kà   bà   búə̀n   yɛ̄   Pita   lā
REL.AN and **3PL** call:**DIPF** that Peter **ART**
"who was called Peter" (Mt 10:2)

The verb is often used passively 23.1.1 with *yʋ̄'ʋr*ᵉ/ "name" as subject and the name itself as complement:

dau sɔ' ka o yʋ'ʋr buon Joon.
dàu̯-sɔ́'   kà   ò   yʋ̄'ʋr   búə̀n   Joon.
man-**INDF.AN** and **3AN** name:**SG** call:**DIPF** John.
"a man [habitually 33.1.2.3] called John." (Jn 1:6)

The verb *màal*ᵉ "make" is used with an object and a resultative predicative complement in the 1976 NT in Acts 8:9

Ka o maal o meŋ nintita'ar.
Kà   ò   máàl ò   mɛ̄ŋ 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 meŋ ye o ane nintita'ar.
Kà   ò   dū'əsí‿ò   mɛ̄ŋ yɛ́   ò   à   nɛ̄   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   màan   gígìs   kà   bà wúm   kà   pi̯āň'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 an Adnominal *kà*-Clause <u>29.2</u> anchored to its object, *ňyɛ̄*⁺ "see, find" can have the sense "see as", resulting in a predicative sense:

M̀   dāa ňyɛ̄ dāu̯   lá   kà   ò   áň   ná'àb.
1SG TNS see man:**SG ART** and **3AN COP** chief:**SG**.
"I saw the man as a chief."

M̀   dāa pū   ňyɛ̄ dāu̯   lá   kà   ò   áň ná'abā   ⁺ø.
1SG TNS   NEG.IND see man:**SG ART** and **3AN COP** chief:**SG   NEG**.
"I didn't see the man as a chief."

23.2.1 Manner-adverbs

Manner-adverbs behave syntactically in many respects like abstract mass nouns, and indeed may arise from such noun usages <u>20.4</u>. One such instance is in their common usage as predicative complements.

Kusaal characteristically uses proadverbs of manner <u>17.1</u> as predicative complements in place of pronouns with abstract reference. i.e. the language says "be/do *how*" rather than "be/do *what*."

Dā   níŋì͜   àláa   ⁺ø!   "Don't do that!" ("thus")
NEG.IMP do   **ADV:**thus **NEG**.

Fʊ wʊm ban yɛt si'em laa?
Fʊ̀ wúm   bán   yὲt   sī'əm   láa ⁺ø?
2SG hear:**DIPF 3PL:COMP** say:**DIPF INDF.ADV ART   PQ**?
"Do you hear what they are saying?" (Mt 21:16)

Tiig wela bigisid on a si'em.
Tìɪg   wɛ́là   bìgɪsɪd   ɔ́n   àň sī'əm.
Tree:**SG** fruit:**PL** show:**DIPF 3AN:COMP COP INDF.ADV**.
"The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

The Indefinite proadverb *sī'əm*ᵐ is particularly commonly used in this way as head of a Relative Clause 31.2.1.

Transitive verbs like *nìŋ*ᵋ "do, make" *màal*ᵋ "make" may be followed by *àlá*⁺ "thus" or *wēlá*⁺ "how?" with following subordinate clause of purpose:

> *M na niŋ wala ka nyɛ faangirɛ?*
> *M̀   ná   nīŋ   wēlá   kà   ňyē   fāaňgírè   ⁺ø?*
> **1SG IRR** do   how and find   salvation   **CQ**?
> "What must I do to get saved?" (Acts 16:30)

The verb *àe̯ň*ᵃ "be something/somehow" typically has a derived manner-adverb or abstract noun as complement rather than an adjective as NP head 24.2:

> *Lì à nē zāalím.*   "It's empty."
> *Lì à nē būgʋsígā.*   "It's soft."
> *Lì à sʋ́ŋā.*   "It's good."

23.3 Locative Complements

Locative AdvPs 20.3 occur as complements after verbs of position and movement. Some verbs *require* a locative complement, and its absence is anaphoric.

> *M̀   yí   Bɔ̀k.*   "I left Bawku."
> **1SG** emerge Bawku.

> *M̀   yí   yā.*   "I've left [there]."
> **1SG** emerge **PFV**.

Others do not; so with *kēŋ*ᵋ⁄ "go, walk" *dìgɪn*ᵋ "lie down" *dīgɪl*ᵋ⁄ "lay down":

> *...ka pʋ tun'e kenna..*
> *...kà   pū   tūň'e‿   ø   kēnná   ⁺ø.*
>   **3AN   NEG.IND** be.able **SER** go:**DIPF   NEG**.
> "who couldn't walk." (Acts 14:8)

but   *Ò   kèŋ   Bɔ́k.*   "She's gone to Bawku."
      3AN go   Bawku.

> *Ò   dìgɪn   yā.*   "He's lain down."
> **3AN** lie.down **PFV**.

but   *Dìgınım   kpɛ̄!*   "Lie down here!"
       Lie.down:**IMP** here!

       Ò   dìgıl   gbáṳŋ   lā.   "She's put the book down."
       3AN lay.down book:**SG ART**.

but   *Ò   dìgıl   gbáṳŋ   lā   tɛ́ɛbʋ̀l   lā   zúg.*
       3AN lay.down book:**SG ART** table:**SG ART** upon.
       "She's put the book on the table."

The verb *bɛ̀*+ 24.1 without a complement is "exist":

       Wínà'am bɛ́.   "God exists."
       God   **EXIST**.

       Àláafʋ̀ bɛ́·o‿ ø.   "He's well." ("Health exists for him.")
       Health **EXIST   3AN.OB**.
       (Indirect object but no complement.)

With a locative complement, *bɛ̀*+ means "be in a place":

       Dāṳ   lā   bɛ́   nɛ̄   dɔ́-kàŋā   lā   pʋ́ʋgʋ̄-n.
       Man:**SG ART EXIST FOC** hut-**DEM.DEI.SG ART** inside:**SG-LOC**.
       "The man is inside that hut."

23.4 Prepositional Phrases as Complements

*Wɛ̄n*na/ "resemble" usually takes a phrase introduced by *nɛ̄* or *wʋ̄ʋ* 21.1.

       Ka o nindaa wenne nintaŋ ne.
       Kà   ò   nīn-dáa   wɛ̄n   nɛ̄   nīntāŋ nɛ̄.
       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 *nɛ̄* as complements from NP objects or complements preceded by Focus-*nɛ̄*+/ 33.1.2, unless the *nɛ̄* occurs in contexts where focus is prohibited like *ǹ*-Clauses. Thus *yī nɛ̄* X occurs in the sense "come from X" and the metaphorical sense "arise from X":

       Ǹ   yí   nɛ̄   Bɔ́k.   "I come from Bawku." SB
       1SG emerge **FOC** Bawku.

Yadda niŋir yitnɛ labaar la wʋmmʋg ni.
Yàddā-níŋìr yít nɛ̄ lábāar lā wʋ́mmʋ̀g 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 *ǹ*-Clause lack *nɛ̄*:

Meeri one yi Magdala "Mary who came from Magdala"
Meeri ɔ́nì 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 *dɔ̄l*[a/] "accompany a person in subordinate rôle", which with *nɛ̄* means rather "be in accordance with":

Li dɔlnɛ lin sɔb Wina'am gbauŋʋn si'em la ye ...
Lì dɔ̀l nɛ̄ lín sɔ̄b Wínà'am gbáu̯ŋū-n sī'əm lā yɛ̄ ...
3INAN follow with **3INAN:COMP** 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)

23.5 Clausal Complements

Certain verbs require a following clause with a Verbal Predicator in Imperative Mood introduced by a linker particle *kà* or *yɛ̄* 29.1. They include like *kɛ̄*[+] "let", *mìt* "let not", *nār*[a/] "be obliged to." Of these, *kɛ̄*[+] 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..." 32.1.1.

The verb *bɔ̀ɔd*[a] "want, love" takes a *yɛ̄*-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 *yɛ̄*-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'əm*, or a postpositional AdvP with *yɛ̄lá* "about." Most such verbs have an anaphoric sense without such an object.

The verb *àe̯ñ*[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 *yɛ̄* as a complement too 24.2.

Adnominal *kà*-Clauses 29.2 may appear as predicative clausal complements.

23.6 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 Verbal Predicator may contain clause-level adjuncts preceding the subject 28.1.1.

VP Adjuncts may be AdvPs, prepositional phrases, or subordinate clauses.

Bà dìt   nɛ̄ sā'ab   dɔ́-kàŋā̀   lā pʋ́ʋɡʋ̄-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:

Fʋ̀ bɔ́ɔ̀d bɔ́ ⁺ø?   "What do you want?"
2SG want what **CQ**?

M̀ bɔ́ɔ̀d yɛ́ fʋ̀ kūl.   "I want you to go home."
1SG want that **2SG** return.home.

Content clauses 29.3 are always complements:

Bʋ̀ŋ-bān̆'ad   zī'   yɛ̄ tɛ̄ŋ   tʋ́llā ⁺ø.
Donkey-rider:**SG NEG.KNOW** that ground:**SG** be.hot **NEG**.
"The donkey-rider doesn't know the ground is hot."

23.7 Verb-Phrase-Final Particles

The particles *nā* "hither" and *sà* "hence; ago" follow any complements. The verb *kɛ̄n̆⁺* "come" is invariably used with *nā*; the imperative SF *kɛ̀m*, which coincides for *kɛ̄n̆⁺* "come" and *kɛ̄ŋᵋ/* "go", is always disambiguated by the fact that it is followed by *nā* or *sà* respectively: *kɛ̀m nā!* "come" *kɛ̀m sá!* "go!"

Examples:

M̀ mɔ́r kú'ɛ̀m náa ⁺ø?   "Shall I bring water?" SB
1SG have water hither **PQ**?

bùɡʋ́m lā yít   yáa ní ná ⁺ø?
Fire   **ART** emerge:**DIPF** where **LOC** hither **CQ**?
"Where is the light coming from?"

Fù   yí   yáa   ní   ná   ⁺ø?
2SG emerge where **LOC** hither **CQ**?
"Where have you come from?" WK

Sà is often used temporally, for "since" or "ago":

O daa pʋn anɛ ninkʋʋd hali pin'ilʋgʋn sa.
Ò   dāa pún   à   nɛ̄ nīn-kúʋ̀d   hālí pīň'ilúgū̄-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 baŋ li nya'aŋ sa.
Fù ná báŋ   lì   ňyá'aŋ sá.
2SG IRR realise **3INAN** behind since.
"You will come to understand afterwards." (Jn 13:7, 1976)

Lazarus pʋn bɛ yaʋgʋn la daba anaasi sa.
Lazarus pún   bè   yáʋgū̄-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:

Kɛ̀m   nā   n   gɔ̄s.   "Come and look!" SB
Come:**IMP** hither **SER** look.

Man ya'a pʋ kɛɛn na tu'asini ba ...
Mān   yá' pū̄   kɛ̄ɛ-n   nā‿ ø tú'asī-ní‿bā...
1SG.CNTR if   **NEG.IND** come-**REM** hither **SER** talk-**REM**   **3PL.OB**...
"If I had not come to talk to them ..." (Jn 15:22)

Nā⁺ᐟ and *sà⁺* often follow any article *lā⁺ᐟ* ending an *ǹ*-Clause containing them:

ba diib n yit na'ateŋ la na zug
bà dīιb ǹ   yīt   ná'-tēŋ   lā nā   zúg
3PL food **COMP** 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*:

*ŏwādıg-kánì   kɛ̄n   **nā   lā***
month   **REL.SG** come:**DIPF** hither **ART**
"next month" SB

*dunia kanɛ ken **la na***
dūnıyá-kànı   kɛ̄n   lā   nā
world-**REL.SG** come:**DIPF ART** hither
"the world which is coming" (Lk 20:35)

*M diib anɛ ye m tʋm onɛ tʋmi m **la na** bɔɔdim naae.*
M̀ dīıb á   nɛ̄ yɛ́   m̀ tʋ́m ɔ̀nı   tʋ̀mı‿ m   lā nā   bɔ́ɔdìm‿ø   nāe.
1SG food **COP FOC** that **1SG** work **REL.AN** send **1SG.OB ART** hither will   **SER** finish.
My food is that I do the will of him who sent me completely. (Jn 4:34)

*ti tʋm onɛ tʋm man **na la** tʋʋma.*
tì   tʋ́m ɔ̀nı   tʋ̀m mān   nā   lā tʋ̄ʋma
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.
Nīdıb   lā dāa gūr   Zakaria   yîîb   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 lɛbʋg la na
Nīn-sáàl   Bîîg   lā lɛ́bʋ̀g   lā nā
Person-smooth:**SG** Child:**SG ART** return:**GER ART** hither
"the return of the Son of Man" (Mt 24:27)

24 The Verbs "to be"

24.1 *Bɛ̀⁺* "be somewhere, exist"

Bɛ̀⁺ 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 *bɛ̀⁺* means simply "exist":

Wínà'am bɛ́.		"God exists."
God	**EXIST**.	(Calque of the West African Pidgin *God dey*, implying "It'll all work out in the end.")

Àláafʊ̀ bɛ́·o‿ ø.		"She's well." ("Health exists for her.")
Health **EXIST** **3AN.OB**.		

Wāad	*bɛ́.*	"It's cold."
Cold.weather **EXIST**.		

Before a locative *bɛ̀⁺* means "be located in a place" if the locative is a complement 33.1.2.4, but "exist in a place" if the locative is a clause adjunct:

Mam bene moogin.   "I'm in the bush." BNY p8
Mām   bɛ́   nɛ̄ mɔ̄ɔgʊ-n.   (focus on the locative)
1SG.CNTR EXIST FOC grass:**SG-LOC**.

Moogin ka mam bɛ.   "I'm in the bush." BNY p10
Mɔ̄ɔgʊ́-n   kà   mām   bɛ́.   (*kà*-preposed locative)
Grass:**SG-LOC** and **1SG.CNTR EXIST**.

Dāʊ̯   lā bɛ́ nɛ̄ dɔ́-kàŋā   lā pʊ́ʊgʊ̄-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)

Dàʊ̯-sɔ̄'   bɛ́ dɔ́-kàŋā   lā pʊ́ʊgʊ̄-n.
Man-**INDF.AN EXIST** hut-**DEM.DEI.SG ART** inside:**SG-LOC**.
"There's a certain man in that hut." (focus on subject)

Bɛ̀⁺ is common in Presentational Constructions 33.4.
For the corresponding negative *kā'ę̄⁺* see 32.1.1. **pʊ̄ bɛ́* is not used.
Bɛ̀⁺ plays a rôle analogous to a "passive" to *mɔ̄r^a/* "have" in constructions like:

    Ṁ   bīig   bɛ́.   "I have a child."; equivalent to
    1SG child:**SG EXIST**.

    Ṁ   mɔ́r   bīig.
    1SG have child:**SG**.

    Ṁ   bīig   kā'e   ⁺ø.   "I have no child."; equivalent to
    1SG child:**SG NEG.BE NEG**.

    Ṁ   kā'   bīiga   ⁺ø.
    1SG NEG.HAVE child:**SG NEG**.

Bɛ̀⁺ can be used in direct commands:

    Bɛ́ɛ‿   ànínā.   "Be (i.e. stay) there!" SB
    EXIST   **ADV**:there.

    Bɛ̄e-ní‿   àlá   ànínā.   "Be ye there!" [bɛ:nala anina]
    EXIST-2PL.SUB ADV:thus **ADV**:there.

24.2 *À*e̯*ň*ᵃ "be something/somehow"

    The *e̯* of the SF of *àe̯ň*ᵃ is always lost except on the rare occurrence of the word phrase finally 8.5.3.

    Ò   à   nɛ̄ bīig.   "She is a child."
    3AN COP FOC child:**SG**.

    Lì   àň súŋā.   "It's good."
    3INAN COP good:**ADV**.

but   *Mānι‿ ø áň du̯'átà   kà fūn   mɛ́n áe̯ň.*
    1SG.CNTR SER COP doctor:**SG** and **2SG.CNTR** also **COP**.
    "I'm a doctor and you are too."

    The usual negative uses the negative verb *kā'e̯⁺* "not be":

    Ṁ   kā'   du̯'átāa ⁺ø.   "I'm not a doctor."
    1SG NEG.BE doctor:**SG NEG**.

    However, *pū áe̯ň* can occur, for example in contrasts:

Mānɩ‿ ø áň du̯'átà àmáa fūn pū áňyā ⁺ø .
1SG.CNTR SER COP doctor:**SG** but **2SG.CNTR NEG.IND COP** **NEG**.
"I'm a doctor but you aren't."

Àe̯ň[a] can be used in direct commands:

Àň bāaňlím!   "Be quiet!"
COP quiet:**ABSTR**!

Āa-ní‿ àlá bāaňlím!   "Be (ye) quiet!"
COP-2PL.SUB ADV:thus quiet:**ABSTR**!

As with English copular clauses, the sense may be ascriptive or specifying (cf Huddlestone and Pullum p266.) If it is **ascriptive**, the complement is non-referring, and normally focussed with *nɛ̄*⁺/ 33.1.2.4 if permitted 33.1.2.1 33.1.2.2:

Ò à nɛ̄ bīig.   "She is a child."
3AN COP FOC child:**SG**.

Ò à nɛ̄ bíígàa ⁺ø?   "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 33.1.1:

Mānɛ an kɔnbkem sʋŋ la.
Mānɩ‿ ø áň kɔ́ňb-kìm-sùŋ lā.
1SG.CNTR SER COP animal-tender-good:**SG ART**.
"I am the good shepherd." (Jn 10:11)

Mane a o.   "I am he." (Jn 18:5, 1976) 8.2.1.
Mānɩ‿ ø áň·o‿ ø.
1SG.CNTR SER COP 3AN.OB.

Nɔbibisi a mam disuŋ.
Nɔ̄-bíbɩsì‿ ø áň mām dí-sùŋ.
Hen-small:**PL SER COP 1SG.CNTR** food-good:**SG**.
"Chicks are my favourite food." BNY p13

Nɛ'ɛŋa an Yesu [...] *yaanam yɛla.*

Nɛ̄'ŋá   àň Yesu [...] *yáa-nám   yɛ́là.*

DEM.DEI.INAN COP Jesus [...] ancestor-**PL** about.

"This is the account of Jesus' ancestors." (Mt 1:1)

When the complement of *àe̯ňᵃ* is definite, the construction is usually specifying, with the subject in focus:

M̀   á   nɛ̄   dʋ'átà.   "I'm a doctor." ("What do you do?")

1SG COP FOC doctor:**SG**.   Ascriptive.

but   *Mānι‿   ø   áň   dʋ'átà   lā.*   "I'm the doctor." ("Which one is the doctor?")

1SG.CNTR SER COP doctor:**SG ART**.   Specifying.

However, definite complements may be in focus as "pragmatically non-recoverable" because of their internal structure or other factors: see 33.1.2.4.

Àe̯ňᵃ 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 20.5:

Zīná   a   nɛ̄   dá'a.   "Today [time] is market."

Today **COP FOC** market:**SG**.

Yiŋ venl, ka poogin ka'a su'um.

Yìŋ   vɛ́ňl   kà   pūʋgʋ-n   kā'   súmm   ⁺ø.

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 noŋi ya si'em la ane bedego.

Mán   nɔ̀ŋι‿ yā   sī'əm   lā   á   nɛ̄   bɛ́dʋgū.

1SG:COMP love   **2PL.OB INDF.ADV ART COP FOC** much.

"How much I love you [manner], is a lot." (2 Cor 7:3, 1976)

Àe̯ňᵃ is remarkable in being able to take a complement consisting of an adjective without any noun head. The article *lā⁺/* is permitted, but no other dependents apart from ideophones 19.8.1.3.

Lì à nɛ̄ píəlìg.   "It's white, a white one."

Lì à nɛ̄ píəlìg fáss.   "It's very white."

Bà à nɛ̄ 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 19.8.1.5.) More often, compounds with *nīn-* "person" or *būn-* "thing" + adjective 19.9.3 are used:

Ò	*à*	*nɛ̄*	*nīn-sʋ́ŋ.*	"She's a good person."
3AN	**COP**	**FOC**	person-good:**SG**.

Dīɩb	*á*	*nɛ̄*	*būn-sʋ́ŋ.*	"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 nɛ̄ būn-píə̀l-kàŋā.   "It is this white one."

Àẹ̌n̆[a] often takes a manner-adverb or deadjectival abstract noun as complement 23.2.1. Such constructions are ascriptive, using *nɛ̄*[+/] where syntactically permissible:

Lì	*à*	*nɛ̄*	*ná'anā.*	"It's easy."
3INAN	**COP**	**FOC**	easily.

Lì	*à*	*nɛ̄*	*zāalím.*	"It's empty."
3INAN	**COP**	**FOC**	empty:**ABSTR**.

Lì	*à*	*nɛ̄*	*būgʋsígā.*	"It's soft."
3INAN	**COP**	**FOC**	soft:**ADV**.

Lì	*àn̆*	*sʋ́ŋā.*	"It's good." 33.1.2.2
3INAN	**COP**	good:**ADV**.

Possible complements of *àẹ̌n̆*[a] also include Circumstance AdvPs 31.1 and even Content Clauses:

M diib anɛ ye m tʋm onɛ tʋmi m la na bɔɔdim naae.
M̀ dīɩb á nɛ̄ yɛ́ m̀ túm ɔ̀nɩ tʋ̀mɩ‿m lā nā bɔ́ɔdìm‿ø nāe.
1SG food **COP FOC** that **1SG** work **REL.AN** send **1SG.OB ART** hither will **SER** finish.
My food is that I do the will of him who sent me completely. (Jn 4:34)

25 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 *n lā.*	"That is X."
X *n ňwá.*	"This is X."
X *n wá nā.*	"This here is X."
X *lía?*	"Where is X?"

The particle *n* in these forms is the same phonologically as VP Serialiser *n* 8.2.2.1.2 and is here 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:

Kừlιηι◟ ø lā.   "That's a door."
Door:**SG SER** that.

Bɛ̄ogʋ◟ ø lā.   "See you tomorrow" ("That's tomorrow.")
Tomorrow **SER** that.

Fừ mà   lā lía   ⁺ø?
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 àwāe̲ lā lía   ⁺ø?
And **NUM:**nine **ART** be.where **CQ**?

Bɔ̄ɔ◟ ø lá ⁺ø?   "What's that?"
What **SER** that **CQ**?

Non-verbal Predicators may have a serial-verb construction appended to them, or there may be an Adnominal *kà*-Clause 29.2 modifying X; *kà* is used to introduce a subject different from X, the serial-verb construction otherwise. The resulting constructions are variants of *n*-clefting and *kà*-clefting 33.1.1 33.2.

Anɔ'ɔn nwaa yisid nidib tʊʊmbɛ'ɛdi basida?

Ànɔ́'ɔ̀n‿ø ňwáa‿ø yīsɩd   nīdɩb   túʊ̀m-bɛ̄'ɛdɩ‿ø básɩdà   ⁺ø?

Who   **SER** this   **SER** expel:**DIPF** person:**PL** deed-bad:**PL** **SER** throw.out:**DIPF** **CQ**?

"Who is this who drives people's sins out?" (Lk 7:49)

Ɔ̄nɩ‿   ø   lá   kà   fʊ̀ dāa ňyɛ̄t.

3AN.CNTR SER that and **2SG TNS** see:**DIPF**.

"This is he whom you saw." WK

Ànɔ́'ɔnì‿ø ňwá kà   tì   ňyɛ̄tá   ⁺ø?

Who   **SER** this and **1PL** see:**DIPF** **CQ**?

"Who is this that we can see?"

Bɔ̄ɔ‿ø lá   kà   m̀   ňyɛ̄tá ⁺ø?

What **SER** that and **1SG** see:**DIPF** **CQ**?

"What is that that I can see?"

26 Serial Verb Phrases

26.1 Serial Verb Phrases: Overview

Kusaal makes extensive use of serial verb constructions. A clause may contain a single verb phrase or Non-verbal Predicator, or may add potentially any number of further verb phrases each preceded by the Serialiser particle *n*[14]. (For the realisation of this particle, see 8.2.2.1.2.) Complements and VP adjuncts (even clauses) may be incorporated within such chains of VPs.

> *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-sɔ́b   máli̯āk dāa kēŋ n   yɔ́'ɔ̀g sārɪgá   dɔ́ɔ̀g*
> But   and head-one:**SG** angel:**SG TNS** go **SER** open prison:**SG** house:**SG**
> *zá'-nɔ̄ɔr   lā yū'ʊŋ-kán,   n   mɔ̄rí‿ bā   n   yīis   yíŋ.*
> compound-mouth:**SG ART** night-**DEM.SG**, **SER** have   **3PL.OB SER** 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   dàu̯-sɔ̄'   dūe n   zí'e   lá'asʊ̀g   lā   nīdɪb   sísʊ̀ʊgū-n,*
> And man-**INDF.AN** rise **SER** stand assembly:**SG ART** person:**PL** among-**LOC**,
> *n   áň Parisee níd   kà ò   yū'ʊr   búèn   Gamaliel, n áň ɔ́nì*
> **SER COP** Pharisee person:**SG** and **3AN** name:**SG** call:**DIPF** Gamaliel, **SER COP REL.AN**
> *pà'an   Wínà'am wádà lā yɛ́là,   kà lɛ́m àň yū'ʊr   dáàn*
> teach:**DIPF** God   law **ART** about, and again **COP** name:**SG** owner:**SG**
> *nīdɪb   sá'àn.*
> 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)

Verb phrases within such a chain may be coordinations of component verb phrases linked by *kà* "and" or *bɛ̄ɛ*/*kʊ̄ʊ* "or" 26.2.

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14) Many accounts of serial verb constructions specify that there must be *no* linking element by definition. However, in exactly parallel cases Toende Kusaal has zero for this Agolle particle *n*, and it seems arbitrary to deny the label to the Agolle construction because of a mere phonological difference. Other Western Oti-Volta languages mostly show *n* at least in slow speech; Dagaare (Bodomo 1997) has zero.

Normally only the first Verbal Predicator carries tense and polarity particles, which apply to the entire chain, but verbs each retain the Remoteness Marker n^{ε}, and while initial Irrealis Mood marking applies to the whole chain, a predicator following an Indicative may be in the Irrealis, in which case it will be marked itself.

The particle-verb *tì* is often found with non-initial VPs.

Change in polarity within a chain is rare; if there is a change of polarity the construction is normally replaced by coordination of Serial VPs 26.2 or an Adnominal *kà*-Clause (the only case where an Adnominal *kà*-Clause can have the same subject as the main clause before it 29.2):

> *Ka dau daa zin'i Listra ni ka pu tun'e kenna.*
> *Kà dāu̧   dāa zíñ'i Listra ní kà pū   tūñ'e‿ ø   kēnná ⁺ø.*
> And man:**SG TNS** sit   Lystra **LOC** and **NEG.IND** be.able **SER** go:**DIPF NEG**.
> "There was a man in Lystra who could not walk." (Acts 14:8, 1996)

> *Ka Joon kena lɔɔd nɔɔr ka pʋ nuud daam*
> *Kà Joon kē   nā‿   ø   lɔ̄ɔd nɔ̄ɔr   kà pū   nūud   dáamm ⁺ø.*
> And John come hither **SER** tie:**DIPF** mouth:**SG** and **NEG.IND** drink:**DIPF** beer   **NEG**.
> "John came, fasting and not drinking beer." (Mt 11:18)

A change from positive to negative polarity is possible, however:

> *Ya sieba bɛ kpɛla kʋ kpii asɛɛ ba ti nyɛ Wina'am na'am la.*
> *Yà sīəba bɛ́   kpēlá‿ø kú   kpīi ⁺ø, àsɛ́ɛ bà nà tì*
> **2PL INDF.PL EXIST** here   **SER NEG.IRR** die   **NEG**, except **3PL IRR** afterwards
> *ñyɛ̀ 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 licensed by the presentational character of the main VP 33.4.

Verbal Predicators in a chain each have their own aspect marking, which need not necessarily be the same throughout.

In all serial-verb chains the order of events, if they are not simultaneous, is iconic; it must be reflected in the order of the VPs 22.2.1.

Which VP in a chain is semantically the "principal" verb phrase is not determinable from the order; many verbs have characteristic "auxiliary" or subordinate rôles in chains and whether they precede or follow the "main" verb depends on their own semantics.

A Serial VP can be attached after a Non-verbal Predicator 25:

Anɔ'ɔn nwaa yisid nidib tʋʋmbɛ'ɛdi basida?

Ànɔ́'ɔ̀n‿ ø   ňwáa‿ ø   yīsıd   nīdıb   tʋ́ʋ̀m-bɛ̄'ɛdı‿ ø   básıdà   ⁺ø?

Who   **SER** this   **SER** expel:**DIPF** person:**PL** deed-bad:**PL** **SER** throw.out:**DIPF** **CQ**?

"Who is this who drives people's sins out?" (Lk 7:49)

Common patterns with verbs without specialised Serial-VP uses include
(a) main VP + imperfective VP expressing accompanying events:

Ka Ninsaal Biig la kena dit ka nuud...

Kà Nīn-sáàl   Bīig   kɛn   nā‿ ø   dít   kà nūud ...

And Person-smooth:**SG** child:**SG** come:**DIPF** hither **SER** 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' yɛ fupiela zi'e ba san'an.

Kà dāpá‿ àyí   yɛ́   fū-píəlà‿   ø   zì'e bà sā'an.

And man:**PL** **NUM**:two dress shirt-white:**PL** **SER** 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.

Amaa m pʋ mɔr antu'a zugʋ o yɛla na sɔbi tis na'atita'ar laa.

Àmáa m̀ pʋ̄   mɔ̄r ántù'a zúgʋ́‿ ò yɛ̄lá‿ ø nà sɔ̄bı ‿ ø tís

But   **1SG** **NEG.IND** have case:**SG** upon   **3AN** about **SER** **IRR** write   **SER** 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 pʋ kɛɛn na tu'asini ba ...

Mān   yá' pʋ̄   kɛ̄ɛ-n   nā‿ ø   tʋ́'asī-ní‿ bā...

1SG.CNTR if   **NEG.IND** come-**REM** hither **SER** talk-**REM**   **3PL.OB**...

"If I had not come to talk to them ..." (Jn 15:22) Note **REM** on both verbs.

Kɛ̀m‿ ø   tí   ňyɛ̄ dṳ'átà.

Go:**IMP** **SER** afterwards see doctor:**SG**.

"Go and see the doctor."

The Serial VP construction seems always to imply some subordination; the equivalent in translation in European languages would often be a participle modifying the main verb subject.

26.2 Coordination

VPs in serial-verb constructions can be coordinated with *kà* "and", *bɛ̄ɛ* "or", *kūʋ* "or"; *bɛ̄ɛ* and *kūʋ* are here synonymous.

> *Bà bɛ́ɛ‿ ànínā   n wā'ad   bɛ̄ɛ yʋ́'ʋm   yū'ʋmá.*
> **3PL EXIST   ADV:**there **SER** dance:**DIPF** or   sing:**DIPF** song:**PL**.
> "They're in the process of dancing or singing."

> *ka keŋ ... n ian'asid ka pian'ad n du'osid Wina'am yu'ur su'uŋa.*
> *kà   kɛ̄ŋ ... n   i̠ɑ̄ň'asíd kà   pi̠ɑ̄ň'ad   n   dū'ɵsíd*
> and go ...   **SER** leap:**DIPF** and praise:**DIPF SER** elevate:**DIPF**
> *Wínà'am yʋ́'ʋ̀r   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.*
> *Sɔ́gi̠à-sɔ̄'   kā'e n túm   kà yɔ̄ɔd   ò mɛ̄ŋá ⁺ø.*
> Soldier-**INDF.AN NEG.BE SER** work:**DIPF** and pay:**DIPF 3AN** self   **NEG**.
> "No soldier works and pays for himself." (1 Cor 9:7, 1976)

26.3 Auxiliary Verbs in Serial VPs

Certain verbs have characteristic specialised meanings in Serial VP constructions. Variable Verbs of this type agree in aspect with the main VP verb.

26.3.1 Preceding the Main VP

bɛ̀⁺ "exist, be somewhere" + *ànínā* "there" + imperfective "be in the process of ..."

> *Ò bɛ̀   ànínā   n ňwɛ́'ɛd bīig   lā.*
> **3AN EXIST ADV:** there **SER** beat:**DIPF** child:**SG ART**.
> "He's currently beating the child."

àe̠ň[a] "be something/somehow" : the construction seen in

> *Li anɛ o sidi sʋ'oe li.*
> *Lì   á nɛ́ ò sīdɪ‿   ø sʋ́'ʋ‿ līī.*
> **3INAN COP FOC 3AN** husband:**SG SER** own **3INAN.OB**.
> "It's her husband who owns it." (1 Cor 7:4)

is parallel to the Adnominal *kà*-Clause type 29.2 but with the subject of the main clause as antecedent. By ellipsis, this construction gives rise to *n*-focus 33.1.1.

zī' [+] "not know": *nàm zī' n* + perfective "never have X-ed"

    M̀ nám zī'‿   ø ňyε̄ gbīgɩmnɛ [+]ø.
    1SG still **NEG.KNOW SER** see lion:**SG**   **NEG**.
    "I've never seen a lion." SB

zàŋ [ε] and ***nɔ̄k*** [ε/] "pick up, take" with object "using" (of a literal object as instrument)

    M̀ nɔ́k   sʋ́'ʋgʋ̀‿ø kḭá nīm   lā.
    1SG pick.up knife:**SG** **SER** cut meat:**SG ART**.
    "I cut the meat with a knife."

    M̀ záŋí‿ m̀ nú'ugʋ̀‿ø sī'ɩs dāká lā.
    1SG pick.up **1SG** hand:**SG SER** touch box:**SG ART**.
    "I touched the box with my hand."

Not ??*M̀ záŋí‿ m̀ nú'ùg kà sī'ɩs dāká lā.*
      1SG pick.up **1SG** hand:**SG** and touch box:**SG ART**.
    ("I picked up my hand and touched the box.")

mɔ̄r [a/] "have" + object "bringing" with motion verbs:

    Dābá‿ àyɔ́pɔ̀ḛ   kà fʋ̀ mɔ̄r·ó‿ø‿ ø kε̄   nā.
    Day:**PL NUM**:seven and **2SG** have   **3AN.OB SER** come hither.
    "Bring her here in a week." WK

dɔ̄l [la/] "accompany in subordinate rôle, attend"

    Bà dɔ̀ll·ō‿ø‿   ø kε̄ŋ Bɔ́k.
    3PL follow **3AN.OB SER** go Bawku.
    "They went to Bawku with him."

Beginning verbs naturally precede:

    Ka Pita pin'ili pa'ali ba
    Kà Pita pīň'il‿ø pá'alì‿ bā.
    And Peter begin **SER** teach   **3PL.OB**.
    "Peter began to tell them." (Acts 11:4)

Tì   dέŋì‿   ø   tís·ò‿ ø   lɔ́r.
1PL precede **SER** give   **3AN.OB** car.
"We previously gave him a car." (*dèŋ*ᵋ "do/go first")

Ka dau sɔ' duoe zi'en la'asʋg la sʋʋgin ...
Kà   dàu̯-sɔ́'   dūe‿ø   zí'èn   là'asʋg   lā   sʋ́ʋgū-n ...
And man-**INDF.AN** rise **SER** 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:

M̀ kέŋì‿ø   pīə   nú'ùs.   "I went and washed my hands."
1SG go   **SER** wash hand:**PL**.

su̯'ā̄ᵃ "conceal" is used in this construction for "secretly":

Ka Na'ab Herod su'a buol baŋidib la ...
Kà   Nà'ab   Herod su̯'ā̄‿   ø   búèl bāŋɪdɪb   lā ...
And king:**SG** Herod conceal **SER** ask understander:**PL ART**...
"Herod secretly called for the wise men ..." (Mt 2:7)

ňyāŋᵋ/ means "overcome" as a main verb:

Ka m nyaŋ dunia.   "I have overcome the world." (Jn 16:33)
Kà   m̀ ňyāŋ   dūnɪya.
And **1SG** overcome world:**SG**.

As a Serial-VP auxiliary it means "carry out successfully, prevail in":

M̀ pū   ňyāŋɪ‿ø   záb nà'ab láa ⁺ø.
1SG NEG.IND prevail **SER** fight chief:**SG ART NEG**.
"I wasn't able to fight the chief."

Unlike English "can", *ňyāŋ*ᵋ/ expresses events and not states. Thus, to express present ability or inability, the auxiliary is in the Irrealis Mood:

M̀ kʋ́   ňyāŋɪ‿ø   záb nà'ab láa ⁺ø.
1SG NEG.IRR prevail **SER** 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   ŏyāŋídī-n‿   ø   kētí-n   kà nīdıb   vōʋ-n

law-**REL.INAN** prevail:**DIPF-REM SER** cause:**DIPF-REM** and person:**PL** be.alive-**REM**.

"a law which could make people live." (Gal 3:21, 1996)

tūň'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 pàŋı‿   ø   nà tūň'e sīʼəm

3PL TNS give and **3INAN** become.equal **3PL** strength **COMP 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 *tūň'e* occurs before both Perfective and Imperfective main verbs. The verb is thus Invariable. Unlike *ŏyāŋ*ᵉ/, *tūň'e* expresses a state, and both Indicative and Irrealis Moods can express present ability or inability.

ka li kʋ tun'e su'a.

kà lì   kʋ́   tūň'e‿ ø   sṳ'āa ⁺ø.

and **3INAN NEG.IRR** be.able **SER** hide   **NEG**.

"which cannot be hidden" (Mt 5:14)

So' kae' na tun'e dol na'anam ayii.

Sɔ̄' kā'e‿ ø ná tūň'e‿ ø dɔ̄l   ná'-nàmá‿ àyíi   ⁺ø.

INDF.AN NEG.BE SER IRR be.able **SER** follow king-**PL**   **NUM**:two **NEG**.

"Nobody can serve two kings." (Mt 6:24, 1976)

Fʋ tun'e nyɛt si'ela?

Fʋ̀ túň'e‿ ø   ŏyɛ̄t   sí'əlàa   ⁺ø?

2SG be.able **SER** see:**DIPF INDF.INAN** **PQ**?

"Can you see anything?" (Mk 8:23)

O pʋ tun'e pian'ada.

Ò pʋ̄   tūň'e‿ ø   pi̯āň'adá ⁺ø.

3AN NEG.IND be.able **SER** speak:**DIPF** **NEG**.

"He could not speak." (Lk 1:22)

Tūň'e occurs as auxiliary to *ŏyāŋ*ᵉ/ used as a main verb in

bozugo ba ku tun'e nyaŋe ba meŋa.

bɔ̄ zúgɔ̄ bà kʊ̀   tūň'e‿ ø   ňyāŋí‿ bà mɛ̄ŋá ⁺ø.

because **3PL NEG.IRR** be.able **SER** control **3PL** self   **NEG**.

"because they cannot control themselves." (1 Cor 7:5, 1996)

26.3.2 Following the Main VP

***tìs*ᴇ** "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.

Fʊ̀ pū   má' n   tìs nīn-sáalā   ⁺ø, àmáa fʊ̀ mà'

2SG NEG.IND lie **SER** give person-smooth:**SG NEG** but   **2SG** lie

n   tís nɛ̄ Wínà'am Sí-sʊ̀ŋ..

SER 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)

M̀ dāa kúès bʊ̀ŋʊ‿   ø   tís dʊ̱'átà.

1SG TNS sell   donkey:**SG SER** give doctor:**SG**.

"I sold a donkey to the doctor."

Not **M̀ dāa kúès bʊ̀ŋ   kà tís dʊ̱'átà.*

    1SG TNS sell   donkey:**SG** and give doctor:**SG**.

    ("I sold a donkey and gave it to the doctor.")

***gàad*ᴇ** "pass, surpass" can be used in comparisons:

Isaac kárìm‿ ø   gát   John.

Isaac read:**DIPF SER** pass:**DIPF** John.

"Isaac reads better than John." SB

À-Wīn   gím‿ ø   gát   À-Būgʊr.

PERS-Awini be.short **SER** pass:**DIPF PERS**-Abugri.

"Awini is shorter than Abugri." SB

Fʊ sid nɔŋ mam gat bamaa?

Fʊ̀ síd nɔ̀ŋ mām‿ø   gát   bámmáa ⁺ø?

2SG truly love **1SG**   **SER** pass:**DIPF DEM.DEI.PL PQ**?

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

***gàlıs*ᵋ** "get to be too much" (as in *Sāa gálìs yā* "There's too much rain") is used intransitively for "too much":

> *Ò   dì   n   gálìs.*   "She's eaten too much."
> **3AN** eat **SER** exceed.

> *Dā   kárìm   gbánà_ø gálısìdā   ⁺ø.*
> **NEG.IMP** read:**DIPF** book:**PL** **SER** exceed:**DIPF** **NEG**.
> "Don't read books too much."

***bàs*ᵋ** "send/go away" is used for "away, off, out":

> *Bà yìis dāu̯   lā_ø bás.*   "They threw the man out."
> **3PL** expel man:**SG** **ART** **SER** throw.out.

> *Anɔ'ɔn nwaa yisid nidib tʋʋmbɛ'ɛdi basida?*
> *Ànɔ́'ɔ̀n_ø ňwáa_ø yīsıd   nīdıb   túʋ̀m-bē̄'ɛdı_ø básıdà   ⁺ø?*
> Who   **SER** this   **SER** expel:**DIPF** person:**PL** deed-bad:**PL** **SER** throw.out:**DIPF** **CQ**?
> "Who is this who drives people's sins out?" (Lk 7:49)

Ending verbs naturally follow the main VP:

> *Ò   dìı_ø nāe.*   "He's finished eating."
> **3AN** eat   **SER** finish.

> *Ò   dìı_ø tíg.*   "She's eaten to satiety."
> **3AN** eat   **SER** become.satiated.

Motion verbs occur here with meanings like local prepositions e.g.

> *Ò kàt   kíkīr-bɛ́'ɛ̀d-nàm n yīisíd   nīdıb.*
> **3AN** drive:**DIPF** fairy-bad-**PL**   **SER** expel:**DIPF** person:**PL**.
> "He drives evil spirits out of people."

> *Jesus ban'ad buŋ n kpen'ed Jerusalem*
> *Jesus_ø   bāň'ad búŋ   n kpɛ́ň'ɛ̀d Jerusalem*
> Jesus   **COMP** ride:**DIPF** donkey:**SG** **SER** enter:**DIPF** Jerusalem
> "Jesus riding a donkey into Jerusalem" (picture caption, NT 1976)

> *Èǹrıgım‿   ø   páa‿ m.*
> Shift.along:**IMP SER** reach **1SG.OB**.
> "Shift along up to me." (*pāe*⁺ᐟ "reach")

_wɛ̄n_ⁿᵃᐟ "be like": as a main verb it occurs as in e.g.

> *Ka o nindaa wenne nintaŋ ne.*
> *Kà   ò   nīn-dáa   wɛ̄n   nɛ̄   nīntāŋ nɛ̄.*
> And **3AN** eye-face:**SG** resemble with sun:**SG** like.
> "His face is like the sun." (Rev 10:1, 1996: KB *Ka o nindaa nwɛnɛ winnig nɛ*)

Wɛ̄n is very common in Serial VP constructions. The verb is followed by a prepositional phrase as complement, using either *wōʋ* "like" or *nɛ̄* "with" 21.1. Any object without the article *lā*⁺ᐟ, even a pronoun or proper name, is followed by a meaningless *nɛ̄*. *Wɛ̄n* is used before numbers and measurements for "about, approximately." Numbers as NP heads are not followed by the meaningless *nɛ̄*:

> *Li anɛ wʋʋ maila ayi' nɛ.*
> *Lì   à nɛ̄ wōʋ maila àyí   nɛ̄.*
> **3INAN COP FOC** like mile   **NUM**:two like.
> "It's about two miles." (Jn 11:18)

but   *ka ba kal an wʋʋ kɔbiga nɛ pisi.*
> *kà bà kāl   áǹ wōʋ kɔ́bıgā nɛ̄   pīsí.*
> and **3PL** number:**SG COP** like hundred with twenty
> "and their number was about 120." (Acts 1:15)

Wɛ̄n + complement sequences have been reanalysed as prepositional phrases to a considerable degree 21.3.

_là'am_ᵐ "together" is also found as a particle-verb 22.7.2. In *là'am nɛ̄* "together with" the expression has become a compound preposition 21.3. It appears as a main verb meaning "associate with":

> *Bà pū   lá'amìd   tāabaa   ⁺ø.*
> **3PL NEG.IND** associate:**DIPF** each.other **NEG**.
> "They don't associate together."

_yà'as_ᵋ or **_yà'as_**ᵃ "again" usually lacks *n* and has become effectively an adverb, preposable with *kà* 33.2. 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   m̀   gɔ̄s ...

Again and **1SG** look ...

26.4 Serial VPs Introduced by *hālí⁺*

Hālí⁺ 21.2 can introduce Serial VPs in the sense "until":

...ka keŋ ia arakon' kane bodig la hale n ti nye o?

...kà kɛ̄ŋ‿ø   i̯á   àdàkɔ́ň'-kànι   bɔ̀dιg lā

...and go   **SER** seek **NUM:**one-**REL.SG** get.lost **ART**

hālí n   tì   ňyɛ̄·ó-o   ⁺ø?

until **SER** afterwards see-**3AN.OB CQ**?

"... and go and look for the one which is lost until he finds it?" (Lk 15:4, 1996)

*Ba da ditnɛ, ka nuud, ka dit pu'ab, ka pu'ab kun sidib, hali ti paae dabiskan ka
 Noa kpɛn' anrʋŋʋn la.*

Bà dà dìt   nɛ̄, kà nūud,   kà dít   pū'ab, kà

3PL TNS eat:**DIPF FOC**, and drink:**DIPF**, and take:**DIPF** wife:**PL**, and

pū'ab kūn   sīdιb,   hālí‿ø tí   pāe   dábìs-kàn

wife:**PL** return.home:**DIPF** husband:**PL** until **SER** afterwards reach day-**REL.SG**

kà Noa kpɛ́ň' àňrʋŋū-n lā.

and Noah enter boat:**SG-LOC ART**.

"They were eating and drinking and marrying and being given in
marriage up until Noah entered the boat."
(Lk 17:27, KB; the 1996 NT has ... *kun sidib n ti paae ...*)

*Ka bɛ mɔɔgin hali ti paae saŋkanɛ ka o yis o mɛŋ paalʋ ni Israel dim
 san'an.*

Kà bɛ́ mɔ̄ɔgʋ-n   hālí‿ø tì   pāe   sān-kánì

and **EXIST** grass:**SG-LOC** until **SER** afterwards reach time-**REL.SG**

kà ò yís   ò   mɛ̄ŋ 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)

27 Clauses

27.1 Structure

Kusaal is strictly SVO; deviations not achieved by *kà*-preposing <u>33.2</u> always represent extraposition or dislocation <u>33.3</u>. Indirect objects precede direct, and objects precede other complements.

Verb phrases can be concatenated by Serial VP constructions <u>26</u>.

Except in certain special circumstances <u>27.1.1</u> all clauses require a subject NP.

Clause-level particles may occur at various points within the clause structure. These comprise clause-linker <u>27.1.2</u> and post-subject <u>27.1.4</u> particles along with Emphatics <u>33.6</u>.

VP adjuncts may follow each VP. Clause-level adjuncts may follow the last VP; it is generally not possible to distinguish these formally from adjuncts of the last VP itself, unless the VP ends in a particle confined to VP-final position <u>33.3</u> <u>27.2</u>. Clause-level adjuncts may also precede the subject, but only in Main or Content Clauses <u>28.1.1</u>, and only if they express time or circumstance.

Main Clauses and Content Clauses have similar structures. Both display Independency Marking on the first Verbal Predicator <u>22.6</u>, and have structural possibilities not permitted to clauses of any other type: they may contain Non-verbal Predicators <u>25</u> or lack a predicator altogether <u>28.2.4</u>, and they can show clefting or preposing with *kà*, or focus with *nɛ̄*$^{+/}$. *Nɛ̄*$^{+/}$ may follow a Verbal Predicator, precede a verb complement or adjunct, or appear clause-finally <u>33.1.2</u>.

27.1.1 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   tʋ̀l.*   "It (weather) is hot."
> **3INAN** be.hot.

> *Lì   àň súŋā.*   "It's good."
> **3INAN COP** good**:ADV**.   (Contrast Mooré *yaa sõama*, with no pronoun)

> *Lì   nàr   kà   fʋ̀   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'anɛ alaa, m naan kʋ yɛlinɛ ya ye ...

Yà' kā'a-ní‿   àlá,   m̀   nāan kʋ́   yɛ̄lı-ní‿   yā   yɛ̄ ...

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)

Omission of the 2sg subject pronoun is required in direct commands, unless a presubject adjunct is present. In the contexts where the 2sg pronoun is deleted, the 2pl subject pronoun is transferred to follow the verb as an enclitic.

After clause linker *kà* "and" a pronoun repeating the subject of the previous clause is deleted 27.1.5.2 (though its tone-raising effect remains 8.3.)

Absence of subject pronouns in other cases is due to ellipsis 27.1.5; such structures are informal and are "corrected" by reinsertion of pronouns when informants' attention is drawn to them. This will therefore not be taken to invalidate the general principle that clauses require explicit subjects. Any L Raising induced by the ellipted pronoun 8.3 remains.

Náe   yàa ⁺*ø?*   "[Have you] finished?"

Finish **PFV   PQ**?

This is particularly common in greeting formulae like

Gbís wɛ̄lá?   "How did you sleep last night?"

for   *Fʋ̀   sá   gbìs   wɛ̄lá* ⁺*ø?*

    2SG TNS sleep how   **CQ**?

Dúɵ wɛ̄lá?   literally "(You) arose how?"

for   *Fʋ̀   dúɵ   wɛ̄lá* ⁺*ø?*

    2SG arise how   **CQ**?

27.1.2 Clause-linker Particles

The **Clause-linker particles** *kà* "and" and *yɛ̄* "that" are placed before the subject (which may itself be ellipted after *kà* 27.1.5.2.) Conjunctions almost always precede any clause-linker particles 27.1.3. When other clausal elements precede *kà* before the subject, the construction is probably to be understood as *kà*-preposing instead 33.2. "Resumptive" *yɛ̄* in longer passages of indirect speech frequently precedes clause-linking *kà* 29.3.3, but otherwise the clause-linker particles are mutually exclusive; apparent exceptions always arise from ellipsis 27.1.5.1.

While *yɛ̄* is invariably subordinating, *kà* may be coordinating or subordinating.

The glosses "and" and "that" are inadequate; both particles are used in a variety of constructions with meanings that vary considerably.

kà	introduces	*subordinate* clauses of purpose or result	29.1
		subordinate adnominal clauses	29.2
		from which derives *kà*-preposing	33.2
		subordinate content clauses	29.3
		insubordinate sequential clauses	28.3.2
		coordinate main clauses	28.3.1
yɛ̄	introduces	*subordinate* clauses of purpose or result	29.1
		subordinate content clauses	29.3

The meaning is largely determined by the nature of the clauses; for example, purpose clauses contain Imperative Mood, and Content Clauses show main-clause type structural features. *Yɛ̄* has different tonal effects with a following bound subject pronoun depending on the construction 8.3.

27.1.3 Conjunctions

No single group of words in Kusaal corresponds to English conjunctions. The particles *kà* "and" and *yɛ̄* "that" need to be treated separately 27.1.2. Some words translatable as English conjunctions are presubject adjuncts 28.1.1. 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

> *kʊ̄ʊ*   "or" (← Hausa)
> *bɛ̄ɛ*   "or"

never appear before or after *kà*, while

> *àmáa*   "but" (cf Arabic اما *ʔamma:* "as for")
> *hālí*   "until" (cf Arabic حتى *ħatta:*); preposition 21.2
> *àsɛ́ɛ*   "unless" (cf Hausa *sai*); preposition 21.2

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 *àsɛ́ɛ kà*; in the KB versions:

> *Ka sieba la' o. **Amaa ka** sieba yɛl ye ...*
> *Kà sīəba lá'·o‿ø.   Àmáa kà sīəba   yɛ́l yɛ̄ ...*
> 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.*

... zíň'ìn ànínā,   hālí   kà   Herod tí   kpì.

... sit   **ADV:** there, until and Herod afterwards die.

"...remaining there until Herod had died." (Mt 2:14)

*Amaa baa yinne kʋ lu teŋin kpii, **asɛɛ ka** li aan ya Ba' Wina'am bɔɔdim.*

Àmáa báa yīnní kʋ̀   lū tēŋι-n‿   ø kpíi ⁺ø, àsɛ́ɛ   kà   lì

But   not.one   **NEG.IRR** fall ground:**SG-LOC SER** die **NEG**, unless and **3INAN**

áaň‿ yà Bā'   Wínà'am bɔ́ɔdìm.

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 the orders *kà àmáa*, *kà hālí* and *kà àsɛ́ɛ*. Thus

*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   sūňf   sáň'àm, kà àmáa ɔ́n   pɔ̄   sáam

And king:**SG ART** heart:**SG** spoil,   and but   **3AN:COMP** swear stranger:**PL**

túèn   lā zúg kà ò   tís nɔ̄ɔr   yɛ́ bà tìsιm   bī-púŋ   lā

before **ART** upon and **3AN** give command:**SG** that **3PL** give:**IMP** child-girl:**SG ART**

ɔ́n   bɔ̀ɔd sī'əl.

3AN:COMP 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 pɔ*)

Conjunctions also precede *yē* (both as linker and "resumptive" *yē* 29.3.3):

*Wina'am daa pʋ gaŋi ti ye ti tʋm dian'ad tʋʋma, **amaa ye** ti bɛ nyain.*

Wínà'am dāa pʋ̄   gāŋí‿ tī   yɛ́   tì túm di̱ā'ad túʋmà ⁺ø,

God   **TNS NEG.IND** choose **1PL.OB** that **1PL** work dirt   work   **NEG**,

àmáa yɛ́   tì bɛ́   ňyāe.

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 33.2. 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":

	X alone	kà X	X kà
nānná-nā[+/]	33	28	4
lín à sī'əm lā	4	6	0

Similarly *sān-sí'ōn lā* "at one time, once ..." is a presubject AdvP:

saŋsi'en la ya da ka' yinni ne Kiristo
sān-sí'ə-n   lā, yà dà kā'   yīnní nē   Kiristo
time-**INDF.IH-LOC ART 2PL TNS NEG.BE** one   with Christ
"at one time you were not one with Christ." (Eph 2:12, 1996)

Ka saŋsi'en *la tinam meŋ da ane zon*
Kà   sān-sí'ə-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 *zùgɔ̄* (see 8.1.1), like *dìn zúgɔ̄* "therefore" *bɔ̄ zúgɔ̄* "because" are conjunctions like *kōʋ/bɛ̄ɛ* "or" which do not usually occur with clause linkers at all. *Bɔ̄ zúgɔ̄*, though stigmatised as an Anglicism in ILK, is in fact freely used in the NT/KB for "because."

Police gbáň'a_ m   bɔ̄ zúgɔ́ m̀   ňwɛ́' dāʋ̯   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 zúg* "therefore", can be used *either* as *kōʋ/bɛ̄ɛ*-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 20.1. This results in a characteristic pattern: all combinations with *kà* occur *except kà* X (1996 NT again):

	X alone	kà X	X kà	kà X kà
dìn zúgɔ̄	208	2	0	0
dìn zúg	39	2	69	17

Unlike the NT, WK also treats *nānná-nā*[+/] "now" in this way, accepting

Nānná-ná   m̀   á   nē   ná'àb.   "Now I am a chief."
Now-hither **1SG COP FOC** chief:**SG**.

Nānná-ná **kà** *m̀* *áň* *ná'àb.*   "Now I am a chief."
Now-hither and **1SG COP** chief:**SG**.

Kà *nānná-ná* **kà** *m̀* *áň* *ná'àb.*   "And now I am a chief."
And now-hither and **1SG COP** chief:**SG**.

but rejecting

****Kà** *nānná-ná m̀ áň ná'àb*   "And now I am a chief."
****Kà** *nānná-ná m̀ á nɛ̄ ná'àb.*

Conjunctions have no effect on clause structure or on the occurrence of tense marking in narrative 28.3.2. A *subordinating* conjunction would therefore have to be regarded as preceding a Content Clause 29.3. Usually the meaning is not consistent with subordination and the issue does not arise; sometimes, although the English translation suggests subordination, the Kusaal construction is shown to be otherwise by the position of the Negative Prosodic Clitic. Thus with *àsɛ́ɛ* "unless":

O **kʋ kpii**, *asɛɛ o ti nyɛ Zugsɔb Kristo la.*
Ò *kʋ̀* *kpīi* ⁺ø, *àsɛ́ɛ* *ò* *tì* *ňyɛ̀* *Zūg-sɔ́b* *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)

However, the preposition *wōʋ* "like" 21.1 may introduce formally subordinate clauses with Content/Main Clause features like focus-*nɛ̄*⁺ᐟ:

ka tuumbe'ed **ku** *len so'e ti wuu ti aa li* **yamugo**.
kà *tʋ̀ʋm-bɛ̄'ɛd* *kʋ́* *lɛ̄m* *sʋ́'ʋ̲_tī* *wōʋ tì áaň̲ lì* *yàmmʋgɔ̄* ⁺ø.
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 wʋʋ ya a***nɛ*** m biis nɛ.*
M̀ *pi̠áň'adī̲_ø* *tísìdī̲_* *yá* *wōʋ yà á* *nɛ́* *m̀ bīis* *nɛ̄.*
1SG speak:**DIPF SER** 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)

Hālí "until" and *àsɛ́ɛ* "unless, except for" 21.2 occur both as conjunctions and as prepositions, suggesting that these categories could be merged. *Nɛ̄* appears both as *nɛ̄* "with" and as "and" coordinating NPs 19.4, but cannot link clauses which have not first been nominalised; however, conjunctions are in any case a separate category from clause linker particles like *kà* "and."

27.1.4 Post-Subject Particles

Several particles marking subordinate clause types follow the subject, including *yà'* "if" ... *nāan* "then" 30.1 30.1.2 and the complementiser *ǹ* 31; *sādɩgím* "since" follows *ǹ* 31.1.1. Other particles found in this slot are

sìd "truly"

> *Ò   sìd   à   nɛ̄ zɔ̄lʋg.*   "He really is a fool."
> **3AN** truly **COP FOC** fool:**SG**.

> *Ò   sìd   dāa á   nɛ̄   ná'àb.*   "Truly, he was a chief." WK
> **3AN** truly **TNS COP FOC** chief:**SG**.

kūlɩm or **kūdɩm** "always" (← Hausa) seems only to be found with negatives:

> *Ka so' kudin ku len nyee li ya'asa.*
> *Kà   sɔ̄'   kūdɩm kʋ́   lɛ̄m ňyɛ́ɛ‿ lī   yá'asā ⁺ø.*
> And **INDF.AN** ever   **NEG.IRR** again see   **3INAN.OB** again   **NEG**.
> "Nobody will ever see it again." (Rev 18:21, 1996)

ňyāan or **nāan** 30.1.2 "next, afterwards"

> *Ka Yesu tans nɛ kʋkɔtita'ar ka nyaan kpi.*
> *Kà   Yesu   táňs nɛ̄   kʋ́kɔ̄-títā'ar   kà ňyāan kpí.*
> And Jesus shout with voice-great:**SG** and next   die.
> "Jesus cried out with a loud voice and then died." (Mt 27:50)

pà' tì "perhaps", like *yà'*, is followed by Indicative Mood with future meaning:

> *Ya yinni pa'a ti bu'osi m ye ...*
> *Yà   yīnní pá' tì   bū'ɵsí‿ m   yɛ̄...*
> **2PL** one   perhaps ask   **1SG.OB** that...
> "One of you will perhaps ask me ..." (Rom 9:19, 1976)

yū'ʋn "then, next"

> *Manoa yʋ'ʋn da baŋ ye o anɛ Zugsɔb maliak.*
> *Manoa   yū'ʋn dá bàŋ   yɛ́ ò   à   nɛ̄ Zūg-sɔ́b   máli̯āk.*
> 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)

27.1.5 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 in which it occurs. More systematic ellipsis often implies anaphora or a similar 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; however, many types of bound particle or pronoun are themselves subject to ellipsis.

Cases where I invoke ellipsis as a descriptive and explanatory device are with yes/no questions ending in *kʋ́ʋ* or *bɛ́ɛ* 28.2.2; indirect commands 29.1 29.3.1; ellipsis of complements of verbs 23.1; *kà*-preposing and *n*-focus 33.1.1 33.2; *hālí* as intensifier 21.2; ambiguity with coordinated modifiers and determiners in the NP and cases where a pre-modifier applies to a coordinated head 19.4; and omission of aspect-marking *nɛ̄* in replies to questions 33.1.2.3. Implicit tense marking 22.3.3 could also reasonably be classified as a form of ellipsis.

27.1.5.1 Coordination and Ellipsis

Ellipsis is involved in many cases of coordination within NPs 19.4.
Ellipsis of repeated elements in clause coordination is common, e.g.

Dāu̯   lā ňyɛ́ bī-díbìŋ   kʋ̄ʋ bī-pʋ́ŋàa   ⁺ø?
Man:**SG ART** see   child-boy:**SG** or   child-girl:**SG PQ**?
"Did the man see a boy or a girl?"

The surface form *kà yɛ̄* "but in order that ..." is always the result of ellipsis; the two particles cannot co-occur in a clause, unless the *yɛ̄* is "resumptive" 29.3.3, in which case it precedes the *kà*. Thus in the sequence *kà yɛ̄*, a clause must have been ellipted between the two particles:

M̀ pʋ̄   tísì‿ f   gbáu̯ŋ lā yɛ́ fʋ̀ kúʋəsì‿ líι   ⁺ø,
1SG NEG.IND give **2SG.OB** book:**SG ART** that **2SG** sell   **3INAN.OB NEG**,
kà yɛ́ fʋ̀ kárìm.
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."

27.1.5.2 Null Anaphora of Subjects

For null anaphora of VP complements see 23.1.

Clause subjects are required to be explicitly present, with cross-linguistically common exceptions like the subjects of direct commands 27.1.1. Dummy subject pronouns (always 3sg inanimate) are required in impersonal constructions like

Lì tʋ̀l.	"It (weather) is hot."
Lì à sʋ́ŋā.	"It's good."
Lì nàr kà fʋ̀ kūl.	"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 29.3, and Adnominal *kà*-Clauses 29.2 usually have different subjects from the main clause, so this is characteristic of **Sequential Clauses** 28.3.2. It can occur with a *kà*-purpose clause too 29.1:

M na niŋ wala ka nyɛ faangirɛ?
M̀   ná nīŋ wēlá kà   ňyɛ̄ fāaňgírè ⁺ø?
1SG IRR do   how and find salvation **CQ**?
"What must I do to get saved?" (Acts 16:30)

A non-deleted subject pronoun after *kà* thus usually signals a change of subject. A conversation may be reported simply by *Kà ò yɛ́l ... kà ò yɛ́l ...* 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 15.1 this can mean any antecedent of the same number, and can trump semantic appropriateness, e.g.

Pʋ̰'ā   lā dá' dāká kà kɛ̄ŋ Bɔ́k.
Woman:**SG ART** buy box:**SG** and go   Bawku.
"The woman bought a box and went to Bawku."

*Pʋ̰'ā   lā dá' dāká   kà ò   kɛ̄ŋ Bɔ́k.
 Woman:**SG ART** buy box:**SG** and **3AN** go   Bawku.
("The woman bought a box and it went to Bawku")

Pʋ̰'āb   lā dá' dāká   kà kɛ̄ŋ Bɔ́k.
Woman:**PL ART** buy box:**SG** and go   Bawku.
"The women bought a box and went to Bawku."

Pu̯'āb   lā dá' dāká   kà bà kɛ̄ŋ Bɔ́k.
Woman:**PL ART** buy box:**SG** and **3PL** go   Bawku.
"The women bought a box and they went to Bawku."
(acceptable but unusual with *bà = pū'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 nyɛ dau ...
Bán   dāa yīt   lā, kà ňyɛ̄ dāu̯ ...
3PL:COMP TNS   emerge:**DIPF ART**, and see man:**SG**...
"As they were going together, (they) saw a man ..." (Mt 27:32)

Ban wʊm nɛ'ɛŋa la ka sin.
Bán   wʊ̀m nɛ̄'ŋá   lá kà sīn.
3PL:COMP hear **DEM.DEI.INAN ART** and be.silent.
"After they heard this they fell silent." (Acts 11:18)

27.2 Main and Subordinate Clauses

There are several criteria for describing a clause as Main or Subordinate, and they do not always neatly align with each other. The criteria may be semantic or syntactic; syntactic criteria may in turn relate either to the internal structure of the clause itself or to its placement within larger structures.

The best structural fit with semantic criteria is whether a clause precedes or follows clause-final elements belonging to the preceding clause, such as Negative Prosodic Clitics induced by negative VPs in preceding clauses <u>32.1</u>. For example, in

Ò   vʊ̀l   tíím   kà ò   nɔ́bʊ̀r pū   zábɛ̄ ⁺ø.
3AN swallow medicine and **3AN** leg:**SG NEG.IND** fight **NEG**.
"She drank medicine and her leg didn't hurt." (*pū* negative Indicative)

it is not possible to make the first Verbal Predicator negative without the corresponding Negative Clitic appearing *before* the *kà*. Accordingly, the construction is simply a mini-narrative and the second clause is not subordinate (it is in fact Sequential, see below.)

However, although placement before the Negative Clitic necessarily implies that a clause is subordinate, the converse is not always true: in the case of constructions which by default involve negative raising, if the subordinate clause is,

exceptionally, outside the scope of the negation semantically, the Negative Clitic placement is also exceptional and precedes the subordinate clause <u>32.2</u> <u>32.3</u>:

> *Ka li **pʋ yuugɛ** ka o pu'a mɛ kena.*
> *Kà   lì   pʋ̄   yúugē⁺ø,   kà   ò   pṵ'ā   mɛ́   kɛ̄   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 wider structure can also be obscured by extraposition <u>33.3</u>, as with the undoubtedly subordinate *kà*-clause after *kɛ⁺* "cause" <u>29.1</u>, unexpectedly placed after the phrase-final perfective marker *yā* <u>22.6.2.1</u> in

> *Amaa Wina'am kɛya ka ya an nɔɔr yinne nɛ Yesu Kristo.*
> *Àmáa Wínà'am kɛ́   yá   kà yà áň nɔ̄ɔr   yīnní nɛ̄ 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)

Features internal to the clause under consideration may show conclusively that it is subordinate. All clauses marked by the distinctive post-subject particles *yà'* <u>30</u> and *ǹ* <u>31</u> are AdvPs or NPs and there is no ambiguity regarding their embedded character; all also lack VP Independency Marking <u>22.6</u>.

All clauses introduced by the linker particle *yɛ̄* "that" are clearly subordinate both from a semantic standpoint and in terms of their placement with regard to clause-final elements from the preceding clause; however, they fall into two quite different types. **Purpose** Clauses <u>29.1</u> always have main VPs with Imperative mood; they lack Independency Marking, focus, clefting, and *kà*-preposing and show tense marking only if the main clause itself is elliptied <u>22.3.1</u>.

> *M̀   pʋ̄   bɔ́ɔ̀d **yɛ́**   fʋ̀   kɛ̄ŋ Bɔ́kɔ̄ ⁺ø.*
> 1**SG NEG.IND** want that **2SG** go   Bawku **NEG**.
> "I don't want you to go to Bawku."

> *Li pu nar **ye** fu di fu ba'abiig po'a Herodiase.*
> *Lì   pʋ̄   nār yɛ́ fʋ̀ dí fʋ̀ bā'-bîîg   pṵ'á   Herodiasɛ ⁺ø.*
> **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)

On the other hand, **Content** Clauses <u>29.3</u> show both Independency Marking and a full range of possible structures: Main Clauses in formal internal structure, they function as subordinate clauses by **Downranking**. Content Clauses function as arguments of verbs of cognition, reporting, and perception:

*M pʋ yɛl **ye** nɔɔr ayɔpɔi maˈaanɛɛ.*
M̀   pʋ̄   yɛ́l yɛ̄ nɔ̄ɔr   àyɔ́pɔ̀ę̄   má'anɛ̄ ⁺ø.
1SG NEG.IND say that occasion**:SG NUM:**seven only   **NEG**.
"I don't say, only seven times." (Mt 18:22)

*Bʋ̀ŋ-bāň'ad   zī'   **yɛ̄** tɛ̄ŋ   tʋ́llā   ⁺ø.*
Donkey-rider**:SG NEG.KNOW** that ground**:SG** be.hot **NEG**.
"The donkey-rider doesn't know the ground is hot."

*Ka o ba' nɛ o ma pʋ baŋ **ye** o kpɛlim yaa.*
Kà   ò   bā'   nɛ́   ò   mà   pʋ̄   báŋ yɛ́ ò   kpɛ̀lɪm yāa ⁺ø.
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)

Particular problems with mismatching criteria arise with clauses introduced by
the linker particle *kà* "and." Despite the conventional gloss "and", *kà* can introduce
both Purpose and Content clauses just like *yɛ̄*; particular verbs may prefer or require
a complement clause with one or the other particle, but elsewhere the two particles
are often equivalent.

Purpose Clause:

*ka pʋ nar **ka** ba buolim ye Tʋmtʋmma*
kà   pʋ̄   nár kà bà búəlì‿m   yɛ̄ Tʋ́m-tʋ̄mma   ⁺ø.
and **NEG.IND** must and **3PL** call   **1SG.OB** that work-worker**:SG NEG**.
"and ought not to be called an apostle" (1 Cor 15:9)

Content Clause:

*M̀   tɛ́ň'ɛs **kà** nīigí   lā   ɔ́ňbìd   nɛ̄.*
1SG think   and cow**:PL ART** chew**:DIPF FOC**.
"I think the cows are eating." WK

Adnominal *kà*-Clauses 29.2 have no parallel type with *yɛ̄*, but are again
unproblematically subordinate. They have Verbal Predicators with Indicative or
Irrealis Mood, and have quasi-relative meaning:

*M̀   dāa pʋ̄   ňyɛ̄ dāu̯   lá   **kà** ò   áň   ná'abā ⁺ø.*
1SG TNS   NEG.IND see man**:SG ART** and **3AN COP** chief**:SG   NEG**.
"I didn't see the man as a chief."

Kà also introduces clauses which are *not* subordinate by semantic criteria or by the criterion of Negative Prosodic Clitic placement, and which show main-clause structural features; nevertheless, **all clauses introduced by *kà* lack Independency Marking on the VP**, **except for Content Clauses.**

Thus even main clauses coordinated by *kà* lack Independency Marking on clauses after the first.

This use of *kà* to coordinate semantically and structurally independent clauses is especially characteristic of narrative 28.3.2, where potentially long series of **Sequential Clauses** 28.3.2 are each introduced by *kà* so long as the sequence of events is proceding in order. So, for example

> *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-Pū-zɔ́t-yɛ̄l*   *dá*   *à*   *nɛ́*   *ò*   *sàam*   *bîig*   *mà'aa.*
> **PERS-NEG.IND**-fear:**DIPF**-thing:**SG TNS COP FOC 3AN** father:**SG** child:**SG** only.
>
> *Kà*   *dāar*   *yīnní* *kà*   *bīig*   *lā*   *nɛ́*   *ò*   *sàam*   *zíñ'i˷ø*   *sɔ̌ňsɪd.*
> And day:**SG** one   and child:**SG ART** with **3AN** father:**SG** sit   **SER** converse:**DIPF**.
>
> *Kà*   *bīig*   *lā*   *tí*   *yèl*   *ò*   *sàam*   *yɛ̄ ...*
> 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

where the second *kà* is preposing the time expression *dāar yīnní* "one day", where *kà*-preposing is a structural feature not found in subordinate clauses 33.2 .

Historically, *kà* was perhaps once always subordinating (compare *nɛ̄* "and" connecting NPs, which is essentially the same word as the preposition *nɛ̄* "with" 19.4.) 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 28.3.

On the question of subordination with Conjunctions see 27.1.3.

Clauses of the type introduced by linker particles are themselves coordinated with *kà* "and" *kʋ̄ʋ/bɛ̄ɛ* "or", not *nɛ̄* like *ǹ*-Clauses:

> *M̀*   *bɔ́ɔ̀d*   *yɛ̄*   *dāu̯*   *lā*   *kɛ̄ŋ* *dá'ā-n,*   *kà*   *pu̯'ā*   *lā*   *dūg dīɪb.*
> **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

28 Main Clauses

28.1 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 29.3. Both clause types display characteristic Independency Marking on the first Verbal Predicator 22.6. They may contain Non-verbal Predicators 25 or even lack a predicator altogether 28.2.4. They can be focussed or clefted or prepose elements with *kà*; Focus-*nɛ̄*$^{+/}$ occurs at most once in a main or content clause, following a Verbal Predicator, before a verb complement or adjunct, or clause-finally 33. Main and Content Clauses may contain time, circumstance or reason-why adjuncts before the subject.

28.1.1 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* 33.2. Thus the AdvP may precede the subject in e.g.

> *Bɛ̄ogʊ́   fʊ̀ ná kūl.*
> Tomorrow **2SG IRR** return.home.
> "You're going home tomorrow." SB

but not in

> **Mɔ̄ɔgʊ́-n   mām   bɛ́.*   for "I'm in the bush."
> Grass**:SG-LOC 1SG.CNTR EXIST**.

which is corrected by WK to

> *Mɔ̄ɔgʊ́-n   kà mām   bɛ́.*   "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, *sādɪgím*-clauses 31.1.1, AdvPs like *àlá zùg*, *dìn zúg* "therefore"; *lì ňyá'aŋ*[a] "afterwards", *yà'*-clauses "if/when ...", *hālí* + *ǹ*-Clause "although ...", "even though ... ", *yā'a* + NP "as for ...", *lín à sɪ̄'əm lā* "as things stand", *àsɪ̄da* "truly."

Some AdvPs of this kind, like Absolute Clauses, *lì ňyá'aŋ*[a] or *dìn zúg* may also occur preposed with *kà*; others, like *yà'*-clauses or *sādɪgím*-clauses, may not.

Pre-subject adjuncts are not followed by L Raising 8.3.

28.2 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.

28.2.1 Content Questions

Content questions (except for *lìa* 25) 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 33.1.1 when syntactically possible, and other interrogatives are very often also fronted with *kà* 33.2, obligatorily so in the case of *bɔ́* in the sense "why?" (compare the parallel construction with a demonstrative pronoun expressing a reason in *Dìn kà Kūsáàs yɛ̄ ...* "That is why the Kusaasi say ..." KSS p16.)

Ànɔ́'ɔnì‿ø   ňyɛ̄ bíigà   ⁺ø?
Who   **SER** see child:**SG CQ**?
"Who has seen a child?"

Fù bɔ́ɔd bɔ́   ⁺ø?   "What do you want?"
2SG want what **CQ**?

Bɔ́   kà fù kúmmà   ⁺ø?   "Why are you crying?"
What and **2SG** weep:**DIPF CQ**?

For "which?" the short demonstratives are used:

Lìnɛ?   "Which one?"
Nīf-kánɛ̀?   "Which eye?"
Nīn-kánɛ̀?   "Which person?"

Fù bɔ́ɔd línɛ̀   ⁺ø?   "Which do you want?"
2SG want **DEM.INAN CQ**?

Note the *short* final LF vowels <u>8.1</u>; these are content, not polar, questions.
Used after a cb, as a dependent pronoun, *bɔ̄*⁺ is a determiner: "what?":

nā'-bɔ́	"what cow?" WK DK
	(not *náaf bɔ́*,
	only possible in the sense "What, of a cow's?")
bʋ̀-bɔ̄	"what goat?"
dā-bɔ́	"what beer?"

Bɔ̀- can be used as a pre-modifier, querying a description: "what sort of …?"

Fʋ̀ túm   bɔ́-tʋ̀ʋma ⁺ø?
2SG work:**DIPF** what-work **CQ**?
"What kind of work do you do?"

Bo yir ka ya na me' n tis mane?
Bɔ̀-yír   kà yà ná mɛ̄ n tís mánɛ̀ ⁺ø?
What-house:**SG** and **2PL IRR** build **SER** give **1SG.CNTR CQ**?
"What kind of house will you build for me?" (Acts 7:49, 1996)

The compound *bɔ̀-būudı*⁺ "what kind of?" can be used as a post-determiner:

nā'-bɔ́-būudı	"what kind of cow?"
dā-bɔ́-būudı	"what kind of beer?"

Note the idiom:

Fʋ̀ á nɛ̄ bɔ́- bùudı ⁺ø?   "What tribe do you belong to?"
2SG COP FOC what sort   **CQ**?

The focus particle *nɛ̄*⁺/ may not be used in content questions; this applies also
to aspect-focus *nɛ̄*⁺/.

Dāʋ̰   lā ̌nyɛ́ bīig.   "The man has seen a child."
Man:**SG ART** see child:**SG**.

Ànɔ́'ɔnì‿ø ̌nyɛ̄ bíigà   ⁺ø? "Who has seen a child?"
Who   **SER** see child:**SG CQ**?

Dāṵ   lā ňyέ ànɔ́'ɔnὲ ⁺ø?   "Whom did the man see?"
Man:**SG ART** see who   **CQ**?

or   *Ànɔ́'ɔ̀n kà dāṵ   lā ňyέɛ* ⁺ø?
Who   and man:**SG ART** see **CQ**?
"Whom did the man see?"

Bà kʋ̀ʋd   nɛ̄ bɯ̄ʋs.   "They're killing goats."
3PL kill:**DIPF FOC** goat:**PL**.

Ànɔ́'ɔnì‿ø kɯ̄ʋd   búʋsὲ ⁺ø?
Who   **SER** kill:**DIPF** goat:**PL CQ**?
"Who is killing goats?"   Progressive sense without *nɛ̄*.

Ànɔ́'ɔ̀n bīigɪ‿ ø ňwá ⁺ø?   "Whose child is this?"
Who   child:**SG SER** this **CQ**?

Bɔ́ kà fʋ̀ kúɵsìda ⁺ø?   "What are you selling?"
What and **2SG** sell:**DIPF** **CQ**?   Progressive sense possible without *nɛ̄*.

Fʋ̀ bɔ́ɔ̀d bɔ́ ⁺ø?   "What do you want?"
2SG want what **CQ**?

Fʋ̀ bɔ́ɔ̀d nɛ̄ bɔ́ ⁺ø?   "What do you want it with?"
2SG want with what **CQ**?   WK confirms that *nɛ̄ must* be "with" here.

Ṁ á nɛ̄ dāṵ.   "I am a man."
1SG COP FOC man:**SG**.

Ṁ áň bɔ́ ⁺ø?   "What am I?"
1SG COP what **CQ**?

Fʋ̀ wá'e yáa ⁺ø?   "Where are you going?"
2SG go   where **CQ**?

Bùgṹm lā yít   yáa ní ná ⁺ø?
Fire **ART** emerge:**DIPF** where **LOC** hither **CQ**?
"Where is the light coming from?"

28.2.2 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 *nɛ̄*. The answer expected is *ɛ̄ɛ̌ñ* 28.2.4.

Dāu̯   lā   ňyɛ́ bíígàa ⁺ø?   "Has the man seen a child?"
Man:**SG ART** see   child:**SG PQ**?

Bà kʋ̀ʋd   nɛ̄ búʋsɛ̀ɛ ⁺ø?   "Are they killing goats?"
3PL kill:**DIPF FOC** goat:**PL   PQ**?

M̀   á   nɛ̄ dáʋ̀ʋ   ⁺ø?   "Am I a man?"
1SG COP FOC man:**SG   PQ**?

Fʋ̀ pʋ̄   wúmmàa ⁺ø ⁺ø?   "Don't you understand?"
2SG NEG.IND hear:**DIPF   NEG PQ**?   (expects *ɛ̄ɛ̌ñ*, 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 *bɛ́ɛ* (expecting disagreement, with *áyìι*) or *kúʋ* (expecting agreement, with *ɛ̄ɛ̌ñ*.)   NT rarely uses *kōʋ* 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.

Dāu̯   lā ňyɛ́ bīig   kúʋ ⁺ø?
Man:**SG ART** see   child:**SG** or   **PQ**?
"Has the man seen a child?" (I expect so.)

Dāu̯   lā ňyɛ́ bīig   bɛ́ɛ ⁺ø?
Man:**SG ART** see   child:**SG** or   **PQ**?
"Has the man seen a child?" (I expect not.)

28.2.3 Commands

For indirect commands, see <u>29.1</u> <u>29.3.1</u>.

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 <u>8.2.1</u> and <u>8.2.1.2</u>. Thus

Fʋ̀	*gɔ́s*	*bīig*	*lā.*	"You (sg) have looked at the child."
2SG	look.at	child:**SG**	**ART**.	

Yà	*gɔ́s*	*bīig*	*lā.*	"You (pl) have looked at the child."
2PL	look.at	child:**SG**	**ART**.	

but

Gɔ̀sɩm	*bīig*	*lā!*	"Look (sg) at the child!"
Look.at:**IMP**	child:**SG**	**ART**!	

Gɔ̀sɩmī⌣	*ø*	*bīig*	*lā!*	"Look (pl) at the child!"
Look.at:**IMP**	**2PL.SUB**	child:**SG**	**ART**!	

Gɔ̀sɩm	*tɛ̄ŋɩ-n!*	"Look (sg) down!"
Look:**IMP**	ground:**SG-LOC**!	

Gɔ̀sɩmī⌣ø	*tɛ̄ŋɩ-n!*	"Look (pl) down!"	
Look:**IMP** **2PL.SUB**	ground:**SG-LOC**!		

Dā	*gɔ̄s*	*tɛ̄ŋɩ-nɛ́*	*⁺ø!*	"Don't (sg) look down!"
NEG.IMP	look	ground:**SG-LOC**	**NEG**!	

Dā	*gɔ̄sɩ⌣ø*	*tɛ̄ŋɩ-nɛ́*	*⁺ø!*
NEG.IMP	look **2PL.SUB**	ground:**SG-LOC**	**NEG**!

"Don't (pl) look down!"

Dā	*gɔ̄sɛ*	*⁺ø!*	"Don't (sg) look."
NEG.IMP	look	**NEG**!	

Dā	*gɔ̄sɩ⌣yá*	*⁺ø!*	"Don't (pl) look."
NEG.IMP	look **2PL.SUB**	**NEG**!	

No pronoun changes occur after presubject elements, e.g *yà'*-clauses <u>30.1</u>:

Fʋ ya'a mɔr pu'a, fʋn da mɔɔd ye fʋ bas oo.

Fʋ̀ yá' mɔ̄r pʋ̤'ā,   fʋ̄n dā   mɔ̄ɔd   yɛ́ fʋ̀ bás·ō-o   ⁺ø.
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 29.3.1, even when the addressee is the same as in the original utterance:

Ò yèl yɛ́ bà gɔ̀sɩm   tɛ̄ŋɩ-n.
3AN say that **3PL** look:**IMP** ground:**SG-LOC**.
"She said to them: Look down!" WK

Ò   yèl yɛ́ fʋ̀ gɔ̀sɩm   tɛ̄ŋɩ-n.
3AN say that **2SG** look:**IMP** ground:**SG-LOC**.
"She said to you **SG**: Look down!"

Ò yèl yɛ́ yà gɔ̀sɩm   tɛ̄ŋɩ-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 yɛ́ bà gɔ̀sɩmī‿ ø   tɛ̄ŋɩ-n.
3AN say that **3PL** look:**IMP**   **2PL.SUB** ground:**SG-LOC**.
"He said to them: Look down!" WK

Similarly in a serial-verb construction, where WK treats ^ya as a pronoun and, consistently with this, does not repeat it:

Kɛ̀mī‿   ø   nā   n gɔ̄s!
Come:**IMP 2PL.SUB** hither **SER** look!
"Come (ye) and look!"

such speakers have

Kɛ̀mī‿   ø   nā   n gɔ̄sɩ‿ø!
Come:**IMP 2PL.SUB** hither **SER** look   **2PL.SUB**!
"Come (ye) and look!"

For these speakers ᵞᵃ 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:

Gɔ̀sɩmā!	"Look!"
Gɔ̀sɩmīyá!	"Look! (plural)

28.2.4 Clauses without Predicators

Some particles and phrases occur characteristically as complete utterances:

Tɔ̀.	"OK." (= Hausa *tôo*)
Báp.	"Wallop!"
N fá!	"Well done!"

Some of these are onomatopoeic; others are widely shared among local languages.

"Yes" is *ɛ̄ɛǐ*; "No" is *áyìɩ*. As in many languages, the reply agrees or disagrees with the question, so that if the question is negative, the usage differs from English:

Lì   nàa nɛ́ɛ ⁺ø?   "Is it finished?"
3INAN finish **FOC   PQ**?

Ɛ̄ɛǐ.	"Yes."
Áyìɩ.	"No"

Lì   pū   nāée ⁺ø ⁺ø?   "Isn't it finished?"
3INAN NEG.IND finish **NEG PQ**?

Ɛ̄ɛǐ.	"No."
Áyìɩ.	"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:

M̀   bīiga   ⁺ø!   "My child!"
1SG child:**SG VOC**!

M̀   bīisɛ   ⁺ø!   "My children!"
1SG child:**PL VOC**!

M̀ pʋ̰'ā   nɛ́   m̀ bīisɛ   ⁺ø!
1SG wife:**SG** with **1SG** child:**PL VOC**!
"My wife and my children!"

M̀ dìəmmā   ⁺ø, bɔ́   kà fʋ̀ kúɵsìda ⁺ø?
1SG parent.in.law:**SG VOC**, what and **2SG** sell:**DIPF   CQ**?
"Madam <u>35.1</u>, what are you selling?"

Vocative phrases often end in *ňwà* "this":

Bīis ňwá!	[bi:sa]	"Children!"	<u>8.5.1</u>.
Pʋ̰'ā ňwá!	[pʰʋ̰a̰wã]	"Woman!"	
Zɔ̄n ňwá	[zɔn:a]	"Fools!"	

This structure is sometimes simply exclamatory:

Ňwāamɪs ňwá!   [w̃ã:mɪsa]   "Monkeys!" (From a passenger in my car,
                                          on suddenly catching sight of some.)

28.3 Insubordinate *kà*-Clauses

28.3.1 Coordination of Main Clauses

Coordinated main clauses agree in type as declarative, interrogative or imperative. They are coordinated with *kà* "and", *kōʋ* "or", *bɛ̄ɛ* "or". It is possible to regard *kōʋ bɛ̄ɛ* as conjunctions , but the position with *kà* is more complex because it can occur *alongside* conjunctions. Even in coordinating function, *kà* introduces an *Insubordinate* clause *without* Independency Marking on the Verbal Predicator <u>27.2</u>.

Coordination of statements with *kà* outside of narrative has a similar sense to English "and" (though *kà ... lɛ̀ɛ* is "but" <u>22.7.1</u>.)

Coordination of commands with *kà* is quite common:

Pʋ̀'ʋsɪm À-Wīn,   kà pʋ́'ʋ̀s À-Būgʋr.
Greet:**IMP PERS**-Awini, and greet **PERS**-Abugri.
"Greet Awini, and greet Abugri."

Coordination of questions is not common. It is seen in alternative questions like

Fʋ̀ búg   nɛ́ɛ ⁺ø? Bɛ̄ɛ fʋ̀ gɛ́èňm yā kúʋ ⁺ø?
2SG get.drunk **FOC PQ**? Or **2SG** go.mad **PFV** or   **PQ**?
"Are you drunk? Or have you gone mad?"

28.3.2 Sequential Clauses

Kusaal narrative joins clause after clause with *kà*, corresponding to *zero* in English. Once again, such clauses are Insubordinate, *without* Independency Marking on the Verbal Predicator 27.2. Tense marking in narrative is the norm for all main clauses without *kà* unless they contain an explicit time expression; 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[15]. 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 yʋma pii nɛ ayiꞌ la, ka ba keŋ malʋŋ la wʋʋ ban ɛɛnti niŋid siꞌem la. Ka malʋŋ la dabisa naae la, ka ba lɛbidi kun. Ka Yesu kpɛlim Jerusalem teŋin ka o baꞌ nɛ o ma pʋ baŋ ye o kpɛlim yaa. Ba **daa** tɛnꞌɛs ye o dɔlnɛ ba teŋ dim la, ka keŋ ...*

Kà Yesu‿ø   dāa áň yúmà pīi nɛ́ àyí   lā, kà bà kēŋ málʋ̀ŋ
And Jesus **COMP TNS** **COP** year:**PL** ten with **NUM**:two **ART**, and **3PL** go sacrifice:**SG**

lā wʋ̄ʋ bán   ɛ̄ɛň tí nìŋɪd sī'əm lā. Kà màlʋŋ   lā dábɪsà‿ ø
ART like **3PL:COMP** usually do:**DIPF INDF.ADV ART**. And sacrifice:**SG ART** day:**PL**   **COMP**

nāe lā, kà bà lɛ́bɪdì‿   ø kūn.   Kà Yesu kpɛ́lìm Jerusalem
finish **ART**, and **3PL** return:**DIPF SER** go.home:**DIPF**. And Jesus remain Jerusalem

tɛ́ŋī-n   kà ò bā'   nɛ́ ò mà   pū báŋ yɛ́ ò kpɛ̀lɪm
land:**SG-LOC** and **3AN** father:**SG** with **3AN** mother:**SG NEG.IND** realise that **3AN** remain

yāa +ø. Bà dāa tɛ̄ň'ɛs yɛ́ ò dɔ̀l   nɛ́ bà tɛ̀ŋ-dìm   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)

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15) It is common in Africa for non-initial clauses in narrative to resemble subordinate clauses: Hausa narrative, for example, uses the Focus Perfective, otherwise found in relative clauses and in clefting (Jaggar 2001 pp161ff pp526ff, Caron pp171ff), and the Kordofanian Talodi language Lumun has *á* "and, while" followed by the Dependent Perfective, used elsewhere in purpose clauses and in coordinated commands following the Imperative (Smits pp363, 652.) Consistent narrative tense-marking behaviour of this kind is not seen in Mooré or Dagbani, which seemingly also lack subordinate-type tonal marking following a coordinating clause linker 27.2.

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   nɛ̄* 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 *du̲'á*   Y   "and X begat Y."
> and X beget Y

Note the "aside" *Ò mà **dá** à nɛ̄ ...* in

> *Ka Jese du'a na'ab David. Ka David du'a Solomon. O ma **da** anɛ Uria pu'a. Ka*
> *Solomon du'a Rehoboam.*
> *Kà   Jese du̲'á   ná'àb   David. Kà   David du̲'á   Solomon. Ò   mà*
> And Jesse beget king:**SG** David. And David beget Solomon. **3AN** mother:**SG**
> *dá à   nɛ̄ Uria pu̲'á.   Kà   Solomon du̲'á Rehoboam...*
> **TNS COP FOC** Uriah wife:**SG**. And Solomon beget Rehoboam...
> "And Jesse begat King David. And David begat Solomon. His mother **was**
>   Uriah's wife. And Solomon begat 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 anɛ Y* at the beginning of paragraphs in the text, but *ka X saam an Y* otherwise.

The typical aspect in narration is naturally the Perfective. Asked to comment on the acceptability of isolated *kà*-clauses containing Variable Verb Base Forms without tense marking, informants interpreted them as narrative Sequential Clauses, rejecting interpretations with other aspects, and the particle *nɛ̄*[+/] was taken as necessarily marking constituent focus, not aspect:

> *Lì   bɔ̀dɪg   nɛ̄.*   "It's lost."
> **3INAN** get.lost **FOC**.

> *Kà   lì   bɔ́dìg nɛ̄.*   Rejected by WK as ill-formed; accepted after
> And **3INAN** get.lost **FOC**.   some thought by DK, explaining the expression
>   as contradicting "someone hid it"
>   - contrastive VP focus

> *Bà kʊ̀dɪg nɛ̄.*   "They're old."
> **3PL** get.old **FOC**.

Kà   bà kúdìg nɛ̄.   "And they're old." Rejected by WK; accepted
And **3PL** get.old **FOC**.   by DK with the gloss "You're saying they're old
                                      when he promised to give you new ones"
                                      - contrastive VP focus

With any tense marker, such isolated *kà*-clauses are no longer taken as
Sequential and *nɛ̄⁺ᐟ* is readily taken as aspectual by both WK and DK:

Kà   lì   dāa bɔ́dìg nɛ̄.   "And it was lost."
And **3INAN TNS** get.lost **FOC**.

Kà bà sá kʊ̀dɪg nɛ̄.
Kà bà dāa kúdìg nɛ̄.
Kà bà dá kʊ̀dɪg nɛ̄.   all acceptable as "and they were old."

In texts, the Dynamic Imperfective appears without aspectual *nɛ̄⁺ᐟ* in
Sequential Clauses to express several instances of an event:

Ka on kpɛn' la, o yɛli ba ye [...]. *Ka ba **la'ad** o.*
Kà   ɔ́n   kpɛ̀ň' lā, ò yélì‿ bā   yɛ̄ [...]. *Kà bà lá'ad·ō‿   ø.*
And **3AN:COMP** 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)

*Ǹ-*Clauses normally mark tense independently:

Ɔ̄n   dāa ň̆yɛ̄t súŋā   ɔ́n   dāa áň bí-līa   láa ⁺ø?
3AN.CNTR TNS see:**DIPF** good:**ADV 3AN:COMP TNS** **COP** child-baby:**SG ART PQ**?
"Did he see well when he was a baby?"

However, within Sequential Clauses they mark tense relative to the narrative
timeline:

Kà   bà ň̆yɛ̄ dáʊ̯-kànɪ sà kū ná'àb lā.
And **3PL** see man-**REL.SG TNS** kill chief:**SG ART**.
"And they saw the man who killed the chief the day before."

Kà   bà níŋ ɔ́n   pà' yɛ̀lɪ‿ bā   sɪ̄'əm   lā.
And **3PL** do **3AN:COMP TNS** say **3PL.OB INDF.ADV ART**.
"And they did what he'd told them earlier that day."

Most clauses without tense marking in narrative show initial *kà*, but some begin with an Absolute Clause *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 *kà* B	*kà* A, B	*kà* A *kà* B
A	B				
-	-	7	23	40	85
-	+	2	0	4	2
+	-	0	7	3	17
+	+	11	2	11	0

Absent tense marking in *ǹ*-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 22.3.3. This phenomenon also explains the apparent appeance of aspectual *nɛ̄*⁺/ in a Sequential Clause in a case like

> *Ka ba due keŋ. Ka ban ken la, Jesus **gbisid ne**.*
> *Kà bà dūe‿ø kɛ̄ŋ. Kà bán kɛ̄n lā, Jesus gbīsɪd nɛ̄.*
> And **3PL** arise **SER** go. And **3PL:COMP** go**:IMPF ART**, Jesus sleep**:DIPF FOC**.
> "So they started out. As they were travelling, Jesus was sleeping."
> (Lk 8:22-23, 1976; no *nɛ̄* 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:

> *Ba da pu mor biiga, bozugo Elizabet **da** ane kundu'ar, ka babayi la wusa*
> *me **kudigne**.*
> *Bà dà pū mɔ̄r bīiga ⁺ø, bɔ̄zúgɔ̄ Elizabet dá à nɛ̄*
> **3PL TNS NEG.IND** have child**:SG NEG**, because Elizabeth **TNS COP FOC**
> *kúndʊ̀'ar kà bà bàyí lā wʊsa mɛ́ kʊ̀dɪg nɛ̄.*
> 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 *nɛ* in the KB *ka babayi' la wʊsa mɛ kʊdig hali.*)

*Ka siakidib wusa bane be Judea ne Galilee ne Samaria **daa** mor sumalisim. Ka*
*ba kal **paasid**. Ka ba yadda niŋir **nobugid**.*

Kà   si̱ākɩdɩb   wūsa bánì bɛ́   Judea nɛ̄   Galilee nɛ̄   Samaria
And believer:**PL** all   **REL.PL EXIST** Judea with Galilee with Samaria

dāa mɔ̄r sū-máĺɪsɩ̀m.   Kà   bà   kāl   páasɩ̀d.   Kà   bà
TNS have heart-sweetness. And **3PL** number:**SG** increase:**IPVF**. And **3PL**

yàddā-níŋ̀ìr   nɔ̄bɩgíd.
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)

Tense marking is not affected by Conjunctions 27.1.3 or by the "Resumptive"
yɛ̄ of indirect speech 29.3.3 (all of which precede the clause linker *kà*):

Ka sieba la' o. Amaa ka sieba yɛl ye ...
Kà   sīəba   lá'·o_ø.   Àmáa kà   sīəba   yɛ́l yɛ̄ ...
And **INDF.PL** laugh **3AN.OB**. But   and **INDF.PL** say that...
"Some laughed at him, but others said..." (Acts 17:32)

Ka o ma daa a siakid. Amaa ka o saam daa a Greek nid.
Kà   ò   mà   dāa áń si̱ākɩd.   Àmáa kà   ò   sàam   dāa á
And **3AN** mother:**SG TNS** **COP** believer:**SG**. But   and **3AN** father:**SG TNS COP**
Greek níd.
Greek person:**SG**.
"His mother was a believer, but his father was a Greek." (Acts 16:1, 1976)

The occurrence of pre-subject adjuncts and constituent-focussing *nɛ̄*$^{+/}$ in
Sequential Clauses shows that they are not only semantically but structurally main
rather than subordinate clauses.

29 Subordinate Clauses after *kà* and *yɛ̄*

29.1 Purpose Clauses

Purpose Clauses can be introduced by either *yɛ̄* or *kà*. They 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 *pū* or *kʋ̀*, as the negation particle.

Purpose Clauses may appear as main clause adjuncts, and are then most often introduced by *yɛ̄*:

> *Bà tìs·ō‿ ø   kú'ə̀m yɛ́   ò   nū.*
> **3PL** give   **3AN.OB** water that **3AN** drink.
> "They gave him water to drink. ("So that he might drink it.")

> *M̀   ná tī‿ f   tíìm   yɛ́   fʋ̀ zàbɪr bás.*
> **1SG IRR** give **2SG.OB** medicine that **2SG** pain go.away.
> "I'll give you medicine so your pain will go away."

> *M̀   ná tī‿ f   tíìm   yɛ́   fʋ̀ nīf   dā   zábɛ̄ ⁺ø.*
> **1SG IRR** give **2SG.OB** medicine that **2SG** eye:**SG NEG.IMP** fight **NEG**.
> "I'll give you medicine so your eye won't hurt."

Kà + Purpose Clause is also possible as an adjunct:

> *M na niŋ wala ka nyɛ faangirɛ?*
> *M̀   ná nīŋ wɛ̄lá kà ňyɛ̄ fāaňgírè ⁺ø?*
> **1SG IRR** do   how and find salvation **CQ**?
> "What must I do to get saved?" (Acts 16:30)

Purpose Clauses frequently appear as complements of particular verbs. Some such verbs prefer either *yɛ̄* or *kà* specifically; thus *bɔ̀ɔd*ᵃ "want" takes *yɛ̄* + Purpose Clause. Answers to *Fʋ̀ bɔ́ɔd bɔ́?* "What do you want?" might be

> *M̀   bɔ́ɔd yɛ́   ò   kūl.*
> **1SG** want that **3AN** return.home.
> "I want him to go home."

> *M̀   bɔ́ɔd yɛ́   m̀ kūl.*
> **1SG** want that **1SG** return.home.
> "I want [me] to go home."

Ṁ bɔ́ɔ̀d yɛ́ fʊ̀ dā   kūlɛ   ⁺ø.
1SG want that **2SG NEG.IMP** return.home **NEG**.
"I want you not to go home."

cf   *Ṁ pū   bɔ́ɔ̀d yɛ́ fʊ̀ kūlɛ   ⁺ø.*
1SG NEG.IND want that **2SG** return.home **NEG**.
"I don't want you to go home."

Verbs expressing necessity or permission, e.g *nār*[a/] "be obliged to" (negated "be obliged not to"); *mɔ̄r sūɵr* "be allowed to" (literally "have a way [to]") usually take *yɛ̄* when used personally:

Fʊ̀ pū   nār yɛ́ fʊ̀ níŋ àláa   ⁺ø.
2SG NEG.IND must that **2SG** do   **ADV:**thus **NEG**.
"You're not allowed to do that."

Yà mɔ́r sūɵr   yɛ́ yà kūl.
2PL have way:**SG** that **2PL** return.home.
"You may go home."

With *impersonal* expressions *kà* may be used instead of *yɛ̄*:

Lì   nàr yɛ́/kà   fʊ̀   kūl.
3INAN must that/and **2SG** return.home.
"You must go home."

Lì   pū   nār yɛ́ fʊ̀ kūlɛ   ⁺ø.
3INAN NEG.IND must that **2SG** return.home **NEG**.
or   *Lì   pū   nár kà fʊ̀ kūlɛ   ⁺ø.*
3INAN NEG.IND must and **2SG** return.home **NEG**.
"You must not go home."

Sūɵr   bɛ́ yɛ́/kà   tì kūl.
Way:**SG EXIST** that/and **1PL** return.home.
"We may go home." (" There's a way that ...")

Never **Lì pū nārá kà fʊ̀ kūl* 27.2. So too with *lì à* [*nɛ̄*] *tīlás* "it is necessary", either particle may be used:

Li a tilas ye m keŋ Jerusalem.
Lì   àň   tīlás   yɛ́   m̀ kɛ̄ŋ Jerusalem.
3INAN COP necessity that **1SG** go   Jerusalem.
"I must go to Jerusalem." (Mt 16:21, 1996)

Li ane tilas ka m niŋid ala.
Lì   à   nɛ̄ tīlás   kà   m̀ níŋìd   àlá.
3INAN COP FOC necessity and **1SG** do:**DIPF ADV:**thus.
"I must do that." (1 Cor 9:16, 1996)

Certain verbs require a Purpose Clause introduced by *kà* as complement.
Thus *mìt* "see that it doesn't happen that ...", a defective verb used only in the
imperative 32.1.1:

Mid ka ya maali ya tʋʋm sʋma nidib tuon ye ba gɔs.
Mìt   kà yà máalì‿ yà tʋ̀ʋm-sʋ̀ma   nīdɪb   túèn yɛ́ bà gɔ̄s.
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)

So too *kɛ̄⁺* "let, leave off" in the sense "let, cause that" which makes
periphrastic causatives.

Tì kɛ́   kà bà lɛ́bɪsì‿tī.   "We made them reply to us."
1PL cause and **3PL** reply   **1PL.OB**.

Ò kɛ̀   kà bà pū   kūlɛ   ⁺ø.
3AN cause and **3PL NEG.IND** return.home **NEG**.
"He caused them not to go home." (Indicative)

The irregular imperative *kɛ̀l*[a], followed by a *kà*-clause with Imperative Mood,
creates a way of expressing indirect commands, including first and third persons:

Kɛ̀l   kà ò gɔ̄s tɛ̄ŋɪ-n.
Cause:**IMP** and **3AN** look ground:**SG-LOC**.
"Let him look down."

Dā   kɛ́   kà dābíàm bɛ́ɛ ⁺ø!
NEG.IMP cause and fear   **EXIST NEG**.
"Don't be afraid." ("Let fear not exist.")

Kèl   [or *Kèlí‿*   ø]   *kà   tì   pʋ́'ʋ̀s Wínà'am.*
Cause:**IMP**   cause:**IMP 2PL.SUB** and **1PL** greet God.
"Let us praise God."

In informal speech *kèl kà ...* is often ellipted <u>27.1.5</u>, leaving the lack of Independency Marking as the only sign that the clause is an indirect command:

Ò   gɔ̄s tēŋɩ-n.   "Let her look down."
3AN look ground:**SG-LOC**.   (No Independency Marking, so
                                          no tone overlay on *gɔ̄s*.)

Tì   pʋ́'ʋ̀s Wínà'am.   "Let us praise God."
1PL greet God.   (homophonous with "We thank God.")

M̀ gɔ̄s   nīf   lā.   "Let me look at the eye."
1SG look.at eye:**SG ART**.   (No tone overlay on *gɔ̄s*.)

cf   *M̀ gɔ́s   nīf   lā.*   "I've looked at the eye."
     1SG look.at eye:**SG ART**.   (Independency marked: tone overlay on *gɔ́s*.)

M̀ dígɩnɛ̀ɛ ⁺ø?   "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 <u>22.6.1.1</u>)

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 ellipted main clause *M̀ bɔ́ɔ̀d yē̆ ...* "I want that ..." or *Kèl kà... .*

The "purpose" sense of a Purpose Clause is sometimes very attenuated:

Ka ba gban'e ba kpɛn'ɛs sanrega ni ye bɛog nie.

Kà bà gbáň'a͜ bā͜   ø   kpɛ́ň'ɛ̀s sārɪgá   nī   yɛ̄ bɛog   níe.

And **3PL** seize   **3PL.OB SER** 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.

Nīdɪb   lā dāa gūr   Zakaria   yîîb   nā.

Person:**PL ART TNS**   watch Zechariah emerge:**GER** hither.

The people were watching for Zechariah's coming out. (Lk 1:21)

dap banɛ gur ye ba zugdaan naan pu'adiir di'ema zin'igin kul na

dàp-bànɪ   gūr yɛ́   bà zūg-dáàn   nāan   pṵ'á-dīɪr   dí'əmà

man-**REL.PL** wait that **3PL** head-owner:**SG** be.there wife-taking:**SG** feast:**PL**

zíň'igī-n͜   ø   kūl   nā

place:**SG-LOC SER** 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   yɛ̄   pṵ'ā   lā dṵ'á kà ò   ɔ́ňb 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 Serial VPs 26, or by the particle-verb *tì* 22.7.2.

29.2 Adnominal *kà*-Clauses

A subordinate *kà*-clause with Indicative mood 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 ellipted if it is a verb direct object 23.1. The sense is usually that of a non-restrictive relative clause:

> *Asɛɛ linɛ an bɛ'ɛd ma'aa ka m na tun'e niŋ.*
> *Àsɛ́ɛ línì   àň bɛ̄'ɛd má'àa kà m̀ ná tūň'e‿ø níŋ.*
> Only **REL.INAN COP** bad   only   and **1SG IRR** be.able **SER** do.
> "It's only that which is bad that I can do." (Rom 7:21)

> *Li anɛ ya taaba banɛ pʊ'ʊsid Wina'am ka li nar ka ya kad saria.*
> *Lì   à   nɛ́ yà tāaba bánì   pʊ̀'ʊsɪd 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)

> *Dau sɔ' da bɛ Sizerea, ka o yʊ'ʊr buon Konelius.*
> *Dàu̯-sɔ̄'   dá bɛ̀ Sizerea kà ò yʊ̄'ʊr 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 yʊ'ʊr buon Aneas.*
> *Àníná   kà ò ňyɛ̄ dáu̯   kà ò yʊ̄'ʊr   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 25:

> *Ɔ̄nɪ‿   ø   lá kà fʊ̀ dāa ňyɛ̄t.*
> **3AN.CNTR SER** that and **2SG TNS** see:**DIPF**.
> "This is he whom you saw." WK

> *Ànɔ́'ɔnì‿ ø ňwá kà tì ňyɛ̄tá ⁺ø?*
> Who   **SER** this and **1PL** see:**DIPF CQ**?
> "Who is this that we can see?"

Bɔ́ɔ‿ ø lá kà m̀ ňyɛ̄tá ⁺ø?
What **SER** 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 33.2.
Adnominal *kà*-Clauses are essentially in complementary distribution with Serial VPs 26.1, replacing these when the subject and/or polarity do not agree with those of the main clause. An Adnominal *kà*-Clause has the same subject as the main clause only when it replaces a Serial VP because of polarity change, e.g.

Dau sɔ' da bɛ Listra tengin an pɔn'ɔri zin' o nɔba zug ka pʋ tun'e kenna.
Dàʋ̠-sɔ̄'   dá bɛ̀ Listra tɛ́ŋī-n‿   ø áň pɔ́ň'ɔ̀rı‿ ø   zíň'i ò nɔ̄bá
Man-**INDF.AN TNS EXIST** Lystra land:**SG-LOC SER COP** cripple:**SG SER** sit   **3AN** leg:**PL**
zùg kà pʋ̄   tūň'e‿ ø kɛ̄nná ⁺ø.
upon and **NEG.IND** be.able **SER** 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 33.1.1 33.2.
Just as Serial VPs could often be rendered in European languages by a participle modifying the main clause subject, so too Adnominal *kà*-Clauses may have the sense of a participle modifying an NP other than the subject.
Examples (KT's translations):

M̀ dāa ňyɛ̄ dáʋ̠   kà ò áň ná'àb.
1SG TNS see man:**SG** and **3AN COP** chief:**SG**.
"I saw a man being a chief/who was a chief."

M̀ dāa pʋ̄   ňyɛ̄ dáʋ̠   kà ò áň ná'abā ⁺ø.
1SG TNS NEG.IND see man:**SG** and **3AN COP** chief:**SG NEG**.
"I didn't see a man being a chief/who was a chief."

M̀ dāa pʋ̄   ňyɛ̄ ná'àb kà ò áň bālɛ̄rʋgɔ́ ⁺ø.
1SG TNS NEG.IND see chief:**SG** and **3AN COP** ugly:**SG   NEG**.
"I didn't see a chief being ugly/who was ugly."

With an established old-information object of *ňyɛ̄*⁺ "see , find" as anchor, the sense is a predicative 23.2 "see *as* …"

M̀   dāa ňyɛ̄ dāu̯   lá   kà   ò   áň   ná'àb.
1SG TNS see man**:SG ART** and **3AN COP** chief**:SG**.
"I saw the man being a chief/as a chief."

M̀   dāa pō̄   ňyɛ̄ dāu̯   lá   kà   ò   áň   ná'abā ⁺ø.
1SG TNS NEG.IND see man**:SG ART** and **3AN COP** chief**:SG NEG**.
"I didn't see the man being a chief/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."

KT rejected some similar sentences as ill-formed.
NEG before *ka*, making the subordinate reading impossible:

*M̀   dāa pō̄   ňyɛ̄ dáʋ   ⁺ø   kà   ò   áň   ná'àb.
 1SG TNS NEG.IND see man**:SG NEG** and **3AN COP** chief**:SG**.

*M̀   dāa pō̄   ňyɛ̄ ná'abá ⁺ø   kà   ò   áň   bālɛ̄rʋg.
1SG TNS NEG.IND see chief**:SG NEG** and **3AN COP** ugly**:SG**.

Tense marking in the subordinate clause:

*M̀   dāa pō̄   ňyɛ̄ dāu̯   lá   kà   ò   dāa áň ná'abā ⁺ø.
1SG TNS NEG.IND see man**:SG ART** and **3AN TNS COP** chief**:SG NEG**.

Focus marking in the subordinate clause:

*M̀   dāa pō̄   ňyɛ̄ dāu̯   lá   kà   ò   á   nɛ̄   ná'abā ⁺ø.
1SG TNS NEG.IND see man**:SG ART** and **3AN COP FOC** chief**:SG NEG**.

*M̀   dāa pō̄   ňyɛ̄ dāu̯   lá   kà   ò   dāa á   nɛ̄   ná'abā ⁺ø.
1SG TNS NEG.IND see man**:SG ART** and **3AN TNS COP FOC** chief**:SG NEG**.

29.3 Content Clauses

Yɛ̄, and less often *kà*, may introduce clauses displaying Independency Marking on the Verbal Predicator 22.6. 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

*yɛ̀l*ᵉ	"say"	*wʊ̀m*ᵐ	"hear"
ňyɛ̄⁺	"see"	*tɛ̄ň'ɛs*ᵉ/	"think"
mī⁺	"know"	*bàŋ*ᵉ	"come to know"
*pà'al*ᵉ	"teach, show"	*kàrɪm*ᵐ	"read"
zī'⁺	"not know"		

Although the tone is different, *yɛ̄* is presumably connected with *yɛ̀l*ᵉ "say, tell." It occurs by itself in the sense *yɛ̀l yɛ̄*: *Wínà'am yɛ̄ ...* "God says: " Compare the immediate future construction with subject + *yɛ̄*-Purpose Clause 22.3.2.

Except in indirect speech 29.3.1, content clauses are normally declarative. The equivalent of an interrogative main clause is a Relative Clause headed by an indefinite pronoun 31.2.1, and the equivalent of an imperative main clause is a subordinate Purpose Clause 29.1.

> *Fʊ wʊm ban yɛt si'em laa?*
> *Fʊ̀ wʊ́m   bán   yɛ̀t   sī'əm láa* ⁺ø?
> **2SG** hear:**DIPF 3PL:COMP** say:**DIPF INDF.ADV ART   PQ**?
> "Do you hear what ["how"] they are saying?" (Mt 21:16)

> *Bà nà yɛ̄l·o‿ø   ɔ́n   nà nīŋ sī'əm.*
> **3PL IRR** say   **3AN.OB 3AN:COMP IRR** do **INDF.ADV**.
> "They will tell him what he is to do."

> *Lì   nàr yɛ́/kà   fʊ̀ kūl.*
> **3INAN** must that/and **2SG** return.home.
> "You must go home."

An Absolute Clause 31.1 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 + *yɛ̄lá* "about" <u>20.6</u>.

In WK's speech *yɛ̄* + content clause is usual, but he prefers *kà* + content clause after *tɛ̄n̆'ɛs*[ɛ/] "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   tɛ̀n̆'ɛs kà   ò   zàb   ná'àb   lā.
3AN think   and **3AN** fight chief:**SG ART**.
"He thinks he's fought the chief." WK

 M̀   tɛ́n̆'ɛs kà   ò   à   nɛ̄ du̥'átà.
1SG think   and **3AN COP FOC** doctor:**SG**.
"I think she's a doctor." WK

 M̀   tɛ́n̆'ɛs kà   ò   lù   yā.   "I think she's fallen." WK
1SG think   and **3AN** fall **PFV**.

 M̀   tɛ́n̆'ɛs kà   m̀   lú   yā.   "I think I've fallen" WK
1SG think   and **1SG** fall **PFV**.

 M̀   tɛ́n̆'ɛs kà   nīigí   lā   ɔ́n̆bìd.
1SG think   and cow:**PL ART** chew:**DIPF**.
"I think the cows eat." WK

 M̀   tɛ́n̆'ɛs kà   nīigí   lā   ɔ́n̆bìd   nɛ̄.
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 *yɛ̄* + content clause after *tɛ̄n̆'ɛs*[ɛ/].

Ya pʊn wʊm ka ba da yɛl ye...
Yà   pún   wùm   kà   bà   dá yɛ̀l yɛ̄ ...
2PL previously hear and **3PL TNS** say that...
"You previously heard that they had said ..." (Mt 5:43)

...yanam baŋim ka li san'auŋ li'el ya.
...yānám   bàŋɩm   kà   lì   sàn̆'ʊŋ   lí'àl   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   tɛ́ň'ɛ̀s yɛ́   m̀   mɔ̄ɔd   yɛ́   m̀   mā'e nīdɪb   súňf   bɛ́ɛ ⁺ø?

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)

Pronouns are changed throughout in the Content Clause to reflect its setting, on the same basis as in English "indirect speech."

The free personal pronouns have **logophoric** 29.3.2 meaning in Content Clauses.

Tense and mood marking is always the same as in the equivalent main clause. Pluperfect and future-in-the-past meanings may result:

Ò   dāa yɛ́l yɛ́   bà dāa kūl.

3AN TNS say that **3PL TNS** return.home.

"She said that they had gone home."

Tì   dāa tɛ̄ň'ɛs yɛ́   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 kpinɛ la zug

bán   mī'   yɛ̄ bīig   lā kpí nɛ̄ lā zúg

3PL:COMP know that child:**SG ART** die **FOC ART** upon

"because they knew that the child was dead" (Lk 8:53)

where focus-*nɛ̄*⁺/ occurs in a content clause within an Absolute Clause. (The second article *lā* marks the end of the Absolute Clause.)

Bʋ̀ŋ-bāň'ad   zī'   yɛ̄ tɛ̄ŋ   túllā ⁺ø.

Donkey-rider:**SG NEG.KNOW** that ground:**SG** be.hot **NEG**.

"The donkey-rider doesn't know the ground is hot."

(*Tɛ̄ŋ túl.* "Ground is hot."; *tʋ̄l*ˡᵃ/"be hot")

There is tone overlay due to Independency Marking on *tʋ̄l*ˡᵃ/. The final LF is induced by the Negative Prosodic Clitic belonging with the negative verb in the superordinate clause.

Content Clauses also appear after *wōʋ* "like" 21.1; the construction involves a subordinate rather than main clause, as is demonstrated by e.g.

*ka tuumbe'ed **ku** len so'e ti wuu ti aa li **yamugo**.*
kà   tʊ̀ʊm-bɛ̄'ɛd kʊ́   lɛ̄m sʊ́'ʊ‿tī   wōʊ tì áàǎ̌‿lì   yàmmʊgɔ̄ ⁺ø.
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)

See further <u>27.1.3</u> on conjunctions and prepositions.

29.3.1 Direct and Indirect Speech

After a speech-verb *yɛ̄* may introduce the words of the direct speech itself, unaltered except for the presence of "resumptive" *yɛ̄* at intervals <u>29.3.3</u>. This is an uncommon strategy in written materials prior to the 1996 NT Version; in the 1976 version it seems to be chosen mostly for direct utterances of Jesus.

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 <u>29.3.2</u> 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. The 1996 revision consistently replaces all indirect speech with direct, however.

Pronouns are changed even within a vocative in indirect speech:

O zuanam ne o saamnama, ye ba kelisim.
Ò   zṵà-nàm nɛ́   ò   sàam-nàmā ⁺ø, yɛ́   bà kɛ̀lɪsɪm!
3AN friend-**PL** with **3AN** father-**PL**   **VOC** that **3PL** listen:**IMP**!
(Acts 7:2, 1976)

for   M̀ zṵà-nàm nɛ́   m̀ sàam-nàmā ⁺ø,   kɛ̀lɪsɪmī‿ ø!
1SG friend-**PL** with **1SG** father-**PL**   **VOC**, listen:**IMP 2PL.SUB**!
"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   wʊ́m Wínà'am kʊ́kɔ́r   kà lì   yī   áràzánà ní nā   yɛ̄,
And **1SG** hear God   voice:**SG** and **3INAN** emerge heaven **LOC** hither that
ò   nīdɪbá   ⁺ø, yɛ́ bà yìmī‿   ø   tɛ̄ŋ   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)

These examples also illustrates the fact that **the indirect speech construction differs from other types of content clause in that it may feature imperative clauses as content clauses**, which elsewhere would be replaced by subordinate clauses of purpose.

In such quoted direct commands the usual deletion of a 2nd sg subject and change of 2pl subject to enclitic ᵞᵃ does not occur; this is true even when the addressee is the same as in the original utterance so that the pronouns remain 2nd person. Some speakers still keep the enclitic ᵞᵃ after the verb even when there is a pronoun subject before it; see the second example above, and 28.2.3.

Indirect-speech quoting of imperatives provides an alternative way of expressing indirect commands to the use of purpose clauses 29.1; as with that construction, the main clause and linker may be altogether ellipted 27.1.5 informally:

> *M̀ yɛ́l yɛ́ ò   gɔ̀sɪm tɛ̄ŋɪ-n.*
> **1SG** say that **3AN** look:**IMP** ground:**SG-LOC**.
> "I said she should look down."

> *Ò gɔ̀sɪm   tɛ̄ŋɪ-n.*   "She should look down."
> **3AN** look:**IMP** ground:**SG-LOC**.

> *M̀ tɛ́ň'ɛ̀s kà tì pʋ́'ʋsɪm Wínà'am.*
> **1SG** think and **1PL** greet:**IMP** God.
> "I think we should praise God."

> *Tì pʋ́'ʋsɪm Wínà'am.*   "We should praise God."
> **1PL** greet:**IMP** God.

A main clause of interrogative type can be downranked in indirect speech too:

> *Ka Peter bu'os o ye, Ananias, ye bo ka o ke ka Sutaana kpen' o suunrin...*
> *Kà Peter bū'ɵs·ó‿ø   yɛ̄ Ananias, yɛ̄ bɔ́ kà ò kɛ́   kà Sūtáanà*
> And Peter ask   **3AN.OB** that Ananias, that what and **3AN** cause and Satan
> *kpɛ̀ň' ò   sūuňrí-n ...   ⁺ø?*
> enter **3AN** heart:**SG-LOC** *...* **CQ**?
> "Peter asked him: Ananias, why did you let Satan enter your heart ...?"
> (Acts 5:3, 1976)

Similarly with a main clause without a predicate structure 28.2.4:

Ò yèl yē̄ báp.   "She said 'Bap!'"

3AN say that Bap.

29.3.2 Logophoric Pronouns

Within Content Clauses personal pronouns are altered throughout as in English indirect speech, except in directly embedded passages of direct speech 29.3.1.

The free 3rd person pronouns have **logophoric** sense. In contexts where bound pronouns could have occurred instead (i.e. where they are contrastive 33.5) 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 "He said: I will kill them.'" is usually

Ò   yèl yē̄ ōn   ná kúυ‿ bā.

3AN say that **3AN.CNTR IRR** kill   **3PL.OB**.

It is possible to say *Ò yèl yέ ò nà kōύ bā* with this meaning, but this is more likely to be the equivalent of "He(1) said: 'He(2) will kill them.'" So e.g (all 1976 NT version):

Festus tans Paul ye o geem ne ... ka Paul lebis ye on pu geem.

Festus táňs Paul yέ   ò gèɛňm nē̄ ...   kà Paul lέbìs

Festus shout Paul that **3AN** go.mad **FOC** ... and Paul reply

yē̄ ōn   pō   gέɛňmm ⁺ø.

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)

Wina'am ye ... arazana ane on na'am kuk ... bo yir ka ba na me n tis one?

Wínà'am yέ ...   àrazánà á nē̄ ōn   nā'am kúk

God   say:that...heaven:**SG** COP FOC **3AN.CNTR** realm chair:**SG**

... bɔ̀-yír   kà bà ná mē̄ n tís ɔ̀nɛ   ⁺ø?

... what-house:**SG** and **3PL IRR** build **SER** give **3AN.CNTR CQ**?

"God says: .... heaven is his throne ... what house will they build for him?" (Acts 7:49)

for   *Àrazánà á nέ m̀ nā'am kúk*

        Heaven   **COP FOC 1SG** realm chair:**SG**

        ... bɔ̀-yír   kà yà ná mē̄ n tísì‿mà   ⁺ø?

        ... what-house:**SG** and **2PL IRR** build **SER** give **1SG.OB CQ**?

29.3.3 Resumptive *yɛ̄*

Regardless of whether a passage is direct or indirect speech, if it is longer than two or three clauses "resumptive" *yɛ̄* is inserted at intervals of roughly every third clause, after any conjunctions but before clause-linker *kà*; this is the only way that *yɛ̄* and *kà* occur together apart from ellipsis 27.1.2 27.1.5.1.

Ye *ka Paul yel ye o bood ye o kpelim sarega ni.*
Yɛ́   kà   Paul yɛ́l yɛ́   ò   bɔ̀ɔd yɛ́   ò   kpɛ́lìm sārıgá   nī.
That and Paul say that **3AN** want that **3AN** remain prison:**SG LOC**.
" .... but Paul said he wanted to remain in prison...(Acts 25:21, 1976)

 ... amaa **ye** *ba yaanam da pu bood ye ba siak o noore*
... àmáa yɛ́   bà   yāa-nám   dá pū   bɔ́ɔd yɛ́   bà   si̱ák·ò‿ø
... but   that **3PL** ancestor-**PL TNS NEG.IND** want that **3PL** agree   **3AN.OB**
nɔ̄ɔrɛ́   ⁺ø.
mouth:**SG NEG**.
(within a speech) " ... but their ancestors did not want to obey him"
(Acts 7:39, 1976)

Amaa **ye** *ka on yeli ba ye ...*
Àmáa yɛ́   kà   ɔ̄n   yɛ́lì‿bā   yɛ̄...
But   that and **3AN.CNTR** say **3PL.OB** that...
"But he [the speaker] had said to them ..." (Acts 25:16, 1976)

Alazug **ye** *Wina'am sadigim tisi ba piini kan ka o daa tisi ti la...*
Àlá zùg yɛ̄ Wínà'am ø   sādıgím tísì‿bā   pīinı-kán   kà ò dāa
Thus   that God   **COMP** since   give **3PL.OB** gift-**REL.SG** and **3AN TNS**
tísì‿tī   lā...
give **1PL.OB ART**.
"Thus, since God had given them the gifts that he had given us ..."
(Acts 11:17, 1976)

Alazug **ye** *ka on ke ka ba mor o ba sa'an na ...*
Àlá zùg yɛ́   kà   ɔ̄n   kɛ́ kà bà mɔ̄r·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)

*Dinzugo **ye** ba kel tikpeedug...*
Dìn zúgɔ̄   yɛ́   bà   kɛ̀l ...
Therefore that **3PL** let:**IMP** ...
"Therefore they should leave off disturbance ..." (Acts 19:36, 1976)

Resumptive *yɛ̄* may be placed between a clause-level presubject adjunct and the subject, or between a vocative NP and the following clause:

*Nanana **ye** o zuanam, **ye** o baŋ ye...*
Nānná-nā   yɛ́   ò   zṳà-nàm,   yɛ́   ò   bàŋ   yɛ̄ ...
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   yɛ́   ò   nìŋī̠   bá   Wínà'am   nɛ́   ò   pṳ̀-pìəlɩm
And now-hither that **3AN** do   **3PL.OB** God   with **3AN** inside-whiteness
pḭáň'àd lā   nú'usī-n...
speech **ART** hand:**PL-LOC**...
"And now he committed them to God and the words of his holiness.."
(Acts 20:32, 1976)

*O zuanam ne o saamnama, **ye** ba kelisim.*
Ò   zṳà-nàm nɛ́   ò   sàam-nàmā ⁺ø,   yɛ́   bà   kɛ̀lɩsɩm!
3AN friend-**PL** with **3AN** father-**PL**   **VOC** that **3PL** listen:**IMP**!
"His friends and my fathers should listen." (Acts 7:2, 1976)

30 Conditional Clauses

30.1 Conditional Clauses: Overview

Conditional clauses have a subordinate *yà'*-clause protasis before the subject of the main apodosis clause. *Yà'*-clauses cannot be coordinated with each other, though they may contain coordinated subclauses, and a main clause may contain more than one *yà'*-clause:

> *Fʋ̀ yá' bɔ̀ɔd, m̀ yá' lɛ̀b   nā,   m̀ ná yɔ́ɔ‿ f.*
> **2SG** if   want, **1SG** if   return hither, **1SG IRR** pay   **2SG.OB**.
> "If you want, when I return, I will pay you."

Ya'-clauses occur immediately before the subject of the main clause, after any other pre-subject adjuncts, clause-linker particles or conjunctions.

There must be a non-zero subject after a *yà'*-clause; even direct commands do not, as usual, delete the 2nd person subject pronoun 28.2.3; my informants use a free pronoun in this context, as does the KB version in

> *Fʋ ya'a mɔr pu'a, fʋn da mɔɔd ye fʋ bas oo.*
> *Fʋ̀ yá' mɔ̄r pʋ̠'ā,   fūn dā   mɔ́ɔd   yɛ́ fʋ̀ bás·ō-o   ⁺ø.*
> **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)

Other speakers permit bound pronouns:

> *Bung ya'a bood ye o lubuf, fu po nyeti o tubaa.*
> *Bʋ̀ŋ   yá' bɔ̀ɔd yɛ́ ò   lūbʋ́‿   f,*
> Donkey**:SG** if   want that **3AN** throw.off **2SG.OB**,
> *fʋ̀ pʋ̄   ňyɛ̄tí‿ ò   tʋ̀bāa ⁺ø.*
> **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

The main clause can be of any type, including a command, as above, or a question; it may have elements preposed with *kà* 33.2:

> *Fʋ̀ yá' gɔ̄s kpɛ̄lá, bɔ́   kà fʋ̀   ňyɛ̄tá   ⁺ø?*
> **2SG** if   look here,   what and **2SG** see**:DIPF CQ**?
> "If you look here, what do you see?"

Yà'-clauses express tense independently of the main clause. Indicative Mood, not Irrealis, is used for future meaning, but WK accepts negation with *kʊ̀* instead of *pʊ̄* when the sense is future; so too NT

> *So' ya'a ku tum, on da dii.*
> *Sɔ̄'   yá' kʊ̀   tʊ̄m,   ɔ̄n   dā   díı* ⁺ø.
> **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 [33.3](#)), notably in constructions meaning "it would be better if ...":

> *Li naani so'on ba ya'a nokin neertita'are loon kollin o niŋgoonr ka zaŋ o lobi bas kolugin, n gati*
> *Lì   nāanı sɔ̄ñ'ɔ-n,   bà yá' nɔ̄kı-n   nɛ̄ɛr-títā'arı͜   ø   lɔ̄ɔ-n͜   ø*
> **3INAN** then   be.better-**REM 3PL** if   take-**REM** millstone-big:**SG SER** tie-**REM SER**
> *kɔ́lī-n   ɔ̄n   nín-gɔ̀ɔr   kà záŋ·ò͜ ø͜   ø   lɔ̄bı͜*
> put.around.neck-**REM 3AN.CNTR** body-neck:**SG** and take   **3AN.OB SER** throw
> *ø   bás   kɔ̄lʊgʊ-n,   n   gát ...*
> **SER** abandon river:**SG-LOC SER** 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   sʊ́m   bà yá' pʊ̄   dʊ́'ā-n   dáʊ̯-kàŋáa* ⁺ø.
> 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)

In archaic materials like proverbs, *yà'*-clauses sometimes end in a LF (but see [8.1.1](#) for an alternative analysis):

> *Buŋ ya'a kpi **be'ede**, ba siido ne be'ed.*
> *Bʊ̀ŋ   yá' kpì bɛ̄'ɛdɛ, bà sìıd·ō͜   ø   nɛ̄ bɛ̄'ɛd.*
> 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
> ("Make the best of a bad job.")

30.1.1 Remoteness Marker *n*ᵋ

The Remoteness Marker Liaison Enclitic *n*ᵋ can attach to any verb form in Indicative or Irrealis Mood; it is not compatible with the Imperative Mood. With Serial VPs, if *n*ᵋ is found in the first predicator it is repeated in all 26.1.

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 (Huddlestone and Pullum pp 148ff.) It expresses a hypothetical or unlikely state of affairs; it is frequently accompanied by the post-subject particle *nāan(ι)* 30.1.2, which creates a contrary-to-fact interpretation. It is most often seen, without *nāan(ι)*, in *yà'*-clauses, and with or without *nāan(ι)* in apodoses 30.2 30.3, but also appears both with and without *nāan(ι)* in other main and subordinate clause types.

In main clauses, *n*ᵋ without *nāan(ι)* is most often seen in *bɔɔdīn* "might wish":

m pa'ati nye ka ya pu wenne wuu man boodin ye ya aan si'em laa.
m̀   pá' tì   ňyɛ́ kà yà pū   wēn   nɛ̄
1SG perhaps see and **2PL NEG.IND** resemble with
wūʋ mán   bɔ̀ɔdī-n   yɛ́ yà áa-n   sī'əm   láa ⁺ø.
like **1SG:COMP** 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 boodin ne yaname naan aan ma'asiga bee yaname naan aan tuuliga.
Mān   bɔ́ɔdī-n nɛ̄ yānámì‿ø   nāan áa-n   mā'asígā bɛ̄ɛ
1SG.CNTR want-**REM** with **2PL**   **COMP** then **COP-REM** cold:**ADV** or
yānámì‿ø   nāan áa-n   tūʋlígā.
2PL   **COMP** then **COP-REM** hot:**ADV**.
"I might wish you had been cold or you had been hot." (Rev 3:15, 1996)

The enclitic can be used temporally as a today-past, implying specifically that the state of affairs described no longer obtains 22.3.2:

M̀   ɔ́ňbɪdī-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.

30.1.2 *Nāan(ι)* "in that/which case"

The post-subject particle *nāan(ι)* is distinct from *ňyāan* "next, afterwards, then", but *nāan* (never *nāanι*) occurs commonly in the same sense as *ňyāan*. Thus in the parallel NT passages from the 1996 version:

> *Fu na ki'is noor atan' ye, fu zi' ma, ka noraug nyaan kaas.*
> *Fὺ ná kī'ιs nɔ̄ɔr   àtáň'   yέ fὺ zí'ι‿   mā   ⁺ø,*
> **2SG IRR** deny occasion:**SG NUM:**three that **2SG NEG.KNOW 1SG.OB NEG**,
> *kà nɔ̄-dáὺg   ňyāan 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.*
> *Fὺ ná kī'ιs mān   nɔ̄ɔr   àtáň'   kà nɔ̄-dáὺg*
> **2SG IRR** deny **1SG.CNTR** occasion:**SG NUM:**three and hen-male:**SG**
> *nāan kāas nɔ̄ɔr   àyí.*
> next cry   occasion:**SG NUM:**two.
> "You will deny me three times before the cock crows twice."
> (Mk 14:30, 1996: KB *nyaan*)

The particle *ňyāan* is probably a form of *ňyá'aŋ*[a] "behind, after" with loss of glottalisation and assimilation of the final nasal because of its proclitic status <u>4.2.2</u> <u>8.5.1</u>. The particle *nāan(ι)* itself seems to have a core locative and logical sense "be(ing) there/thus, in that case" which has presumably broadened for speakers who use it in the sense of *ňyāan* to temporal "then", unless the falling-together of the forms is simply phonological or dialectal.

There are examples in NT/KB of *nāan(ι)* used as an auxiliary verb with its own locative complement in both the Serial VP construction and in Adnominal *kà*-Clauses:

> *M nye ka Sutaana naane arazana ni n lu wenne saa yiti iank si'em la.*
> *M̀ ňyέ kà Sūtáanà nāaní‿ ø àrazánà ní n lù‿ø wēn   nɛ̄*
> **1SG** see and Satan   be.there **SER** sky   **LOC SER** fall **SER** resemble **FOC**
> *sáa‿ ø   yītι‿   ø i̠ãň sī'əm lā.*
> rain:**SG COMP** emerge:**DIPF SER** leap   **INDF.ADV ART**.
> "I saw Satan [being] in heaven fall like lightning." (Lk 10:18, 1996)

Ka nwadbibis na naan agɔla lit teŋin na.

Kà ňwād-bíbìs   ná nāan   àgɔ́là‿   ø lít   tēŋɩ-n   nā̄.

And moon-small:**PL IRR** be.there **ADV**:above **SER** fall:**DIPF** ground:**SG-LOC** hither.

"And the stars [being] above will fall to earth." (Mk 13:25)

dap banɛ gur ye ba zugdaan naan pu'adiir di'ema zin'igin kul na

dàp-bànɪ   gūr yɛ́   bà zūg-dáàn   nāan   pṳ'á-dīɪr   dí'əmà

man-**REL.PL** wait that **3PL** head-owner:**SG** be.there wife-taking:**SG** feast:**PL**

zíň'igī-n‿   ø kūl   nā̄

place:**SG-LOC SER** return.home hither.

"men who are waiting for their lord [being] at a wedding feast to return ..."
(Lk 12:36)

yinni piiga wusa puugin ka li naan o yaab Abraham nu'usin

yīnní pīiga wūsa púʋgú-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)

The form *nāanɪ* thus evidently originated in *nāan* followed by Serialiser *n*, but I will omit **SER** in the interlinear glossing henceforward for simplicity.

In main clause statements *nāan(ɪ)* without *n*ᵋ is most often a by-form of *ňyāan* as described above. By far the most cases of modal *nāan(ɪ)* appear in the apodoses of Conditional Clauses 30.3. 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(ɪ)* 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 *bɔ̀ɔd*ᵃ "want, wish" to convey a hypothetical "might have wished":

M naan bɔɔdin ye ya sid aan na'anam.

M̀ nāan bɔ́ɔdī-n yɛ́ 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 sɔ̄'   nāan mɔ̄r pɛ̄'ɛs   kɔ́bɪgá kà yīnní bɔ̀dɪgɛ ⁺ø?
And **INDF.AN** then have sheep:**PL** hundred and one   get.lost **PQ**?
"If someone had a hundred sheep and one got lost?" (Mt 18:12 1976)

Li an sʊm ye dau yinne naan kpi nidib la yɛla gaad ...
Lì   àň sʊ́m yɛ̄ dāṵ   yīnní nāan kpí nīdɪb   lā yɛ́là‿ø gàad ...
3INAN COP good that man:**SG** one   then die person:**PL ART** about **SER** pass ...
"It is better if one man should die for the people than ..." (Jn 11:50)

Nāan(ɩ) also appears in subordinate clauses. Examples are not common in KB, which usually simply shows the Irrealis marker *nà* where the older versions have *nāan*.

Subordinate clauses introduced by *kà* or *yɛ̄*:

Li su'm ka fu daa naan zaŋin m ligidi n su'an banki ni.
Lì   sʊ̀'m   kà fʊ̀ dāa nāan záŋí-n‿ m̀ līgɪdɪ
3INAN be.good and **2SG TNS** then take-**REM 1SG** money
n sʊ̄'a-n   bánkì   ní.
SER hide-**REM** bank:**SG LOC**.
"You should have put my money in the bank." (Mt 25:27, 1976)

Ka m bood ye li naani pun niŋin sa.
Kà   m̀ bɔ́ɔd yɛ́ lì   nāanɪ pʊ́n   nìŋī-n sá.
And **1SG** want that **3INAN** then   already do-**REM** hence.
"I wish it had happened already." (Lk 12:49, 1976)

Relative Clauses:

M daa pu bood ye nimbane naan tisini m sumalisim la keen ka m moren
 susa'aŋa.
M̀ dāa pʊ̄   bɔ́ɔd yɛ̄ nīn-bánì   nāan tísī-ní‿ m
1SG TNS NEG.IND want that person-**REL.PL** then give-**REM 1SG.OB**
sʊ̄-málɪsɪ̀m   lā kɛ̄ɛ-n   kà m̀ mɔ̄rɪ-n   sʊ̄-sáň'àŋā   ⁺ø.
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)

... fʋn di'em o wʋʋ fʋn naan di'enim si'em la.

... fūn   dì'əm·ō‿   ø   wūʋ fún   nāan dī'ə-ní‿   m̀   sī'əm   lā.

... **2SG.CNTR** receive:**IMP 3AN.OB** like **2SG:COMP** then receive-**REM 1SG.OB INDF.ADV ART**.

"Welcome him as if you were welcoming me." (Philemon 1:17)

Absolute Clauses:

Bo a na'ana ne man naan yelin ka li niŋine?

Bɔ̄   áň   ná'anā nē   mán   nāan yέlí-n   kà   lì   níŋī-nέ ⁺*ø?*

What **COP** easily   with **1SG:COMP** then say-**REM** and **3INAN** do-**REM CQ**?

"What is easier for me to have said might happen?" (Lk 5:23, 1996)

Hale baa m meŋi naani moren suekane na keen ka m nwe' nyo'og ne saalib yela
 laa.

Hālí báa m̀ mε̄ŋí‿ ø   nāanı mɔ̄rı-n   sṵā-kánì   nà kε̄ε-n

Even not **1SG** self   **COMP** then   have-**REM** way-**REL.SG IRR** cause-**REM**

kà   m̀ ň̆wέ' ň̆yɔ̄'ɔg nε̄   sáalìb   yέlà   láa ⁺*ø.*

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   nāanı túm bε̄'εd kà bà sīgısʋ́‿   f   nε̄   kpísìnkpìl

2SG:COMP then do   bad   and **3PL** put.down **2SG.OB** with fist:**SG**

kà   fʋ̀ sín   kà   mɔ̄r sūgʋrú,   lì   sùm   áň bɔ́ ⁺*ø?*

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)

Ka li su'um ye ya namis yaname naan niŋid line dol suer... n gat yanam na tum
 line pu dol suere ka namis.

Kà   lì   sùm   yέ yà nā'mıs   yānámì‿ ø   nāan níŋìd   línì

And **3INAN** be.good that **2PL** suffer   **2PL**   **COMP** then do:**DIPF REL.INAN**

dɔ̄l   sūər ... n gát   yānám‿ ø   nà tūm línì   pū   dɔ̄l

follow way:**SG**...**SER** pass:**DIPF 2PL**   **COMP IRR** do   **REL.INAN NEG.IND** follow

sūərέ ⁺*ø kà nā'mıs.*

way:**SG NEG** and suffer.

"It is better that you suffer if you are doing what is right ... than that you do
 what is wrong and suffer." (1 Pet 3:17, 1996)

Niŋgbiŋ naan be ka siig kae' ka li a zaalim la, ala men ...
Nìn-gbíŋ‿   ø   *nāan bɛ́*   *kà*   *sīιg*   *kā'e*   *kà*   *lì*   *áň*   *zāalím*   *lā,*
Body-skin:**SG COMP** 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   *kɛ́*   *kà*   *yà sɔ̄'*   *nā'mιsíd*   *túʊ̀m-bàmmā*   *námī-nɛ́* ⁺*ø,*
But   **NEG.IMP** cause   and **2PL INDF.AN** suffer:**DIPF** deed-**DEM.DEI.PL** **PL-LOC**   **NEG**,
ɔ́n   *nāanι áň*   *nīn-kύʋ̀d ...*
3AN:COMP 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.
Nɔ̀ŋιr lɛ́m   *kā'e‿*   ø   *gáàd*   *nīdí‿*   ø   *nāan kpí*
Love   again **NEG.BE SER** pass   person:**SG COMP** then   die
ò   *zṳà-nàm zúgɔ̄* ⁺*ø.*
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
wɛ̄n   *nɛ̄*   *wʊ̄ʋ sáa‿*   ø   *nāanι ι̯áňk*   *yà*   *ňyá'aŋ*
resemble with like rain:**SG COMP** then   jump **2PL** behind
n   *tí*   *páe‿*   *yà*   *tùθna*   *lā*
SER 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   *wɛ̄n*   *nɛ̄*   *zύnzɔ̀ŋ‿*   ø   *nāanι vɛ̄'ɛd*   *zύnzɔ̀ŋ*   *nɛ̄.*
3PL resemble with blind.person:**SG COMP** 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'mιsύg nɛ̄'ŋá*   *wɛ̄n*   *nɛ̄*   *pṳ'á‿*   ø   *nāanι sā'*
And suffering **DEM.DEI:INAN** resemble with woman:**SG COMP** then   strain
yɛ́   *ò*   *dṳ'á nɛ̄.*
that **3AN** bear like.
"This suffering is like when a woman labours to give birth." (Mt 24:8, 1996)

wuu kunduna naan lusi ba meŋ ne pe'es gbana n kpen' pe'esin.

wōʋ kúndʋ̀na‿ ø   nāan lūsí‿bà mɛ̄ŋ nɛ̄   pɛ̄'ɛs   gbánà

like jackal:**PL** **COMP** then wrap **3PL** self with sheep:**PL** skin:**PL**

n   kpèň'ɛs pɛ̄'ɛsí-n.

SER enter   sheep:**PL-LOC**.

"Like when jackals wrap themselves in sheepskins to go among sheep."

(Mt 7:15, 1996)

30.2 Open

Conditional clauses without the Remoteness Marker n^ε or *nāan(ι)* 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 31.1, 28.1.1. 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 tʋm tʋʋma, o di'ed yɔɔd.

Nīd   yá' tʋ̀m   tūʋma, ò   dì'əd   yɔ̄ɔd.

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 pʋ vʋ'ʋg kuminɛ, alaa ti labasʋŋ la mɔɔlʋg la anɛ zaalim.

Kà   Kristo yá' dà pʋ̄   vʋ̄'ʋg   kūmɪ-nɛ́ ⁺ø, àláa‿   tì làba-sʋ̀ŋ

And Christ if   **TNS NEG.IND** come.alive death-**LOC NEG**, **ADV**:thus **1PL** news-good:**SG**

lā mɔ́ɔlʋ̀g   lā á   nɛ̄ zāalím.

ART proclamation **ART COP FOC** empty:**ABSTR**.

"If Christ did not rise from death, our preaching is empty." (1 Cor 15:14)

Fʋ ya'a kenna, fʋn on mɔrim waad fukanɛ ...

Fʋ̀ yá' kɛ̄n   nā,   fʋ̄n   ɔ̄n mɔ̄rí‿ m̀ wāad fú-kánì ...

2SG if   come:**DIPF** hither, **2SG.CNTR** also have   **1SG** cold   clothing-**REL.SG** ...

"When you come, bring my warm clothes that ..." (2 Tim 4:13)

Bɛog ya'a nie fʋ na wʋm o pian'ad.

Bɛ̄og   yá' nìe,   fʋ̀ ná wúm ò   pi̯àň'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."

Būn-píəlìg   bɛ́   fʊ̀   nīf   lā   pʊ́ʊgū-n.   Fʊ̀ yá' bɔ̀ɔd, tì   ná
Thing-white:**SG EXIST 2SG** eye:**SG ART** inside:**SG-LOC**. **2SG** if   want, **1PL IRR**

yīis,   kà   fʊ̀   ná   ňyɛ̄ sʊ́ŋā   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."

Fʊ̀ yá' si̯àk,   tì ná dīgɪlí‿   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]"

Negative polarity with non-past reference in the *yà'*-clause:

M ya'a pʊ keŋɛ, Sʊŋid la kʊ kɛɛn ya ni naa.
M̀ yá' pū   kēŋɛ́ ⁺ø, sūŋɪd   lā kú   kɛ́ɛň‿ yà nī náa   ⁺ø.
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.
Sɔ̄'   yá' kʊ̀   tūm, ɔ̄n   dā   díɪ ⁺ø.
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)

30.3 Hypothetical

If the Remoteness Marker *n*ᵋ 30.1.1 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(ɪ)* does not occur in a *yà'*-clause. If it is also absent in the
main clause, there is no contrary-to-fact implication; such main clauses usually have
Irrealis Mood.

Wief ya'a sigin li ni, li zuluŋ na paaen o salabir.
Wìəf   yá' sīgí-n   lì   nī, lì   zùlʊŋ 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)

Nobir ya'a yelin ye, on pu a nu'ug la zug, o ka' niŋgbiŋ nii, lin ku nyaŋin
keen ka o ka' niŋgbiŋ nii.
Nɔ́bìr yá' yèlī-n   yɛ̄,   ɔ́n   pū   áň nú'ùg lā zúg,
Leg:**SG** if   say-**REM** that **3AN:COMP NEG.IND COP** hand:**SG ART** upon,
ò   kā'   nín-gbīŋ   níι ⁺ø, līn   kú   ňyāŋι-n‿   ø
3AN NEG.BE body-skin:**SG   LOC   NEG**, **DEM.INAN NEG.IRR** accomplish-**REM SER**
kɛ̄ɛ-n   kà ò kā'   nín-gbīŋ   níι ⁺ø.
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)

Ya ya'a aan zunzoos, ya pu morin taale.
Yà yá' āa-n   zúnzɔ̀ɔ̌s,   yà pū   mɔ̄rι-n   táàllɛ̄ ⁺ø.
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*)

30.4 Contrary-to-Fact

If the main clause has *nāan(ι)* there is a contrary-to-fact implication:

Man ya'a pʋ kɛɛn na tu'asini ba, ba naan kʋ mɔrin taalɛ.
Mān   yá' pū   kɛ̄ɛ-n   nā‿   ø   tʋ́'asī-ní‿ bā,   bà nāan kʋ́
1SG.CNTR if   **NEG.IND** come-**REM** hither **SER** talk-**REM**   **3PL.OB**, **3PL** then **NEG.IRR**
mɔ̄rι-n   táàllɛ̄ ⁺ø.
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'inɛ li, ba naan kʋ kpa'an Zugsɔb onɛ an na'atita'ar la
dapuudir zugɔ.
Bà yá' dāa mī'i-ní‿   lī,   bà nāan kʋ́   kpā'a-n   Zūg-sɔ́b   ɔ́nì
3PL if   **TNS** know-**REM 3INAN.OB**, **3PL** then **NEG.IRR** fasten-**REM** head-one:**SG   REL:AN**
àň ná'-tītā'ar   lā dá-pūʋdá   zùgɔ̄ ⁺ø.
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'a ka'anɛ alaa, m naan kʋ yɛlinɛ ya ye ...
Yà' kā'a-ní‿   àlá,   m̀ nāan kʋ́   yɛ̄lι-ní‿ yā   yɛ̄ ...
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 mi'in linɛ na tisi ya sumbʋɡʋsʋm zina nwa, li naan aan sʋ'ʋm!

Yà   yá' mɪ̄'i-n   línì   nà tɪ̄sɪ‿yá   súmbūɡʋsím zɪ̄ná ňwá,

2PL if   know-**REM REL.INAN IRR** give **2PL.OB** peace   today this,

lì   nāan āa-n   súm!

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 ya'a siakin Moses ya naan siakin man mɛn.

Yà yá' sʲàkɪ̄-n   Moses, yà nāanɪ sʲákɪ̄-n   mān   mɛ́n.

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 meŋ ɡaŋir ka m tummin tuum kaŋa, m naani di'edin nyood.

Lì   yá' āa-nɪ́‿ m̀ mɛ̄ŋ ɡáŋìr kà m̀ túmmɪ̄-n   túʋ̀m-kàŋā,

3INAN if   **COP-REM 1SG** self choice and **1SG** work:**DIPF-REM** work-**DEM.DEI.SG**,

m̀   nāanɪ dɪ̄'ədɪ-n   ňyɔ̄ɔd.

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:

Bɔzuɡɔ Josua ya'a da tisini ba vʋ'ʋsʋm zin'ig, Wina'am da kʋ lɛm pian' dabis-si'a yɛla ya'asɛ.

Bɔ̄ zúɡɔ̄ Josua yá' dà tìsɪ̄-ní‿ bā   vū'ʋsím zíň'ìɡ, Wínà'am dá kʋ̀

Because Joshua if   **TNS** give-**REM 3PL.OB** resting place:**SG**, God   **TNS NEG.IRR**

lɛ̄m pʲā̀ň' dábìs-sɪ̄'a   yɛ́là yà'asɛ̄ ⁺ø.

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."

31 *Ǹ*-Clauses

Kusaal transforms complete clauses into AdvPs or NPs by inserting the post-subject particle *ǹ*. (For the realisation of the particle, see 8.2.2.1.1.) The *ǹ* by itself is a complementiser, which turns the original clause "X" into an Absolute Clause 31.1 signifying "it being the fact that X." *Ǹ*-Clauses also form the basis of Kusaal Relative Clauses, though in the commonest type the complementiser particle has fused with a preceding demonstrative pronoun to create what is synchronically simply a relative pronoun 31.2.2.

All types of *ǹ*-Clause have independent tense marking (relative to the narrative timeline within a series of Sequential Clauses, however 28.3.2.)

They cannot use the Imperative Mood; Irrealis appears instead:

Yanamɛ na mɔr sam si'a anɛ ye ya nɔŋ taaba.
Yānámì‿ø   nà mɔ̄r sām-sí'a   á nē yɛ́ yà nɔ́ŋ tāaba.
2PL   COMP 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)

Ǹ-Clauses cannot have any pre-subject elements or be *n*-focussed, but Relative Pronouns are often preposed with *kà* 31.2.2.

If the *ǹ*-Clause has a negative Verbal Predicator, it only shows a final LF if the *ǹ*-Clause is itself clause-final in the superordinate clause:

Nīn-bánι   pū   dít   ná kpī.
Person-**REL.PL NEG.IND** eat:**DIPF IRR** die.
"People who don't eat will die." WK

Ǹ ̌nyɛ́ nīn-bánì   pū   dítā   ⁺ø.
1SG see person-**REL.PL NEG.IND** eat:**DIPF NEG**.
"I've seen some people who don't eat."

Ǹ-Clauses can contain other *ǹ*-Clauses, serial-verb constructions and subordinate clauses:

ban mi' ye biig la kpinɛ la zug
bán   mī' yē bīig   lā kpí nē lā zúg
3PL:COMP 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 ǹ   sɔ̄b gbáu̯ŋ-sı̄'a   n tís Efesus dím   lā‿ ø ňwá.
Paul **COMP** write book-**INDF.INAN SER** give Ephesus individual.**PL ART SER** 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 niŋidib.
Kà m̀ tūʊma lín   kà m̀ túm n tìs Zūg-sɔ́b   lā
And **1SG** work   **REL.INAN** and **1SG** work **SER** give head-one:**SG ART**
kɛ́   kà yānám áň yáddā-níŋ̀dıb.
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)

dàu̯-kànı‿ bɔ̀ɔd yɛ́ 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' ɔ́n   dāa túm   sı̄'əm ɔ́n   dāa bɛ́ bà sā'an
3PL know **3AN:COMP TNS** work:**DIPF INDF.ADV 3AN:COMP TNS EXIST 3PL** presence
sānsá wūsa, dàa-lìn   kà ò dāa pāe Asia sú'ʊlìm 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:

dāu̯   lá ǹ   dāa kɛ̄ŋ dá'ā-n,   kà pu̯'ā   lā dāa kɛ̄ŋ
Man:**SG ART COMP TNS** go market:**SG-LOC** and woman:**SG ART TNS** go
pɔ̄ɔg 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 mɛ pu diti ba ki la.
mán   pū   sáň'amìdí‿ bà lā'ad,   kà mɛ́ pū   dítí‿
1SG:COMP NEG.IND spoil:**DIPF**   **3PL** goods:**PL** and also **NEG.IND** eat:**DIPF**
bà kī   láa ⁺ø.
3PL millet **ART NEG**.
"that I don't spoil their property or eat their millet" BNY p20

Ǹ-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 dīʊb ǹ   yīt   ná'-tɛ̄ŋ   lā   nā   zúg*
> **3PL** food **COMP** 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 fʊn gaŋ sɔ'*
> *Pà'alımī   tí   nīdıbá‿   àyí   ňwá fún   gāŋ   sɔ̄'*
> Teach:**IMP 1PL.OB** person:**PL NUM**:two this   **2SG:COMP** 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 *ǹ*-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 *ǹ*-Clause <u>23.7</u>.

Ǹ-Clauses, like other NPs/AdvPs, are coordinated with *nɛ̄* "and" *kūʊ*/*bɛ̄ɛ* "or."

> *... pa'ali ba on daa nyɛ Zugsɔb la suorin, ka o pian' tis o si'em,*
> *nɛ Saul n mɔɔl Yesu yɛla nɛ sʊnkpi'euŋ Damaskus teŋin si'em.*
> *... pá'alì‿ bā   ɔ́n   dāa ňyɛ̄ Zūg-sɔ́b   lā   sūərí-n,   kà   ò*
> ...teach   **3PL.OB 3AN:COMP TNS**   see   head-one:**SG ART** road:**SG-LOC** and **3AN**
> *pı̨āň'‿ ø   tís·ò‿ ø   sī'əm,   nɛ̄   Saul n   mɔ̄ɔl   Yesu yɛ́là*
> speak **SER** give   **3AN.OB INDF.ADV** with Saul **COMP** proclaim Jesus about
> *nɛ̄   sūň-kpí'òŋ   Damaskus tɛ́ŋī-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 *ǹ*-Clause itself contains two subclauses linked by *kà*.

31.1 Absolute Clauses

Ǹ-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 *ǹ*:

> *Dāu̯   lā   dāa záb   nà'ab   lā.*
> Man:**SG ART TNS** fight chief:**SG ART**
> "The man fought the chief."

> *dāu̯   lá‿ø   dāa záb   nà'ab   lā*
> Man:**SG ART COMP TNS** fight chief:**SG ART**
> "the man having fought the chief"

Absolute Clauses always take the article *lā⁺ᐟ*.

The characteristic use of Absolute Clauses is as **adverbs** of circumstance or time. Like other adverbs, they have limited use as verb arguments, most often as the complement of *àe̯ǹ*[a] "be", though occasionally as subjects:

> *Dine kɛ ka m a saalbiis zua la anɛ*
> *mam pu sa'amidi ba la'ad ka mɛ pu diti ba ki la.*
> *Dìnɪ kɛ́   kà m̀ áǹ sáàl-bīis   zu̯á   lā á nē mán*
> **REL.SG** cause and **1SG COP** smooth-child:**PL** friend:**SG ART COP FOC 1SG:COMP**
> *pū   sáǹ'amìdí‿ bà lā'ad   kà mɛ́ pū   dítí‿   bà kī   láa* ⁺ø.
> **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 kpii ti yɛla la kɛ ka ti baŋ nɔŋilim an si'em.*
> *Kristo‿ ø   dà kpìi‿ tì yēlá lā kɛ́   kà tì báŋ*
> Christ **COMP TNS** die   **1PL** about **ART** cause and **1PL** realise
> *nɔ̀ŋɪlím‿ ø   àǹ sī'əm.*
> love   **COMP 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 *sī'əm* 31.2.1 or Content Clauses 29.3 appear in this function.

31.1.1 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 28.1.1, or preposed with *kà* 33.2, or less commonly as adjuncts clause-finally. Kusaal is stricter than English in requiring constituent order to reflect event order (cf Serial VPs 26.1), so the clause-final position is usually confined to cases where the Absolute Clause expresses a state of affairs rather than a single event:

Ɔ̄n dāa ňyɛ̄t sʋ́ŋā, ɔ́n dāa áň bí-līa láa ⁺ø?
3AN.CNTR TNS see:**DIPF** good:**ADV**, **3AN:COMP 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 yɛli ba ...
Kà bán dìt lā, Yesu yɛ́lì‿ bā ...
And **3PL:COMP** 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 meŋ ...
Kà bán yī lā, kà Zūg-sɔ́b mál̞ı̞āk níe ò mɛ̄ŋ ...
And **3PL:COMP** 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 *sādɩgím* "since, because" immediately following the complementiser-*ǹ* occur in the pre-subject adjunct position of a main clause 28.1.1 and express "reason why":

Tinamɛ sagidim aan o biis la, ti da tɛn'ɛs ...
Tīnámì‿ø sādɩgím áaň‿ò bīis lā, tì dā tɛ̄ň'ɛs ...
1PL COMP 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-sʋ̀ŋ‿   ø   sādɪgím tísì‿ tī   vūm-páàl   lā,
God   spirit-good:**SG COMP** since   give **1PL.OB** life-new:**SG**   **ART**

kèlí‿ ø   kà   tì bèllím   dɔ̄l   nɛ́   ò   bɔ̀ɔdɪm 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.

Ɔ́n   sādɪgím nīŋ álá   lā, ò sìd nà tīsɪ‿ tí   sī'əl
3AN:COMP since   do **ADV:**thus **ART**, **3AN** truly **IRR** give   **1PL.OB** **INDF.INAN**

mɛ́kàma   wūsa lá'àm   nɛ́   ò.
altogether all   together with **3AN**

"Since he has done this, he will certainly give us everything together with him."
(Rom 8:32, 1976)

For Absolute Clauses with post-subject *nāan(ɪ)* see .

31.1.2 With Prepositions and Postpositions

Absolute Clauses occur after *hālí nɛ̄* or *hālí là'am nɛ̄* "although"

Hali la'am nɛ on daa an yɛlsʋm wʋsa daan la

Hālí là'am   nɛ̄   ɔ́n   dāa áň yɛ̄l-sʋ́m   wūsa dáàn   lā
Even together with **3AN:COMP 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 ..."

hālí   n   tì   pāa tīnámì‿ ø   kūl   lā
Up.to **SER** afterwards reach **1PL**   **COMP** 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 deŋi 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'ateŋ la na zug.

Kà   bà   lá'às   tāaba   n   dέŋì⏝   ø   ňyē Blestus
And **3PL** gather each.other **SER** do.first **SER** see Blastus

ɔ́nì   àň ná'àb   Herod sāmán-nà'ab   lā   n   máàl sūƟr
REL.AN COP king:**SG** Herod courtyard-chief:**SG** **ART** **SER** make way:**SG**

yέ   ò   ňwέ' nà'ab   nú'ùg,   bà dīɩb ǹ   yīt   ná'-tɛ̄ŋ
that **3AN** strike king:**SG** hand:**SG**, **3PL** food **COMP** 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* 33.2 to match the word order to event order 22.2.1:

Mán   ňwὲ' dāṵ   lā zúg kà police gbáň'a⏝ m.
1SG:COMP 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 Sequential Clause construction:

Mán   ňwὲ' dāṵ   lā, kà police gbáň'a⏝ m.
1SG:COMP strike man:**SG** **ART** and police seize   **1SG.OB**.
"I having struck the man, the police arrested me."

Ǹ ňwέ' dāṵ   lā, kà police gbáň'a⏝ m.
1SG strike man:**SG** **ART** and police seize   **1SG.OB**.
"I struck the man and the police arrested me."

yɛ̄lá[+] "concerning" appears after an Absolute Clause in section headings in the NT:

Jesus n kpen' Jerusalem la yela
Jesus ǹ   kpὲň' Jerusalem lā   yέlà
Jesus **COMP** 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   *mὲɛd*   *yīr*
3PL:COMP build:**DIPF** house:**SG**

Paul n sobid gboŋ nwa   "Paul writing this letter"
Paul ǹ   *sɔ̄bɪd*   *gbáu̯ŋ*   *ňwá*
Paul **COMP** write:**DIPF** letter:**SG** this

31.2 Relative Clauses

Kusaal Relative Clauses are internally headed, so that the antecedent is included in the Relative Clause itself. The antecedent is either a pronoun or has a pronoun as a post-determiner. Relative Clauses fall into two types: those where the antecedent is initial within the Relative Clause, which use Relative Pronouns, and those where it is not initial, which normally use Indefinite Pronouns. The Relative Clause subject is followed by *ǹ* in the type where the antecedent is not initial; in the initial-antecedent type this was also the case originally, but synchronically such clauses are most straightforwardly treated as headed by unitary Relative Pronouns.

Relative Clauses are normally restrictive in meaning, except when the construction is appositional 31.2.3, and usually even then. Compare 29.2 on Adnominal *kà*-Clauses, used typically with a non-restrictive relative meaning.

31.2.1 Non-Initial Antecedents

When the incorporated antecedent is not initial, it is in the great majority of cases an Indefinite Pronoun, or has an Indefinite Pronoun as post-determiner. Non-initial antecedents can be direct objects, VP complements or adjuncts:

Ɔ́n   *yὲl* **sī'əl**   *lā kā' sídāa* ⁺ø.
3AN:COMP say **INDF.INAN ART NEG.BE** truth **NEG.**
"**What** he says is not true" SB

dāu̯   *lá‿ø*   *zàb* **nà'-sɔ̄'**   *lā*
man:**SG ART COMP** fight chief-**INDF.AN ART**
"**the chief** whom the man fought"

nà'ab   *lá‿ø*   *zàb* **sīəba** *lā*
chief:**SG ART COMP** fight **INDF.PL ART**
"**those** whom the chief fought"

*Ka ban tʋm **sɔ'** la kʋ gaad onɛ tʋm o la.*

Kà bán tʋ̀m sɔ̄' lā kʋ́ gāad ɔ́nì tʋ̀m·o‿ ø láa ⁺ø.

And **3PL:COMP** 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 ǹ sɔ̄b gbáṳŋ-sī̀a n tís Efesus dím lā

Paul **COMP** write letter- **INDF.INAN SER** give Ephesus individual.**PL ART**

"**the letter** which Paul wrote to the Ephesians" (NT heading)

*Man mi' **si'el** nan anɛ bi'ela.*

Mán mí̀ sī̀əl nān á nɛ̄ bī̀əlá.

1SG:COMP know **INDF.INAN** now **COP FOC** small.**ADV**

"**What** I know now is small." (1 Cor 13:12)

*nà'ab lá‿ ø kpì **sān-sí'a** lā*

chief:**SG ART COMP** die time-**INDF.INAN ART**

"(at) **the time** the chief died"

Locative Relative Clauses headed by *sī̀əl*[a] are frequent in "where, whither" senses; neither the pronoun nor the Relative Clause have the locative particle:

*Fʋ̀ kɛ́ŋ fʋ́n bɔ̀ɔd **sī̀'əl**.*

2SG go **2SG:COMP** want **INDF.INAN**.

"You went **wherever** you wanted." cf Jn 21:18.

*biig la n be **si'el** la zugin*

bīig lá ǹ bɛ̀ sī̀əl lā zúgʋ̄-n

child:**SG ART COMP EXIST INDF.INAN ART** head-**LOC**.

"over **where** the child was" (Mt 2:9, 1976)

Objects of Invariable Verbs are not usually relativised using *kà*-preposed Relative Pronouns. (*Kà*-preposing is unusual in general with such objects 33.2.)

*Yanamɛ na mɔr **sam si'a** anɛ ye ya nɔŋ taaba.*

Yānámì‿ ø nà mɔ̄r sām-sí'a á nɛ̄ yɛ́ yà nɔ́ŋ tāaba.

2PL COMP 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)

Examples with preposing do occur 31.2.2; however, as with *kà*-preposing generally, this is probably ungrammatical with predicative complements.

Thus always e.g.

*M mi' fʋn an **sɔ'**.*   "I know **who** you are." (Lk 4:34)
Ǹ   mí'   fʋ́n   àň   sɔ̄'.
1SG know **2SG:COMP COP INDF.AN**

*Tiig walaa bigisid lin an **tisi'a**.*
Tìɩg   wɛ́làa__ø   bìgɩsɩd   lín   àň tí-sī'a.
Tree:**SG** fruit:**PL SER** show:**IMPF 3INAN:COMP COP** tree-**INDF.INAN**.
"It's the fruit of the tree that shows **what tree** it is." (Mt 12:33)

Sī'əm^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 23.2.1. Accordingly, relative clauses with *sī'əm* are common as objects of verbs of cognition, reporting, and perception:

Kristo da kpii ti yɛla la kɛ ka ti baŋ nɔŋilim an si'em.
Kristo__ø   dà kpìi__ tì yɛ̄lá   lā kɛ́   kà tì báŋ
Christ   **COMP TNS** die   **1PL** about **ART** cause and **1PL** realise
nɔ̀ŋɩlím__ø   àň   sī'əm.
love   **COMP 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'əm* Relative Clauses:

Ǹ   mí'   mán   nà   nīŋ sī'əm.
1SG know **1SG:COMP IRR** do   **INDF.ADV**.
"I know what to do."

Ǹ   mí'   mán   nà   nīŋ sī'əm   lā.
1SG know **1SG:COMP 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'əm* and past tense marking have *lā*^+/; 75% lacking *lā*^+/ have Irrealis Mood. Cf the two standing expressions

ɔ́n   bɔ̀ɔd sī'əm   "as he wishes"
3AN:COMP want **INDF.ADV**

lín   àǎ sīˀəm   lā   "as things are"
3INAN:COMP COP INDF.ADV ART

*Yèl*ᵋ "say, tell" tends to take a *sīˀəm* Relative Clause with *lā* in its sense of "say, tell how something is" and without *lā* in the sense "say how to do something":

Bà yɛ̀l·ō‿ø   bán   nìŋ sīˀəm   lā.
3PL say   **3AN.OB 3PL:COMP** do   **INDF.ADV ART**
"They told him what they'd done"

Bà nà yɛ̄lι‿ f   fún   nà nīŋ sīˀəm.
3PL IRR tell   **2SG.OB 2SG:COMP IRR** do **INDF.ADV**.
"They'll tell you what to do."

*Pà'al*ᵋ "teach, inform", surprisingly, typically takes a Relative Clause object without *lā*:

Bà pà'al·ō‿ø   bán   nìŋ sīˀəm.
3PL inform   **3AN.OB 3PL:COMP** do **INDF.ADV**.
"They informed him of what they'd done."

Other verbs taking a *sīˀəm* Relative Clause as an object are

*Gàad*ᵋ "pass, surpass" in comparing actions:

Mam tʋm bɛdegʋ gaad ban tʋm si'em la.
Māam   túm   bɛ́dʋgū‿ø gáàd bán   tʋ̀m sīˀəm   lā.
1SG.CNTR work much   **SER** pass **3PL:COMP** work **INDF.ADV ART**
"I've worked much harder than (how) they have." (2 Cor 11:23)

Gbāǎ'e⁺ᐟ "catch" is used with a *sīˀəm* Relative Clause idiomatically for "decide what to do":

M̀ gbáǎ'e mán   nà nīŋ sīˀəm.
1SG seize   **1SG:COMP IRR** do **INDF.ADV**.
"I've decided what to do."

With verbs of doing a *sīˀəm* Relative Clause can be a manner-adverb:

Bà nìŋ ɔ́n   yɛ̀lι‿bā   sīˀəm   lā.
3PL do   **3AN:COMP** tell   **3PL.OB INDF.ADV ART**.
"They did as he'd told them."

which could answer *Bà nìŋ bɔ́?* or *Bà nìŋ àlá?* "What/how did they do?"
Like other AdvPs *sĩˈəm* Relative Clauses can be verb subjects:

Man noŋi ya si'em la ane bedego.
Mán nɔ̀ŋι‿ yā sĩˈəm lā á nɛ̄ bɛ́dʊgū.
1SG:COMP love **2PL.OB INDF.ADV ART COP FOC** much.
"How much I love you, is a lot." (2 Cor 7:3, 1976)

Sĩˈəm Relative Clauses occur often as objects of *wūʊ* "like" and *wɛ̄n*^na/ "resemble"

Ò zɔ̀t wūʊ búŋʊ̀‿ ø zɔ̀t sĩˈəm lā.
3AN run:**DIPF** like donkey:**SG COMP** run:**DIPF INDF.ADV ART**
"He runs like a donkey (runs.)"

...ka ya na kɛ ka nidib dɔl man wʊʊ ziiŋba'adibi gban'ad zimi si'em la.
...kà yà ná kɛ́ kà nīdɩb dɔ̄l mān wūʊ zīīŋ-gbáň'adìb‿ ø
...and **3PL IRR** cause and person:**PL** follow **1SG.CNTR** like fish-catcher:**PL COMP**
gbāň'ad zīmí sĩˈəm lā.
catch:**DIPF** fish:**PL INDF.ADV ART**
"... you will make people follow me like fishermen catch fish." (Mt 4:19)

Hālí (*là'am*) *nɛ̄* "although", alongside its use with Absolute Clauses <u>31.1.2</u> can take a *sĩˈəm* Relative Clause in the sense "despite how...":

hali nɛ man daa sɔbi tisi ya si'em la
hālí nɛ̄ mán dāa sɔ̄bɩ‿ ø tísì‿ yā sĩˈəm lā
even with **1SG:COMP TNS** write **SER** give **2PL.OB INDF.ADV ART**
"despite how I wrote to you" (2 Cor 7:12)

Occasionally determiners other than Indefinite Pronouns can form non-initial antecedents of Relative Clauses: for example, ordinal expressions:

*Paul n sob **gbauŋ yiiga daan** n tis Korint dim la nwa.*
Paul ǹ sɔ̄b gbáʊ̯ŋ yīigá dāan n tís
Paul **COMP** write letter:**SG** firstly owner:**SG SER** give
Korint dím lā‿ ø ňwá.
Corinth individual.**PL ART SER** this.
"This is **the first letter** which Paul wrote to the Corinthians." (NT heading)

Perhaps parallel, but with the deictic *ňwà*⁺ "this" instead of a determiner, is

> *Zugsɔb yɛl ye, Hali nɛ man vʋe nwa...*
> *Zūg-sɔ́b   yɛ́l yɛ̄, Hālí nɛ̄   mán   vʋȩ̄   ňwá ...*
> head-one:**SG** say that even with **1SG:COMP** be.alive this *...*
> "The Lord says: As I live .." (Rom 14:11)

31.2.2 Initial Antecedents

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 *ǹ*. When the head is the subject of the relative clause, this produces the forms *ɔ̀nı kànı lìnı bànı* (always written *onɛ kanɛ linɛ banɛ* in KB) where the final *-ı* is due to Liaison before the complementiser, which is itself invariably realised *ø* in this case.

> *M̀ ňyɛ́ dáʋ̧-kànı‿ ø   zàb nà'ab lā.*
> **1SG** see man-**DEM.SG COMP** 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 *ǹ* 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 záb 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 bɛ́ 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*
> *ɔ̀n   būudí kà Jew dím   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:

gbauŋ kanɛ ka dau la sɔb la

for *gbàu̯ŋ-kàn   kà   dāu̯   lā   sɔ̄b   lā*

letter-**REL.SG** and man:**SG ART** write **ART**

"the letter which the man has written"

In *dau **kanɛ** yadda **niŋiri** pʋ zu'oe*

dàu̯-kànɪ   yàddā-níŋìrɪ⌣   ø   pʋ̄   zú'e   lā

man-**REL.SG** assent-doing:**SG COMP NEG.IND** become.great **ART**

"a man whose faith is not great..." (Mt 14:31)

the complementiser occurs after the actual relative clause subject.

   In view of all this, it seems best to regard the forms *ɔ̀nɪ kànɪ lìnɪ bànɪ* synchronically as subordinating Relative Pronouns rather than Demonstrative + Complemetiser combinations, and where sources use the historically expected forms *ɔ̀n 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.

Ǹ   ñɣɛ́ dáu̯-kànɪ   zàb nà'ab   lā.

1SG see man-**REL.SG** fight chief:**SG ART**

"I saw the man who fought the chief."

bàn(ɪ) 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. Complementiser-*ǹ* is *ne* in Toende, and Serial-*n* is segmentally, at least, ø. 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."

If the antecedent is the subject within a Relative Clause, or a pre-modifier of the subject, a Relative Pronoun is the only possible construction:

bànɪ *zàb nà'ab lā*   "**those** who fought the chief"
REL.PL fight chief:**SG ART**

M̀ ňyɛ́ **dáu̯-kànɪ** *zàb nà'ab lā.*
1SG see man-**REL.SG** fight chief:**SG ART**
"I saw **the man who** fought the chief."

nimbanɛ *yʊda sɔb Pɛbil la gbauŋʊn linɛ an nyɔvʊpaal dim gbauŋ la*
nīn-bánì   yūdá   sɔ̄b Pɛ̄'-bíl lā gbáu̯ŋū-n   línì
person-**REL.PL** name:**PL** write Lamb:**SG ART** book:**SG-LOC REL.INAN**
àň ňyɔ́-vū-páàl   dím   gbáu̯ŋ 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)

It is also the only possible way to relativise an indirect object, 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, unless it is an inanimate-gender verb object:

Onɛ *ka ba tis* **o** *ka li zu'oe, ba mɛ mɔr pʊtɛn'ɛr ye o na lɛbis linɛ zu'oe.*
Ɔ̀nɪ   kà bà tís·ò̱_ø   kà lì   zú'e,   bà mɛ̀ mɔ̀r
REL.AN and **3PL** give   **3AN.OB** and **3INAN** become.much, **3PL** also have
pú-tèň'ɛr   yɛ́   ò   nà lɛ̄bɪs 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 sõ dāa bɛ̃ ànīa, **ôn** *kà mān né***ôn** *dāa túm lā.*
Būrá-sɔ̄'   dāa bɛ́   ànínā,   ɔ̀n   kà mān nɛ̄ ɔ̄n 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

ninkanɛ *ka Na'ab Aretus kɛ ka* **o** *sʊ'oe Damaskus la*
nīn-kánì   kà nà'ab Aretus kɛ́   kà ò   sū'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)

nimbanɛ *ka ya tɛn'ɛs ye* **ba** *anɛ tuongatib la*
nīn-bánì   kà   yà   tɛ̄ň'ɛs   yé   bà   à   nɛ̄   túòn-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)

linɛ [1996 *lin*] *ka Kristo bɔɔd ye ti pian' la*
lìnɪ   kà   Kristo   bɔ́ɔ̀d yɛ́   tì   pi̯ā̄ň'   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,   ɔ̀n   būudí   kà   Jew dím   kīs
Samaritan person:**SG REL.AN** tribe:**SG** and Jew individual.**PL** hate
"a Samaritan, **whose** tribe the Jews hate" (Lk 10:33, 1996)

bikanɛ [1996 *biig kan*] *pʋʋg ka o mɔr la*
bì-kànɪ   pʋ́ʋ̀g   kà   ò   mɔ̄r   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")

Direct objects, complements and adjuncts may also be relativised by *kà*-
preposing, in this case alongside constructions with non-initial antecedents 31.2.1.
There is usually no resumptive pronoun in these cases (compare null anaphora in
Verb Phrases 23.1):

Gbauŋ kane ka Jerusalem kpeenmnam daa sob la nwa.
Gbàṳŋ-kànɪ   kà   Jerusalem kpɛ́ɛ̀ňm-nàm dāa sɔ̄b   lā‿ø   ňwá.
Letter-**REL.SG** and Jerusalem elder-**PL**   **TNS** write **ART SER** this.
"This is the letter that the elders of Jerusalem wrote."
(heading, Acts 15:23, 1996)

nà'-kàn   kà   dāṳ   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 linɛ [1996 *lin*] *ka ba mɔr na*
m̀   àntù'a lìnɪ   kà   bà   mɔ̄r   nā
1SG case   **REL.INAN** and **3PL** have hither
"the charge they are bringing against me" (Acts 25:11)

yɛltɔɔd ayɔpɔi banɛ ka maliaknama ayɔpɔi mɔr la
yɛ̄l-tɔ́ɔ̀d   àyɔ́pɔ̀ḙ   bánì   kà   màlḭāk-námá‿ àyɔ́pɔ̀ḙ   mɔ̄r 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"

A resumptive pronoun can occur:

niŋkanɛ [1996 *niŋkan*] *ka ba gban'e **o** la*
nīn-kánì   kà   bà   gbáň'o‿ ø   lā
person-**REL.SG** and **3PL** seize   **3AN.OB ART**
"a person **whom** they have seized" (Acts 25:16)

It is not clear whether there is anything but a stylistic difference between Relative Clauses with non-initial antecedents and those with *kà*-preposed Initial Antecedents in cases where either would have been permissible. In particular, despite the use of Indefinite Pronouns as determiners, non-initial antecedents can be definite old information, e.g.

*Ka bugum dit **teŋ tita'asi'a** la nyɔ'ɔs dʊt nɛ agɔl saŋa dinɛ ka' bɛnnɛ.*
Kà   bùgúm‿ ø   dìt   téŋ-tītá'-sḭ'a   lā   ňyɔ́'ɔ̀s dʊ̀t   nɛ́
And fire   **COMP** eat:**DIPF** land-big-**INDF.INAN ART** smoke ascend:**DIPF FOC**
àgɔ́l   sāŋá   dìnɪ   kā'   bɛ̄nnɛ ⁺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 teŋ tita'ar* "the great city of Babylon" (Rev 18:21)

There is no focus or foregrounding sense with *kà*-preposing in Relative Clauses. *Kà*-preposing in subordinate clauses is seen only here.
Relative clauses with locative reference do not take the locative *nī*⁺/ <u>20.3</u>:

yikan ka mam Paul be la yidaan

yī-kán　　kà　mām　Paul bɛ́　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)

31.2.3　Uncompounded Antecedents

Written materials frequently show constructions with a human-reference NP followed by a Relative Clause introduced by *onɛ* or *banɛ*. Before *onɛ*, a preceding word never appears as a combining form. Analogy with other constructions involving human-reference heads <u>19.5</u> <u>19.8.1.5</u> suggests that these constructions are appositional. They are still usually restrictive in meaning, but need not be:

o sid onɛ da bɛ nɛ o la

ò　sīd　　　ɔ́nì　dà　bɛ̀　nɛ́　ò　lā

3AN husband:**SG REL.AN TNS EXIST** with **3AN ART**

"her husband, who was there with her" (Genesis 3:6)

Relative pronouns cannot be compounded with coordinate structures, demonstratives, quantifiers <u>15.2</u> or locative forms; such cases are not confined to human-reference, and the resulting constructions are simply parallel to the compounded type.

Mam Paul nɛ Timoti banɛ *an Yesu Kristo tʋmtʋmnib la sɔbid gbauŋ kaŋa*

Mām　　Paul nɛ̄　Timoti　bánì　àň Yesu　Kristo túm-tūmníb

1SG.CNTR Paul with Timothy **REL.PL　COP** Jesus Christ work-worker:**PL**

lā　sɔ̄bıd　　gbáṵŋ-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 linɛ** ka Wina'am onɛ bɛ **saŋa linɛ** ka' bɛn la sʋnpɛɛn pɛ'ɛli ba la*

sālıma láàs　　àyɔ́pɔ̀ḛ　línì　　kà Wínà'am ɔ́nì　　bɛ̀

gold　　vessel:**PL NUM**:seven **REL.INAN** and God　　　**REL.AN EXIST**

sāŋá　lìnı　kā'　　bɛ̄n　lā sʋ́ň-pɛ́ɛ̀n　　pɛ́'ɛlì‿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*
kùkɔ̄r-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)

nimbanɛ yʋda sɔb Pɛbil la ***gbauŋʋn linɛ*** *an nyɔvʋpaal dim gbauŋ la*
nīn-bánì   yūdá   sɔ̄b   Pɛ̄'-bíl   lā   gbáy̰ŋū-n   línì
person-**REL.PL** name:**PL** write Lamb:**SG ART** book:**SG-LOC REL.INAN**
àň ňyɔ́-vū-páàl   dím   gbáy̰ŋ 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 kɛ̄ŋ Nazaret bán   dà ūgʋs·ó‿ ø   tɛ̀ŋ-sɪ̄'a   lā.
And Jesus go Nazareth **3PL:COMP TNS** raise   **3AN.OB** land-**INDF.INAN ART**.
"And Jesus went to Nazareth, where he was raised." (Lk 4:16)

31.2.4 Article with Relative Clauses

With relative pronouns other than *sɪ̄'əm* the function of the **article** after a
relative clause is straightforward; of necessity, absence of the article also does duty
for what with nouns is expressed by indefinite post-determining pronouns.

Ɔ̄n   sɔ̄b   á   nɛ̄ dáy̰-kànι   sà kɛ̄   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-bànι   bɔ̀ɔd yɛ́ bà ňyɛ́ɛ‿ f   kɛ́   nā.
Man-**REL.PL** want that **3PL** see   **2SG.OB** come hither
"Some men who want to see you have come."

onɛ du'a nɛ Siig   "someone born of the Spirit" (Jn 3:8)
ɔ̀nι   dy̰'à nɛ̄ Sīιg
REL.AN bear with spirit:**SG**

onɛ tʋmi m la na   "he who sent me hither" (Mk 9:37)
ɔ̀nι   tùmι‿ m   lā nā   (ɔ̀nι = **REL.AN**; contrast *ɔ́n* **3SG:COMP**)
REL.AN send   **1SG.OB ART** hither

32 Negation

32.1 Negation of Clauses

Negation of clauses is achieved by using a negative marker particle in the Verbal Predicator 22.5 along with a clause-final Negative Prosodic Clitic 8.1.

*Ti **pʋ** bɔɔd ye dau kaŋa aan ti **na'aba**.*
Tì pʋ̄   bɔ́ɔ̀d yɛ̄ dáṳ-kàŋā   áaň tì nà'abā ⁺ø.
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)

Pʋ̄ negates the Indicative, as above; Imperative is negated with *dā*:

*Dìm   nɛ̄   Wīn,   **dā**   tʋ́'às nɛ̄   **Wīnnɛ́** ⁺ø.*
Eat:**IMP** with God:**SG, NEG.IMP** talk   with God:**SG   NEG.**
"Eat with God, don't talk with God."

The negative particle *kʋ replaces* the positive Irrealis marker *nà*:

*Amaa man pian'ad la **kʋ** maligim **gaadɛ**.*
Àmáa m̀   pi̱àň'ad lā kʋ́   mālıgım gáadɛ̄ ⁺ø.
But   **1SG** speech   **ART NEG.IRR** again   pass   **NEG.**
"But my words will not pass away. (Mt 24:35)

32.1.1 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 22.6.1.1.

mìt (always imperative) "see that it doesn't happen that ..." is construed with a following *kà*-clause of purpose 29.1. In address to more than one person it may or may not have the usual postposed 2pl subject enclitic ʸᵃ: *mìtī*.

Mit ka ya maal ya tuumsuma nidib tuon ye ba gosi yaa.
Mìt   kà yà máàl yà tʋ̀ʋm-sʋ̀ma   nīdıb   túèn
NEG.LET.IMP and **2PL** do   **2PL** deed-good:**PL** person:**PL** before
yɛ́ bà gɔ̄sí‿ yáa   ⁺ø.
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 tʋʋm sʋma nidib tuon ye ba gɔs.*

Mìt 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.*
> *Mìtī‿   ø   zīrí nɔ̀-dí'əsìdɪb   bánì kɛ̄nní‿   yà sā'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)

zī̀' [+] "not know" normally replaces negative particle + *mī̀'*:

> *Bʋ̀ŋ-bāň'ad   zī'   yɛ̄ tɛ̄ŋ   túllā   [+]ø.*
> 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 *mī̀'* with negative particles do occur, however:

> *M biig Solomon anɛ dasaŋ , ka pʋ mi' wʋʋ lin nar si'em.*
> *M̀ bīig   Solomon á nɛ̄ dá-sāŋ,   kà pʋ̄   mī̀'i*
> **1SG** child:**SG** Solomon **FOC COP** young.man:**SG**, and **NEG.IND** know
> *wōʋ lín   nār   sī̀'əmm [+]ø.*
> how **3INAN:COMP** be.proper **INDF.ADV NEG**.
> "My son Solomon is young, and does not know how things ought to be."
> (1 Chronicles 22:5)

kā̀'ẹ̀ [+] "not be, not have" appears as *kā̀'* in close connexion with a following word [8.5.3](). It is the negative to both "be" verbs, *àẹ̀ň* [a] "be something/somehow" and *bɛ̀* [+] "be somewhere, exist" and also to *mɔ̄r* [a/] "have." **Pʋ̄ bɛ́* is not found, but *pʋ̄ mɔ̄r* is quite common; *pʋ̄ áẹ̀ň* is rare but can be found in contrastive contexts like

> *Mānɪ‿   ø áň dʋ̀'átà   àmáa fōn   pʋ̄   áňyā [+]ø.*
> **1SG.CNTR SER COP** doctor:**SG** but   **2SG.CNTR NEG.IND COP   NEG**.
> "I'm a doctor, but you're not."

Examples:

> *Dāʋ̀   lā kā̀'   dɔ́ɔgʋ̄-n   láa [+]ø.*
> Man:**SG ART NEG.BE** room:**SG-LOC ART NEG**.
> "The man is not in the room."

Dāu̯   lā kā'   bīiga   +ø.
Man:**SG ART NEG.HAVE** child:**SG   NEG.**
"The man hasn't got a child."

Dāu̯   lā kā'   ná'abā +ø.   "The man isn't a chief."
Man:**SG ART NEG.BE** chief:**SG   NEG.**

Dāu̯   lā kā'e   +ø.   "The man isn't there."
Man:**SG ART NEG.BE   NEG.**

Dāu̯   kā'e̯ dɔ́ɔgū̄-n   láa +ø.
Man:**SG NEG.BE** room:**SG-LOC ART   NEG.**
"There's no man in the room."

Pu̯'ā   lā mɔ́r bīig   àmáa dāu̯   lā kā'e   +ø.
Woman:**SG ART** have child:**SG** but   man:**SG ART NEG.HAVE   NEG.**
"The woman has a child but the man hasn't."

kà'asɪgɛ̄ (LF always, as the word only appears clause finally) "not exist"

Ò   bīig ká'asìgɛ̄ +ø.   "She has no child."
3AN child **NEG.EXIST   NEG.**

32.2 Negative Raising

Negative Raising occurs in a way generally analogous to negative raising in English. It is normal with verbs taking purpose-clauses as complements:

Ti pʋ bɔɔd ye dau kaŋa aan ti na'aba.
Tì pū̄   bɔ́ɔ̀d yɛ̄ dáu̯-kàŋā   áaň tì nà'abā +ø.
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)

Li pu nar ye fu di fu ba'abiig po'a Herodiase.
Lì   pū̄   nār yɛ́ fʋ̀ dí   fʋ̀ bā'-bîig   pu̯'á Herodiasɛ +ø.
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)

It occurs with a Content Clause following *tɛ̄ň'ɛsɛ/* "think":

*Tinamɛ sagidim aan o biis la, ti da tɛn'ɛs ye Wina'am bɛllim nwɛnɛ bada banɛ
 ka ninsaal nɔk sanlima bɛɛ anzurifa bɛɛ kuga, ten'esi maal nɛ o nu'usɛ.*

Tīnámì‿ø   sādɪgím áaň‿ò   bīis   lā,   tì   dā   tɛ̄ň'ɛs yɛ̄
1PL   COMP since   **COP   3AN** child:**PL ART 1PL NEG.IMP** think   that

Wínà'am bɛ́llím   wɛ̄n   nɛ̄   bádà   bànì   kà   nīn-sáàl
God   existence resemble with idol:**PL REL.PL** and person-smooth:**SG**

nɔ̄k sālɪma bɛ̄ɛ ānzúrɪfà bɛ̄ɛ kūgá‿   ø   tɛ̄ň'ɛsɪ‿ø   máàl
take gold   or   silver   or   stone:**PL SER** think   **SER** make

nɛ́   ò   nú'usɛ̄   ⁺ø.
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)

Contrast Content Clauses after *mī'⁺* "know" or *bàŋ*ᵋ "realise":

Bùŋ-bāň'ad   zī'   yɛ̄ tɛ̄ŋ   túllā   ⁺ø.
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' nɛ o ma pʋ baŋ ye o kpɛlim yaa.
Kà   ò   bā'   nɛ́   ò   mà   pū   báŋ   yɛ́   ò   kpɛ̀lɪm yāa ⁺ø.
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 lɛɛ pʋ baŋ ye li anɛ onɛ.
kà   ò   lɛ́ɛ pū   báŋ   yɛ́   lì   à   nɛ̄   ɔnɛ   ⁺ø.
And **3AN** but **NEG.IND** realise that **3INAN COP FOC 3AN.CNTR NEG**.
"but she didn't realise it was him." (Jn 20:14)

Negative raising similarly occurs with Adnominal *kà*-Clauses 29.2, attached to the object of a verb like *ňyɛ̄⁺* "see, find" used in the sense "see as...":

M̀ dāa pū   ňyɛ̄ dāu̯   lá kà   ò   áň ná'abā ⁺ø.
1SG TNS NEG.IND see man:**SG ART** and **3AN COP** chief:**SG NEG**.
"I didn't see the man as a chief." KT

It is not seen after verbs expressing existence; so in particular with constituent negation constructions involving clefting 32.4 and a formally subordinate Adnominal *kà*-Clause:

Di lɛn ka' fʊn yɛl si'el la zug, ka ti niŋ o yadda.

Lì   lɛ̀m   kā'   fún   yɛ̀l sī'əl   lā zúg kà

3INAN again **NEG.BE 2SG:COMP** say **INDF.INAN ART** upon and

tì   níŋ·ò̠_ ø   yáddáa ⁺ø.

1PL do   **3AN.OB** assent   **NEG.**

"It is no longer because of what you said that we believe in him." (Jn 4:42)

Lì   kā'   mān   bīig   kà fʊ̀ ňwɛ́'ɛ̄ ⁺ø.

3INAN NEG.BE 1SG.CNTR child:**SG** and **2SG** beat   **NEG.**

"It's not my child that you've beaten."

32.3 Position of the Negative Prosodic Clitic

The Negative Prosodic Clitic 8.1 normally appears at the end of the clause containing the negated verb, passing over all subordinate clauses:

*Ti **pʊ** bɔɔd ye dau kaŋa aan ti **na'aba**.*

Tì   pū   bɔ́ɔ̀d yɛ̄   dáṵ-kàŋā   áaň tì nà'abā ⁺ø.

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)

Subordinate clauses only fall within the *semantic* scope of the negation when the main clause verb induces **negative raising** 32.2.

However, if a construction which by default would imply negative raising occurs exceptionally with the subordinate clause excluded from the negative scope, the Negative Prosodic Clitic is placed *before* the subordinate clause:

*on nye ka Yesu **pu** pie o **nu'use** ka nyaan di la.*

ɔ́n   ňyɛ́ kà Yesu pū   píe ò nú'usɛ́ ⁺ø kà

3AN:COMP see and Jesus **NEG.IND** wash **3AN** hand:**PL NEG** and

ňyāan dí lā

then   eat **ART**

"when he saw that Jesus didn't wash his hands before eating"

(Lk 11:38, 1996: KB *on nyɛ ka Yesu **pʊ** pie o **nu'us** ka nyaan di la.*)

*Nidib be ka **pu** tum **si'ela** ye ba a popielim dim, ka kudun niŋ Wina'am*
one ke ka tuumbe'ed dim lieb popielim dim o tuon la yadda.
Nīdɩb   bɛ́   kà   pū   túm   sī'əla   ⁺ø   yɛ́ bà áň
person:**PL EXIST** and **NEG.IND** work:**DIPF INDF.INAN NEG** that **3PL COP**
pʊ́-pìəlɩm   dím,   kà   kūdɩm níŋ Wínà'am
inside-whiteness individual.**PL** and ever   do God
ɔ́nì   kɛ́   kà   tʊ̀ʊm-bɛ̄'ɛd dím   líə̀b
REL.AN cause and work-bad:**PL** individual.**PL** become
pʊ̀-pìəlɩm   dím   ò   tùən lā   yáddā.
inside-whiteness individual.**PL 3AN** before **ART** assent.
"There are people who haven't done anything that they become blessed, but
have believed in the God who causes sinners to become blessed before him."
(Rom 4:5, 1976)

The Negative Clitic is dropped at the end of *ǹ*-Clauses containing a negative
unless they are themselves clause final in the main clause, and also before the article
lā⁺/:

*m bi'emnam banɛ **pʊ** bɔɔd ye m an na'abi sʊ'oe ba la*
m̀ bì'əm-nàm bánì   pū   bɔ́ɔd yɛ́   m̀ áň ná'abì‿ø   sʊ́'ʊ‿ bā   lā
1SG enemy-**PL**   **REL.PL NEG.IND** want that **1SG COP** king:**SG SER** 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 **pʊ** niŋ **si'ela**, o pʊ'ʊsim dɔɔg la na lieb zaalim.*
Bà yá' pū   níŋ sī'əla ⁺ø, ò pʊ̀'ʊsɩm dɔ́ɔg   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 *bɛ̄ɛ*/*kūʊ* "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 *bɛ̄ɛ*/*kūʊ* also.

32.4 Constituent Negation

Clefting is the usual way of achieving constituent negation, using the patterns

Lì kā' X *kà ...* /*Lì kā'* X *n ...*   "It's not X that ..."
X *ká'ẹ kà ...* /X *kā'ẹ n ...*   "There's no X that ..."

For example:

Sɔ' kae na nyaŋi dɔl zugdaannam ayi'...
Sɔ̄'   kā'e‿ ø ná ŏyāŋɩ‿ø   dɔ̄l   zūg-dáàn-nàm   àyí ...
INDF.AN NEG.BE SER IRR prevail **SER** follow head-owner:**PL**   **NUM:**two ...
"Nobody can serve two masters." (Mt 6:24)

Sogia so' kae' n tum ka yood o meŋa.
Sɔ́gi̯à-sɔ̄'   kā'e n túm   kà yɔ̄ɔd   ò mɛ̄ŋá +ø.
Soldier-**INDF.AN NEG.BE SER** 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 ŏwɛ́'ɛ̄ +ø.
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* <u>21.2</u> (Hausa *bâa* "not exist") as
báa + NP extraposed from a negated clause:

Bà pū   kɛ̄   náa   +ø, 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 Verbal Predicator, e.g.

Amaa ba pʋ nyaŋi nyɛ linɛ tu'al baa yinne.
Àmáa bà pū   ŏyāŋɩ‿ø ŏyɛ̄ línì   tʋ̀'al   [+ø] báa yīnní.
But   **3PL NEG.IND** prevail **SER** find **REL.INAN** condemn [**NEG**] not one.
"But they couldn't find anything condemning, not one thing." (Mt 26:60)

Ka nid baa yinne pʋ yɛl ye on mɔr si'el la, onɛ sʋ'oe lii.

Kà   nīd   báa yīnní pʋ̄   yɛ́l yɛ̄   ɔ́n   mɔ̄r
and person:**SG** not   one   **NEG.IND** say that **3AN:COMP** have

sī'əl   lā,   ɔ̄nι‿   ø   sʋ́'ʋ‿ líι   ⁺ø.
INDF.INAN ART 3AN.CNTR SER own   **3INAN.OB NEG.**

"Not one person said that what he had, *he* owned." (Acts 4:32)

Fʋ du'adib baa yinne kae ka o yʋ'ʋr buon alaa.

Fʋ̀ dū'adιb   báa yīnní kā'é   kà   ò yū'ʋr   búèn   àláa   ⁺ø.
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 mɔr nɔɔr yinne nɛ banɛ ka' yadda niŋidib la ye ya niŋ si'ela.

Dā   mɔ̄r nɔ̄ɔr   yīnní nɛ̄   bánì kā'   yáddā-níŋìdιb lā
NEG.IMP have mouth:**SG** one   with **REL.PL NEG.BE** assent-doer:**PL ART**

yɛ́   yà níŋ sī'əla   ⁺ø.
that **2PL** do   **INDF.INAN NEG.**

"Do not agree with those who are not believers to do anything." (2 Cor 6:14)

33 Information Packaging

33.1 Focus: Overview

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 Serialiser-*n* 33.1.1, and the use of the particle *nɛ̄*+/ 33.1.2. Clefting constructions with the clause linker *kà* and corresponding ellipted types relate to foregrounding rather than Focus 33.2, 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*+/ 19.3 interacts with the focus mechanisms described below.

33.1.1 Subject Focus: Serialiser-*n*

N-clefting uses a serial-verb construction in the sense of a relative clause with the subject as antecedent, after a main clause with *Lì à nɛ̄* "It is ..." The sense resembles that of the formally analogous "it-clefting" of English, *foregrounding* the clefted element and backgrounding the rest:

> *Ka dau mɛ pʋ sʋ'oe o mɛŋ niŋgbinaa. Li anɛ o pu'a sʋ'oe li.*
> *Kà   dāu̯   mɛ́ pū   sʋ́'ʋ ò   mɛ̄ŋ nín-gbīnáa   +ø.*
> And man:**SG** also **NEG.IND** own **3AN** self body-skin:**PL NEG.**
> *Lì   á   nɛ́ ò   pṵ'ā̯ ø   sʋ́'ʋ̱ lī.*
> **3INAN COP FOC 3AN** wife   **SER** 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 (Huddlestone 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 25:

> *Anɔ'ɔn nwaa yisid nidib tʊʊmbɛ'ɛdi basida?*
> *Ànɔ́'ɔ̀n‿ ø ňwáa‿ø yīsıd   nīdıb   tʊ́ʊ̀m-bē̄'ɛdı‿ ø básıdà   ⁺ø?*
> Who   **SER** this   **SER** expel:**DIPF** person:**PL** deed-bad:**PL SER** 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 Serial VP particle 8.2.2.1.2. The clause lacks Independency Marking but has independent tense marking, unlike a non-initial VP. (Compare tense marking in ellipted indirect commands 22.3.1.)

The meaning of this construction is *focus* rather than foregrounding:

> *Wáafʊ̀‿ ø dúm·ō̄‿ ø.*   "A snake bit him." WK
> Snake:**SG SER** 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 *nɛ̄* 33.1.2.

Focus rather than foregrounding is also demonstrated by the fact that **Interrogative Pronouns as subjects are always *n*-focussed**. As a subject *ànɔ́'ɔ̀n* "who" thus always appears as *ànɔ́'ɔn n* [anɔ̰́:nı] (always NT *ano'one*, KB *anɔ'ɔnɛ*.)

> *Ànɔ́'ɔnì‿ ø kābırídà   ⁺ø?*
> Who   **SER** ask.for.entry:**DIPF CQ**?
> "Who is asking permission to enter?"

Clauses containing interrogative pronouns may not contain focus-*nɛ̄*⁺ᐟ, 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 *nɛ̄*⁺ᐟ 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 33.1.2.1:

> *M̀ zūgʊ‿ ø zábìd.*   "My head is hurting."
> **1SG** head **SER** fight:**DIPF**.   (Reply to "Where is the pain?")

cf   *M̀ zūg lā pʋ́'alìm   nɛ̄.*   "My head is hurting."
      1SG head **ART** damage:**DIPF FOC**.   (Reply to "What's the matter with you?")

Accordingly, the ellipted construction with Serialiser *n* after the subject represents focus, parallel to the use of *nɛ̄* with other clause constituents.

33.1.2 VP Constituent and VP Focus: *nɛ̄⁺ᐟ*

As a constituent-focus particle *nɛ̄⁺ᐟ* has two distinct rôles, readily distinguishable by position: preceding a VP-constituent, *nɛ̄⁺ᐟ* focusses that constituent, while VP-final *nɛ̄⁺ᐟ* focusses the entire VP contrastively.

The focus particle is homophonous with the preposition *nɛ̄* "with, and" and with the empty particle *nɛ̄* which follows objects of comparisons when they do not have the article 21.1; on distinguishing constituent-focus *nɛ̄⁺ᐟ* from the preposition see 23.4.

Greater difficulty arises over the distinction from the *nɛ̄⁺ᐟ* which is part of the aspect system 22.2[16], 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 *nɛ̄⁺ᐟ* cannot appear twice in a clause to mark both focus and aspect 33.1.2.1. The *aspectual* sense normally prevails wherever semantically and formally possible; otherwise, the particle is interpreted as constituent focus. When aspectual *nɛ̄⁺ᐟ* is excluded only by formal constraints, different verbal aspects still appear but are unmarked.

33.1.2.1 Contexts where *nɛ̄⁺ᐟ* cannot Appear

Nɛ̄⁺ᐟ 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

***Nɛ̄⁺ᐟ* may only occur *once* in a clause**; this not necessarily in the *first* VP of a Serial VP chain:

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16) In Dagbani, two different particles, *mi* and *la*, correspond to Kusaal *nɛ̄⁺ᐟ*, but they are in complementary distribution with no meaning difference to shed light on *nɛ̄⁺ᐟ*; together, they show much the same range of senses. Mampruli *ni* shares the initial *n-* of *nɛ̄⁺ᐟ*, but in the related languages the corresponding particles mostly have *m-*: Dagbani *mi*, Mooré *me*, Nabit and Farefare *mɛ*; even Toende Kusaal has *me*.

*Fu pu ma' n tis ninsaala, amaa fu ma' n tis **ne** Wina'am Siig Suŋ.*

Fù pū má' n tìs nīn-sáalā   +ø, àmáa fù mà'
2SG NEG.IND lie **SER** give person-smooth:**SG NEG** but **2SG** lie

n tís nɛ̄ Wínà'am Sí-sʊ̀ŋ..
SER 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 *nɛ̄*+/ marks constituent focus, aspect distinctions are unmarked. This
constraint reveals that Aspectual *nɛ̄*+/ is a specialised use of Focus-*nɛ̄*+/.
Examples of exclusion of Focus-*nɛ̄*+/:
Exclusion with *N*-focussing of the subject:

M̀ zūgʊ‿ø zábìd.   "My head is hurting/hurts." (No aspectual *nɛ̄*+/)
1SG head **SER** fight:**DIPF**.   Reply to "Where is the pain?"

Ànɔ́'ɔnì‿ø dít   sá'abɔ̀ +ø?
Who   **SER** eat:**DIPF** porridge **CQ**?
"Who eats/is eating millet porridge?" (No aspectual *nɛ̄*+/)

Exclusion of *nɛ̄*+/ in subordinate clauses:
In *ǹ*-Clauses:

Ò dāa á nɛ̄ bīig.   "She was a child."
3AN TNS **COP FOC** child:**SG**.

but *ɔ́n   àň bīig lā zúg*   "because she's a child"
   3AN:COMP COP child:**SG ART** upon

M̀ yí   nɛ̄ Bɔ́k.   "I come from Bawku." SB
1SG emerge **FOC** Bawku.

and *Yadda niŋir yitnɛ labaar la wʊmmʊg ni.*
   Yàddā-níŋìr yít   nɛ̄ lábāar lā wʊ́mmʊ̀g ní.
   Assent-doing emerge:**DIPF FOC** news **ART** hearing **LOC**.
   "Faith comes from hearing the news." (Rom 10:17)

but *Meeri one yi Magdala*
   Meeri ɔ́nì yī   Magdala
   Mary **REL.AN** emerge Magdala
   "Mary who came from Magdala" (Mk 16:9, 1996)

In Adnominal *kà*-Clauses, which are also subordinate:

* M̀ dāa pū   ňyē̄ dāų̄   lá kà ò   áň ná'abā ⁺ø.*
1SG TNS NEG.IND see man:**SG ART** and **3AN COP** chief:**SG NEG**.
"I didn't see the man as a chief."

not   **M̀ dāa pū ňyē̄ dāų̄ lá kà ò á nē̄ ná'abā.*

Contrast an *Insubordinate* Sequential clause <u>28.3.2</u> introduced by *kà*, showing aspectual *nē̄⁺/*:

Ka ba due keŋ. Ka ban ken la, Jesus gbisid ne.
Kà bà dūe‿ø kē̄ŋ. Kà bán   kēn   lā, Jesus gbīsıd   nē̄.
And **3PL** arise **SER** go. And **3PL:COMP** 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 *nē̄⁺/* in content questions: aspect-marking *nē̄⁺/*:

Bɔ́   kà fù kúɵsìda ⁺ø?   "What are you selling/do you sell?"
What and **2SG** sell:**DIPF CQ**?

Fù kúɵsìd bɔ́   ⁺ø?   "What are you selling/do you sell?"
2SG sell:**DIPF** what **CQ**?

Bɔ́   kà fù kúmmà ⁺ø?   "Why are you crying/do you cry?"
What and **2SG** cry:**DIPF CQ**?

Fù níŋìd bɔ́   ⁺ø?   "What are you doing/do you do?"
2SG do:**DIPF** what **CQ**?

Fù wá'e yáa   ⁺ø?   "Where are you going (just now)?"
2SG go   where **CQ**?

Exclusion of *nē̄⁺/* in content questions: constituent-focus *nē̄⁺/*:

Mām   áň bɔ́   ⁺ø?   "What am I?"
1SG.CNTR COP what **CQ**?

Fù áaň‿ ànɔ́'ɔnè ⁺ø?   "Who are you?"
2SG COP   who   **CQ**?

Fù bɔ́ɔ̀d nɛ̄ bɔ́ ⁺ø?	"What do you want it with?"
2SG want with what **CQ**?	*Nɛ̄ must* be interpreted as preposition (WK)

Focussing a constituent, thereby leaving aspect distinctions unmarked because *nɛ̄⁺ᐟ* cannot be used twice:

M̀ pʊ́'ʊsìdī‿ f nɛ̄.	"I'm greeting you."
1SG greet:**DIPF 2SG.OB FOC**.	

M̀ pʊ́'ʊsìd nɛ̄ ná'àb lā.	"I'm greeting the chief."
1SG greet:**DIPF FOC** chief:**SG ART**.	

Ò kùɵsɪdī‿ bá nɛ̄.	"She's selling them."
3AN sell:**DIPF 3PL.OB FOC**.	

but

Ò kùɵsɪd sūmma lā nɛ̄.
3AN sell:**DIPF** groundnut:**PL ART FOC**.
"She *sells*/is *selling* the groundnuts." ("They're not free.")

M̀ pʊ́'ʊsìd ná'àb lā nɛ̄.	"I greet/am greeting the chief."
1SG greet:**DIPF** chief:**SG ART FOC**.	

33.1.2.2 Words which cannot be Focussed with *nɛ̄⁺ᐟ*

Certain words do not prevent Focus-*nɛ̄⁺ᐟ* from being used in the clause (unlike Interrogative proforms 33.1.2.1), but cannot themselves be focussed with *nɛ̄⁺ᐟ*. Words which behave like this include *sʊ̀ŋā⁺ᐟ* "good", *sʊ̀m^m* "good", *bɛ̄'ɛd^ɛ* "bad" *sìda⁺* "truth" when used as adverbs, and the "two, three exactly" quantifier forms *àyíŋā⁺ᐟ àtáŋā⁺ᐟ* 16.2.2. AdvPs formed by coordinating such words and NPs with these quantifiers as dependents share the same property.

Lì àň sʊ́ŋā.	"It's good."
3INAN COP good:**ADV**.	

Lì àň sʊ́m.	"It's good."
3INAN COP good:**ABSTR**.	

Lì àň bɛ̄'ɛd.	"It's bad."
3INAN COP bad:**ABSTR**.	

Lì   àň sídà.   "It's true."
3INAN COP truth.

[*ye ka*] *o sariakadib a sum ne sida.*
ò   sàríyà-kādıb áň súm   nɛ̄ sídà.
3AN law-drive   **COP** good:**ABSTR** with truth.
"His judgments are good and true. (Rev 19:2, 1976)

If *nɛ̄⁺ᐟ* 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 33.1.2.3):

M̀   mɔ́r bīīsá‿ àtáŋā.
1SG have child:**PL NUM:**three.exactly.
"I've got exactly three children."

but *M̀   mɔ́r nɛ̄ bīīsá‿ 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 áň súŋā.   "It was good." WK
3INAN TNS COP good:**ADV**.

Lì   dāa á nɛ̄ súŋā.   "At the time, it was good." WK
3INAN TNS COP FOC good:**ADV**.
= *Sān-kán   lā, lì   dāa á   nɛ̄ súŋā.*
Time-**DEM.SG ART**, **3INAN TNS COP FOC** good:**ADV**.

Lì   à   nɛ̄ súŋā.   "It's good." ("Now; it wasn't before." WK)
3INAN COP FOC good:**ADV**.

Emphatics 33.6 do not behave in this way:

bɔzugɔ o anɛ fʊ biig mɛn.
bɔ̄ zúgɔ́ ò   à   nɛ́ fʊ̀ bīig   mɛ́n.
Because **3AN COP FOC 2SG** child:**SG** also.
"Because he is your child too." (Genesis 21:13)

33.1.2.3 Contexts where *nɛ̄*⁺ᐟ cannot be Aspectual

There is potential ambiguity between *nɛ̄*⁺ᐟ 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 *nɛ̄*⁺ᐟ requires that it follow the verb word directly, with at most Liaison Enclitics intervening; if not, the relevant aspectual distinctions are unmarked:

> Ò   kùɵsɪdī‿ bá   nɛ̄.   "She's selling them." (Aspectual)
> **3AN** sell:**DIPF**   **3PL.OB FOC**.

but Ò   kùɵsɪd sūmma   lā nɛ̄.
>   **3AN** sell:**DIPF** groundnut:**PL ART FOC**.
> "She *sells*/is *selling* the groundnuts." (VP focussed: "They're not free.")

Nɛ̄⁺ᐟ may only be used aspectually if the Verbal Predicator has positive polarity; if not, the relevant aspectual distinctions are again unmarked:

> Ò   zàbɪd.   "He fights."
> **3AN** fight:**DIPF**.

> Ò   zàbɪd   nɛ̄.   "He's fighting."
> **3AN** fight:**DIPF FOC**.

but Ò   pū   zábɪdā   ⁺ø.   "He's not fighting"/"He doesn't fight."
>   **3AN NEG.IND** fight:**DIPF NEG**.

The Predicator must have Indicative Mood for aspectual use of *nɛ̄*⁺ᐟ. It is not clear if the relevant distinctions occur at all in the Irrealis.

In direct commands *nɛ̄*⁺ᐟ may occur only as the VP-final marker of constrastive focus on the entire VP 33.1.2.5. It cannot be aspectual or focus a constituent.

> Ò   gɔ̀sɪd   nɛ̄.   "She's looking."
> **3AN** look:**DIPF FOC**.

> Gɔ̀sɪm   kpɛ̄.   "Look here!"
> Look:**IMP** here.

but   *Gɔ̀sɪm nɛ̄.*   "*Look*!" ("Don't *touch*." WK)
      Look:**IMP FOC**.

      Ò   à   nɛ̄ bāaňlím.   "She is quiet."
      3AN COP FOC quiet:**ABSTR**.

but   *Àň bāaňlím!*   "Be quiet!"
      COP quiet:**ABSTR**.

However, a following *àlá* "thus" imposes a continuous/progressive imperfective sense on the verb, in a similar sense to *nɛ̄*⁺/ with a Dynamic Imperfective 22.4.

Passive constructions 23.1.1 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 *nɛ̄*⁺/ can never be interpreted aspectually with passives.

(All interpretations WK):

      Dāká lā záňl   nɛ̄.   "The box is portable by hand."
      Box:**SG ART** carry.in.hands **FOC**.   not "The box is being carried."

      Dāká lā zîid   nɛ̄.   "The box is for *carrying on the head*."
      Box:**SG ART** carry.on.head **FOC**.   ("Not in the hands.")

      Dāam lā   núùd.   "The beer gets drunk."
      Beer   **ART** drink:**DIPF**.

      Dāam núùd   zīná.   "Beer gets drunk today."
      Beer   drink:**DIPF** today.

but   *Dāam lā núùd   nɛ̄.*   Only "The beer is for drinking."
      Beer   **ART** drink:**DIPF FOC**.   ("Not for throwing away.")
                                      not "The beer is being drunk."

      *Dāam núùd nɛ̄.   rejected by WK altogether

Contrast the intransitive use of Patientive Ambitransitive verbs expressing changes of state 23.1:

      M̀ yɔ́ɔ̀d   nɛ̄ kʋ́lìŋ lā.   "I'm closing the door."
      1SG close:**DIPF FOC** door:**SG ART**.

Kʋ̀lıŋ   lā yɔ́ɔ̀d   nɛ̄.   "The door is closing."
Door:**SG ART** close:**DIPF FOC**.

Ò   tʋ̀lıgıd   nɛ̄.   "He's heating it up."
3AN heat.up:**DIPF FOC**.

Lì   tʋ̀lıgıd   nɛ̄.   "It's heating up."
3INAN heat.up:**DIPF FOC**.

Lì   mà'ad   nɛ̄.   "It is getting cool" (dipf of *mā'e*[+/] "get cool")
3INAN get.cool:**DIPF FOC**.

but *Lì   mà'an nɛ̄.*   "It gets *cooled*." (contrastive focus on the VP)
       3INAN cool:**DIPF FOC**.   Not "It is getting cool"
                                     (dipf of the causative *mā'al*[ε/] "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.

M̀   dá' bʋ́ŋ.   "I've bought a donkey."
1SG buy donkey:**SG**.   ("What have you done?")

M̀   dá' nɛ̄ bʋ́ŋ.   "I've bought a *donkey*."
1SG buy **FOC** donkey:**SG**.   ("What have you bought?")

M̀   pʋ̄   dá' bʋ̀ŋā   [+]ø. "I haven't bought a donkey."
1SG NEG.IND buy donkey:**SG NEG**.

M̀   pʋ̄   dá' nɛ̄ bʋ́ŋā   [+]ø.
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   dìgıl   nɛ̄.   "He's *laid it down*." ("I thought he'd pick it up.")
3AN lay.down **FOC**.

> *Ò   dìgɪn   nɛ̃.*
> **3AN** lie.down **FOC**.
> "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   nɛ̃.*   "She's pregnant." (Not "She's stood still.")
> **3AN** stand.still **FOC**.

With Descriptive Verbs, aspectual *nɛ̄*[+/] may only occur if there is an explicit
time expression in the immediate context. If not, *nɛ̄*[+/] must be interpreted as
focussing the VP or a constituent:

> *Ò   gìm.*   "She's short."
> **3AN** be.short.

but   *Ò   gìm   nɛ̃.*   "He's *short*." ("I was expecting someone taller.")
       3AN be.short **FOC**.

> *Lì   zùlɪm.*   "It's deep."
> **3INAN** be.deep.

but   *Lì   zùlɪm   nɛ̃.*   "It's *deep*." (Focus on the verb.)
       3INAN be.deep **FOC**.

> *M̀   mɔ́r   pu̠'ā.*   "I have a wife."
> **1SG** have wife:**SG**.

but   *M̀   mɔ́r   nɛ̃   pu̠'ā.*   "I have a woman."
       1SG have **FOC** woman:**SG**.   (not "wife": implies an irregular liaison, WK)

The verb *àe̠n̆*[a] "be something/somehow" is *characteristically* followed by *nɛ̄*[+/]
focussing its complement [24.2](#):

> *Ò   à   nɛ̃   bĩig.*   "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 *nɛ̄*[+/] 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   nɛ̄.*   "It's *beautiful*." (Focus on the verb.)
> **3INAN** be.beautiful **FOC**.

but *Nānnánā, lì   vèn   nɛ̄.*
     Now,   **3INAN** be.beautiful **FOC**.
     "Just now, it's beautiful."

> *Sān-kán   lā, lì   dāa zúlɪm   nɛ̄.*
> Time-**DEM.SG ART**, **3INAN TNS** be.deep **FOC**.
> "At that time, it was deep."

> *Mù'ar   lā dāa zúlìm   nɛ̄.*   "The lake *was* deep."
> Lake:**SG ART TNS** be.deep **FOC**.   (Implying, "Now it's shallow." WK)

> *Lì   dāa vɛ́n   nɛ̄.*   "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 būgʊs nɛ̄.*   "It *was* soft." ("Now it isn't.")
> **3INAN TNS** be.soft **FOC**.

Aspectual interpretation of *nɛ̄*$^{+/}$ is also forced when the following constituent does not permit focussing with *nɛ̄*$^{+/}$ 33.1.2.2.

A generic subject is not semantically compatible with the use of *nɛ̄*$^{+/}$ in aspectual function:

> *Nīigí   ɔ̀n̆bɪd   nɛ̄ mɔ̄ɔd.*   "Cows eat *grass*." ("What do cows eat?")
> Cow:**PL** chew:**DIPF FOC** grass:**PL**.

A form like *nīigí* 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 19.3. By context, pronoun subjects also can be generic or specific:

> *Bà ɔ̀n̆bɪd   nɛ̄ mɔ̄ɔd.*   "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.*
> *Kùkɔ̀ma dá zàb tāabá   à-sɔ̄ň'e   bī'əlá 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 *nɛ̄*[+/] in its aspectual sense is omitted in replying to polar questions or responding to questions by repeating the verb:

A: *Gɔ̀sɩm!*   "Look!"
B: *Ḿ gɔ́sìd!*   "I'm looking!"
A: *Fù gɔ́sìd nɛ́ɛ?*   "Are you looking?"
B: *Ḿ gɔ́sìd!*   "I'm looking!"

This probably simply represents the cross-linguistically common phenomenon of ellipsis in declarative replies to questions 27.1.5.

33.1.2.4 VP Constituent Focus

(See 33.1.2.3 for the constituent-focus sense of *nɛ̄*[+/] 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 33.1:

> *Ḿ   dá' nɛ̄ búŋ.*   "I've bought a donkey."
> **1SG** buy **FOC** donkey:**SG**.   ("What have you bought?")

> *Nīigí   ɔ̀ňbɩd   nɛ̄ mɔ̄ɔd.*   "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**:

> *Ḿ pū   dá' nɛ̄ búŋā   ⁺ø.*
> **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 $n\bar{\varepsilon}^{+/}$ before a definite object is usually aspectual:

> *Nīigí   lā   ɔ́ñbìd   nɛ̄ mɔ̄ɔd   lā.*
> Cow:**PL ART** chew:**DIPF FOC** grass:**PL ART**.
> "The cows are eating the grass."

> *Nā'-síəbà   ɔ́ñbìd   nɛ̄ mɔ̄ɔd   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 Suŋ.*
> *Fù pū   má' n   tìs   nīn-sáalā   ⁺ø, àmáa fù   mà'*
> **2SG NEG.IND** lie   **SER** give person-smooth:**SG NEG** but   **2SG** lie
> *n   tís   nɛ̄   Wínà'am Sí-sùŋ..*
> **SER** give **FOC** God   Spirit-good:**SG**.
> "You have not lied to a human being, but to *the Holy Spirit*." (Acts 5:4, 1996)

> *Linɛ ka ba'amaannib maannɛ tisid bada la, ba maannɛ tisid**nɛ** kikiris, ka pʋ*
> * maannɛ tisid Wina'am.*
> *Lìnɪ   kà   bà'-māannɪb   máànnɪ‿   ø   tísìd   bádà lā,*
> **REL.INAN** and idol-sacrificer:**PL** sacrifice:**DIPF SER** give:**DIPF** idol:**PL ART**
> *bà màannɪ‿   ø   tísìd   nɛ̄ kíkīrɪs kà pū   máànnɪ‿*
> **3PL** sacrifice:**DIPF SER** give:**DIPF FOC** fairy:**PL** and **NEG.IND** sacrifice:**DIPF**
> *ø   tísìd   Wínā'amm ⁺ø.*
> **SER** 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 *àe̱ñ*[a] "be something/somehow" in its ascriptive sense <u>24.2</u> is non-referring and almost prototypically "unpredictable or pragmatically non-recoverable", and therefore is naturally preceded by $n\bar{\varepsilon}^{+/}$ for **ordinary** focus:

> *Ò   à   nɛ̄ bīig.*   "She is a child."
> **3AN COP FOC** child:**SG**.

> *Ò   dāa á   nɛ̄   bīig.*   "She was a child."
> **3AN TNS COP FOC** child:**SG**.

Ò   à   nɛ̄ nīn-súŋ.   "She's a good person."
3AN COP FOC human-good:**SG**.

Dīɩb á   nɛ̄ būn-súŋ.   "Food is a good thing."
Food **COP FOC** thing-good:**SG**.

Ò   à   nɛ̄ bāaňlím.   "She is quiet."
3AN COP FOC quiet:**ABSTR**.

Lì   à   nɛ̄ zāalím.   "It's empty."
3INAN COP FOC empty:**ABSTR**.

Lì   à   nɛ̄ būgʊsígā.   "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 nɛ dua gbinin. Ba zamisid nɛ bula wa'ab. Ba anɛ Apam biis.
Bīis   lā dí'əmìd nɛ̄ dúaň   gbínnī-n.   Bà zà'mɩsɩd nɛ̄
Child:**PL ART** play:**DIPF FOC** dawadawa:**SG** base:**SG-LOC**. **3PL** learn:**DIPF FOC**
būla wá'àb.   Bà à nɛ́ À-Pām   bîis.
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 bʊmbʊʊda banɛ lu gɔn'ɔs sʊʊgin la anɛ banɛ wʊm pian'ad la, ka...
Kà   būn-búʊdà   bànɩ lù gɔ̀ň'ɔs   súʊgū-n   lā á nɛ̄
And thing-planting:**PL REL.PL** fall thorn:**PL** among-**LOC ART COP FOC**
bánì wùm pi̯àň'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 yʋ'ʋr na anɛ Joon.   "His name will be John." (Lk 1:60)
Ò yū'ʋr   ná ā nɛ̄ 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'ḛ̄⁺* "not be") focus is difficult to interpret in the "ordinary" sense, so that if *nɛ̄⁺/* is present at all the result is normally **contrastive**:

Ṁ á nɛ̄ dṵ'átà.   "I'm a doctor."
1SG COP FOC doctor:**SG**.

Ṁ kā'   dṵ'átāa ⁺ø.   "I'm not a doctor."
1SG NEG.BE doctor:**SG NEG**.

Ṁ kā'   nɛ̄ dṵ'átāa ⁺ø.   "I'm not a *doctor*." ("I'm a lab assistant.")
1SG NEG.BE FOC doctor:**SG NEG**.

Focus on a **Locative complement** 23.3 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 20.3; like other postpositions, it is not itself referential even though it has a pre-determiner. (Cf locative pre-modifiers 19.7.2.3.)

Dāṵ   lā bɛ́ nɛ̄ dɔ́-kàŋā   lā púʋgū-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   bɛ́ nɛ̄ mɔ̄ɔgʋ-n.
1SG.CNTR EXIST FOC grass:**SG-LOC**.

Ṁ yí   nɛ̄ Bɔ́k.   "I come from Bawku." SB
1SG emerge **FOC** Bawku.

Yadda niŋir yitnɛ labaar la wʋmmʋg ni.
Yàddā-níŋìr yít   nɛ̄ lábāar lā wúmmʋ̀g ní.
Assent-doing emerge:**DIPF FOC** news   **ART** hearing   **LOC**.
"Faith comes from hearing the news." (Rom 10:17)

Contrast the existential use of *bɛ̀⁺*, where the locative is a clause adjunct:

Dàu̯-sɔ́'   bɛ́   dɔ́-kàŋā   lā   púʋgū-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 *nɛ̄⁺ᐟ*-focus on an adjunct in my data; one is

Tì   dít   sā'ab   nɛ̄ záàm.   "We eat millet porridge *in the evening*."
1PL eat:**DIPF** porridge **FOC** evening.   ("When do you eat porridge?")

33.1.2.5 VP Focus

When *nɛ̄* 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 <u>33.1.2.3</u> for the the constituent-focus sense of *nɛ̄⁺ᐟ* here):

Gɔ̀sɪm   nɛ̄.   "*Look*!" ("Don't *touch*." WK)
Look:**IMP FOC**.

Ò   kùɵsɪd   sūmma   lā   nɛ̄.
3AN sell:**DIPF** groundnut:**PL ART FOC**.
"She *sells*/is *selling* the groundnuts." ("They're not free.")

Ò   gìm   nɛ̄.   "He's *short*." ("I was expecting someone taller.")
3AN be.short **FOC**.

Lì   zùlɪm   nɛ̄.   "It's *deep*."
3INAN be.deep **FOC**.

M̀   bɔ́ɔdī‿ f   nɛ̄.   "I really *love* you."
1SG want   **2SG.OB FOC**.

Ò   dìgɪl   nɛ̄.   "He's *laid it down*." ("I thought he'd pick it up.")
3AN lay.down **FOC**.

Ò   dìgɪn   nɛ̄.   "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   bɔ́dìg   nɛ̄.   "It's *lost*."
And **3INAN** get.lost **FOC**.   Contradicting "someone hid it." 28.3.2

Dāká   lā   záñl   nɛ̄.   "The box gets carried *in the hands*."
Box:**SG ART** carry.in.hands **FOC**.   ("Not on your head.")

Dāká   lā   zîd   nɛ̄.
Box:**SG ART** carry.on.head:**DIPF FOC**.
"The box is for carrying *on the head*." ("Not carrying in the hands.")

Dāam lā   núùd   nɛ̄.   "The beer is for *drinking*."
Beer   **ART** drink:**DIPF FOC**.   ("Not washing with!")

Lì   mà'an   nɛ̄.   "It gets *cooled*."
3INAN get.cool:**DIPF FOC**.   ("Not heated!")

An idiomatic use (marking a euphemism) is seen in

Ò   zì'ən   nɛ̄.   "She's pregnant." (Not "She has stood still.")
3AN stand.still **FOC**.

33.2 Clefting and Preposing with *kà*

Kà-clefting arises from constructions with Adnominal *kà*-Clauses 29.2 in a way similar to the development of *n*-clefting from Serial VPs. Once again, there is an implicature of exhaustiveness and exclusiveness, here made explicit by *mà'aa* "only."

Asɛɛ linɛ an bɛ'ɛd ma'aa ka m na tun'e niŋ.
Àsɛ́ɛ línì   àñ bɛ̄'ɛd má'àa kà m̀ ná tūñ'e‿ø níŋ.
Only **REL.INAN COP** bad   only   and **1SG IRR** be.able **SER** 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 anɛ ya taaba banɛ pʊ'ʊsid Wina'am ka li nar ka ya kad saria.
Lì   à   nɛ́ yà tāaba bánì pʊ̀'ʊsɪd 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 Predicate:

Ɔnι‿   ø   lá   kà   fʊ̀   dāa ɳy̆ɛ̄t.
3AN.CNTR SER that and **2SG TNS** see:**DIPF**.
"This is he whom you saw." WK

Ànɔ́'ɔnì‿ ø   ɳ̆wá kà   tì   ɳy̆ɛ̄tá   ⁺ø?
Who   **SER** this and **1PL** see:**DIPF** **CQ**?
"Who is this that we can see?"

Bɔ̄ɔ‿ ø   lá   kà   m̀   ɳy̆ɛ̄tá   ⁺ø?
What **SER** 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 ellipted structure, as with *n*-focus. Preposed direct objects leave a null-anaphora gap 23.1.

Bɔ́   kà   fʊ̀   kúθsìda ⁺ø?   "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 *nɛ̄*⁺/:

Bɪ̄'əl bɪ̄'ə́l   kà kɔ̄lιg   pɛ́'ɛ̀l   nɛ̄.
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   bɛ́   sārιgá   nī Yesu Kiristo zúg   yānám
That-upon and **1SG.CNTR** Paul **SER EXIST** prison:**SG LOC** Jesus Christ upon **2PL.CNTR**
búùd-bànι kā'   Jew dím   lā   yɛ́là.
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   ⁺ø?*
> Fire   **ART** emerge:**DIPF** where **LOC** hither **CQ**?
> "Where is the light coming from?"

but *bɔ̄* "what?" is very often preposed with *kà*, as in the example above; preposing is *required* if the sense is "why?" rather than "what?":

> *Bɔ́ kà fʋ̀ kúmmà?*   "Why are you crying?"
> cf   **Fʋ̀ kúm bɔ́?*   *"What are you crying?"

This construction with *bɔ́ kà*... is by far the most frequent way of rendering "Why?", and most cases of *bɔ́ kà*... have this meaning, but foregrounding *bɔ̄* in the normal sense "What?" occurs too:

> *Bɔ ka ti na niŋɛ?*   "What are we going to do?" (Acts 21:22)
> *Bɔ́   kà   tì   ná nìŋɛ ⁺ø?*
> What and **1PL IRR** do   **CQ**?

Other queried NP objects in content questions are often preposed with *kà*:

> *Nū'-bíbɪsá‿   àlá   kà fʋ̀ ňyɛ̄tá   ⁺ø?*
> 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 sʋnf da pɛlig nɛ ba yʋma piisnaasi la?*
> *Kà   ànɔ́'ɔ̀n-nàm kà Wínà'am súňf   dá pɛ̀lɪg   nɛ́   bà*
> And who-**PL**   and God   heart:**SG TNS** go.white with **3PL**
> *yʋ̀ma pīs nāasí lá ⁺ø?*
> 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*:

Fʋ bɔ́ɔ̀d bɔ́   ⁺ø?   "What do you want?"
2SG want what **CQ**?

Examples do occur:

Niŋgbiŋ bɔ buudi ka ba na ti mɔra?
nìn-gbīŋ   bɔ́-būudí kà bà ná tī   mɔ̄rá ⁺ø?
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   áň bɔ́   ⁺ø?   "What am I?"
1SG.CNTR COP what **CQ**?

Kà fʋ̀ áaň‿ ànɔ́'ɔnɛ̀ ⁺ø?   "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 *nɛ̄*:

Ňwādɪsá‿ àtáň'   kà fʋ̀ ná lɛ̄b   nā.
Month:**PL** **NUM**:three and **2SG IRR** return hither.
"You're to come back in three months."
Instructions: not a reply to a question; excludes any other time.

Tì dít   sā'ab nɛ̄ 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 *ǹ*-Clauses) or AdvP that I have found preposed with *kà* is *wʋ̄ʋ* "like" + object:

Wʋ̄ʋ búŋ   nɛ́ kà ò zɔ́t.
Like donkey:**SG** like and **3AN** run:**DIPF**.
"It's like a donkey that he runs."

Nɛ́ m̀ nú'ùg kà m̀ sī'ɪs.
*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 31.2.2. 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 22.2.1 27.2 26.1 31.1.1 28.3.2:

Mán   ňwɛ̀' dā̰ṵ   lā   zúg   kà   police gbáň'a‿ m.
1SG:COMP hit   man:**SG ART** upon and police seize   **1SG.OB**.
"Because I hit the man, the police caught me." ILK

33.3 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 bɛdegʋ.   "You are very much mistaken." (Mk 12:27)
Yà   yídìg   yā bɛ́dʋgū̄.
2PL go.astray **PFV** much.

M̀ pʋ́'ʋ̀s yā bɛ́dʋgū̄.   "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   ňyɛ̀ yā ná'àb   lā.   "He's seen the chief." ("of all people!")
3AN see **PFV** chief:**SG ART**.

Ò dà' yā mṵ́ḭ.   "She's bought rice." ("of all things!")
3AN buy **PFV** rice.

Contrast the effects of focussing with *nɛ̄*, and foregrounding by *kà*-clefting:

Ò   dà' nɛ̄ múi̧.   "She's bought rice."
3AN buy **FOC** rice.   (reply to "What did she buy?")

Lì   à   nɛ̄ múi̧ 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.

Wilkanɛ bɛɛ m ni ka pʋ wanna, m Ba' nwaadi li nɛ [sic: 1996 *n*] *basid.*
Wìl-kànι   bὲε‿ m̀ ní kà pū   wénnā   ⁺ø,
Branch-**REL.SG EXIST 1SG LOC** and **NEG.IND** bear.fruit:**IPVF NEG.**
m̀ Bā'   ňwá'adī‿ lí   n   básìd.
1SG father:**SG** cut:**DIPF   3INAN.OB SER** throw.out:**DIPF**.
"A branch which is in me and does not bear fruit, my father cuts out."
(Jn 15:2)

Onɛ ka ba tis o ka li zu'oe, ba mɛ mɔr pʋtɛn'ɛr ye o na lɛbis linɛ zu'oe.
Ɔ̀nι   kà bà tís·ò‿ø   kà lì   zú'e,   bà mὲ mɔ̀r
REL.AN and **3PL** give   **3AN.OB** and **3INAN** become.much, **3PL** also have
pʋ́-tὲň'ɛr   yέ ò   nà lɛ̄bιs 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)

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.
Māml   Paul ... tísìd   gbáu̧ŋ-kàŋā   Wínà'am nídìb   bànι àň
1SG.CNTR Paul ... give:**DIPF** book-**DEM.DEI.SG** God   person:**PL REL.PL COP**
sídà dím   kà áň yīnní nɛ̄ Jesus Christ Efesus tέŋī-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...*)

33.4 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 19.3. The NP may (but need not) have an Indefinite post-determining pronoun or number.

The verb *bὲ*⁺ "be somewhere/exist" is frequent in presentational clauses, often with a following Serial VP construction 26 or Adnominal *kà*-Clause 29.2.

> *Dau da be mori o po'a yimmir*
> *Dāṵ   dá bὲ‿ ø   mɔ̄rí‿ò   pṵ'à-yīmmír*
> Man:**SG TNS EXIST SER** have   **3AN** wife-single:**SG**
> "There was a man who had one wife." KSS p26

> *Pu'a sɔ' da bɛ mɔr o bipuŋ ka kikirig dɔl o.*
> *Kà pṵ'à-sɔ̄'   dá bὲ‿ ø   mɔ̄r ò   bī-púŋ   kà kìkīrıg dɔ̄ll·ó‿ø.*
> And woman-**INDF.AN TNS EXIST SER** 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‿ àtáň'   n   dá bὲ.*
> Man:**PL NUM:**three **SER 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 Listra ni ka pu tun'e kenna.*
> *Kà dāṵ   dāa zíň'i Listra ní kà pū   tūň'e‿ ø   kēnná ⁺ø.*
> And man:**SG TNS** sit   Lystra **LOC** and **NEG.IND** be.able **SER** go:**DIPF NEG**.
> "There was a man in Lystra who could not walk." (Acts 14:8, 1996)

> *Anina ka o nyɛ dau ka o yʋ'ʋr buon Aneas.*
> *Àníná   kà ò ňyɛ̄ dáṵ   kà ò yʋ̄'ʋr   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)

Change of polarity within a Serial VP construction, which is otherwise unusual, may occur with presentational constructions:

Ya sieba bɛ kpɛla kʋ kpii asɛɛ ba ti nyɛ Wina'am na'am la.

Yà sīəba bɛ́   kpēlá‿ø   kʋ́   kpīi +ø,   *àsɛ́ɛ   bà nà tì*

2PL INDF.PL EXIST here   **SER NEG.IRR** die   **NEG**,   except **3PL IRR** afterwards

ňyὲ 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)

33.5 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:	*Mánὲ?*	"Me?"
Apposition:	*mān Paul*	"I, Paul"
Coordination:	*tīnám nē fūn*	"us and you"
Before Relative Pronouns:	*fūn-kánì ...*	"you, who ..."

and for some speakers, the 2nd persons before direct commands after a *yà'*-clause
 30. In other contexts, the choice of a free pronoun over bound implies *contrast*. For
the special case of **logophoric** use see 29.3.2.

A personal pronoun which is focussed 33.1 must be contrastive:

Manɛ an kɔnbkem sʋŋ la.

Mānι‿   ø   áň kɔ́ňb-kìm-sὺŋ   lā.

1SG.CNTR SER COP animal-tender-good:**SG ART**.

"I am the good shepherd." (Jn 10:11)

Funɛ mi', ka man zi'.

Fūnι‿   ø   mī̀',   kà mān   zī'ι   +ø.

2SG.CNTR SER 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 dʋ ka man sie.

Lì   nàr kà ɔ̄n   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 *ǹ*-Clauses are distinct from the *non-contrastive* fused *ǹ*-Clause pronoun subject series 15.1:

wuu mane a si'em la.
*wūʋ **mánì**＿ ø   àň sɪ̄'əm   lā.*
like **1SG.CNTR COMP COP INDF.ADV ART**.
"as *I* am." (1 Cor 7:7, 1996)

33.6 Emphatics

I have borrowed the term "Emphatic" from Jeffrey Heath's Songhay grammars (e.g. Heath 2005 pp202ff.) The category corresponds quite well to Huddlestone and Pullum's "Focussing Modifiers" in English (pp586ff); however, this "focus" is not "Informational Focus" of the kind discussed in 33.1 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 occur after top-level NPs or AdvPs within clauses. They relate the NP or AdvP to the discourse context. Those which are not loanwords share the unusual morphological feature of forming the LF by adding *-nɛ* to the SF 6.4.

mɛ̀ DK KT SB NT *mɛ̀n* WK; clause finally (all sources) *mɛ̀n*ᵋ "also, too"

bɔzugɔ o anɛ fʋ biig mɛn.
bɔ̄ zúgɔ́ ò   à nɛ́ fʋ̀ bīig   mɛ́n.
Because **3AN COP FOC 2SG** child:**SG** also.
"Because he is your child too." (Genesis 21:13)

O pu'a mɛ kena.   "His wife also came." (Acts 5:7)
Ò pṵ'ā   mɛ́ kɛ̀   nā.
3AN wife:**SG** also come hither.

The particle may follow *kà* + ellipted subject pronoun 27.1.5.2:

Wina'am tisid ... ka mɛ tisid ...
Wínà'am tísìd ...   kà mɛ́ tɪsɪd ...
God   give:**IPVF** ... and also give:**DIPF**
"God gives ... and [God] also gives ..." (1 Cor 15:38)

mà'aa (LF *mà'anɛ̄*) "only"

> *Asɛɛ linɛ an bɛ'ɛd ma'aa ka m na tun'e niŋ.*
> *Àsɛ́ɛ líní   àñ̀ bɛ̄'ɛd má'àa kà   m̀   ná tūñ'e‿ø   níŋ.*
> Only **REL.INAN COP** bad   only   and **1SG IRR** be.able **SER** do.
> "It's only that which is bad that I can do." (Rom 7:21)
> (*Kà*-foregrounding of the NP, which also implies exclusiveness 33.2.)

gʋ̀llɩmⁿᵋ "only"

> *M̀   níŋī‿ lí   m̀   gʋ̀llɩm.*   "I did it myself alone."
> **1SG** do   **3INAN.OB 1SG** only

kɔ̀tàaⁿᵋ "at all"

> *Áyìɩ kɔ̀tàa.*   "Not at all."

The added -*nɛ* of the LF of these words is found also with the quantifier *pāmm* SF *pāmnɛ́* LF "a lot" and the adverb *ñ̌yāe*ⁿᵋ/ "brightly, clearly" 6.4.

The loanword **hālí**, in addition to its many other rôles, can be used preceding a top-level NP in the sense "even":

> *Hali tʋʋmbɛ'ɛd dim niŋid ala.*
> *Hālí tʋ̀ʋm-bɛ̄'ɛd dím   níŋìd   àlá.*
> Even deed-bad:**PL** individual:**PL** do:**DIPF ADV:**thus.
> "Even sinners do that." (Lk 6:33)

Lexicon

34 Greetings and Other Formulae

(a) Enquiries after health.

[*Fʋ̀ sá*] *gbìs wɛ̄lá?*	"How did you sleep?"
Dúθ wɛ̄lá?	literally "How did you get up?"
	both usual greetings on meeting
	for the first time in the morning.
Nīntāŋ á wɛ̄lá?	"How is the day/afternoon?"
Yʋ́'ʋŋ á wɛ̄lá?	"How is the evening?" literally "night"
Fʋ̀ yī-dímàa?	"[How are] your household?"
Nìn-gbīnáa?	"[How is your] body?" i.e. "How are you?"
Fʋ̀ sìdaa?	"[How is your] husband?"
Pṵ'ā nɛ̄ bíísɛ̀ɛ?	"[How are your] wife and children?"

... and so on, often at great length.

Replies:

Àláafʋ̀ bɛ́.	literally "There is health."
	(Also a general purpose greeting itself.)
Àláafʋ̀ bɛ́·o.	... for him/her.
Àláafʋ̀ bɛ́ɛ bá.	... for them.

(b) Blessings

These follow the pattern

Bárɪkà nɛ́ fʋ̀ ...	"Blessing with your ..."

with the introductory words usually ellipted; the reply to all of these is *Náa*.

Kɛ̄n kɛ̄n.	"Welcome!" *Kɛ̄n*, gerund of *kɛ̄ň* "come"
	cf Hausa: *Barkà dà zuwàa.*
Nɛ̄ záàm záàm.	"Good evening."
Tʋ̄ʋma!	
or *Tʋ̄ʋma tʋ̄ʋma!*	literally "(Blessing on your) work!"
	Interpreted to include practically anything
	which could be regarded as work, and hence
	probably the commonest daytime greeting.

Nɛ̄ sɔ́ñsɪgā.	"(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 *wīn*$^{nɛ/}$ (spiritual essence, personal *genius*)
Nɛ́ fʊ̀ būrɪyá-sʊ̀ŋ.	"Merry Christmas." (*būrɪyá*$^+$ ← **bʊrʊ̃ya* ← Twi/Fante *bronya*, of unclear ultimate origin)
Nɛ́ fʊ̀ yʊ̀ʊm-pāalíg.	"Happy New Year."

(c) Prayers. Reply *Àmí!* "Amen!"

Wīn ná lɛ̄bɪsɪ f nɛ̄ láafìya.	"Safe journey!" literally "[I pray that] God will bring you back in health."
Wīn ná sōŋɪ f.	"God will help you." Generally a formula expressing thanks.
Wīn ná tā'así f.	"Safe journey!" ("God will help you travel.")

(d) Statements of fact and commands. Reply *Tɔ̀* "OK", or as appropriate.

Bɛ̄ogʊ lā.	"See you tomorrow!" ("That's tomorrow.")
Àtínì dáarì lā.	"See you on Monday."
Gbìsɪm súŋā.	"Sleep well."
Kpɛ̀lɪmī súm.	"Remain (ye) well." Said by departing person to those remaining.
Pʊ̀'ʊsɪm yín.	"Greet (those) at home." i.e. "Goodbye." reply *Tɔ̀* "OK", or *Bà nà wōm* "They will hear."

(e) Miscellaneous formulae

M̀ pʊ́'ʊ̀s yā.	"Thankyou." reply *Tɔ̀*, or *Pʊ̀'ʊsʊg kā'e.* "No thanks (sc. needed.)"
M̀ pʊ́'ʊ̀s yā bɛ́dʊgō.	"Thank you very much."
Gáafàra.	(← Arabic) "Pardon me, sorry." Also (like Ghanaian English "sorry") used simply to empathise with misfortune, with no implication of apology as such.

Kābɪr kābɪrí!	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 sūgʊrʋ́.	"Please forgive me."
M̀ bɛ́lìm nɛ̄.	"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 *Dīɪb má'àa.* "Only food." i.e. "good"
M̀ mɔ̄r kú'ə̀m náa?	literally "Shall I bring water?" Traditional first words to guest. Reply for "No, thank you" is *Kù'əm á sʊ́m.* ("Water is good.")
Wīn yɛ́l sídà.	"Bless you!" (after a sneeze.) Literally "God speaks truth"; WK explained: "If you sneeze, it means someone elsewhere is praising you."
Fʋ̀ wʋ́m Kūsáalɛ̀ɛ?	"Do you understand [literally "hear"] Kusaal?"
Ɛ̄ɛň, m̀ wʋ́m.	"Yes, I do."
Áyìɪ, m̀ pʊ̄ wʋ́mmā.	"No, I don't."

35 Structured Semantic Fields

35.1 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	*sàam*[ma], less formally *bā'*[+/]
Father's elder brother		*sàam-kpɛ̄ɛňm*[m]
Father's younger brother		*sàam-pīt*[a/]
Father's sister		*pùgʋdɩb*[a]

My
Mother	is my	*mà*[+]
Mother's elder sister or senior co-wife		*mà-kpɛ̄ɛňm*[m]
Mother's younger sister or junior co-wife		*mà-bīl*[a] or *mà-pīt*[a/]
Mother's co-wives	are my	*mà nám*[a]
Mother's brother	is my	*áňsìb*[a]

I am my mother's brother's *āňsíŋ*[a]; to all the other relatives above I am *bīig*[a] "child" or specifically *dà-kɔ̀ɔňr*[ɛ] "son" or *pʊ̜'à-yùa*[+] "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	*yáab*[a]	Sex can be specified as
		♂ *yāa-dáʊ̜*[+]	♀ *yāa-pʊ̜'á*[a]
Grandchild		*yáaŋ*[a]	

These words are also used for ancestor/descendant.

My

Elder sibling of my own sex is my		*bīər*ᵉ/
Younger sibling of my own sex is my		*pītʋ́*⁺
Sibling of opposite sex is my		*tāu̯ň*⁺/

These words are also used for cousins, with seniority, as always, going by family branch.

My

Wife	is my	*yī-pu̯'á*ᵃ or simply *pu̯'ā*ᵃ	
Wife's parent		*dìəm*ᵐᵃ	Sex can be specified as
		♂ *dìəm-dāu̯*⁺	♀ *dìəm-pu̯āk*ᵃ
Wife's sibling		*dàkīig*ᵃ	Sex can be specified as
		♂ *dàkì-dāu̯*⁺	♀ *dàkì-pu̯āk*ᵃ

*Dìəm*ᵐᵃ is also used as polite address by a man to an unrelated woman of similar or greater age to himself but not old enough to be called *m̀ mà* "my mother." 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 *Bùgʋ́m-tɔɔňr*ᵉ, 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' *dàkīig*ᵃ.

My

Husband	is my	*sīd*ᵃ
Husband's parent		*dàyáam*ᵐᵃ	Sex can be specified as
		♂ *dàyāam-dáu̯*⁺	♀ *dàyāam-pu̯ák*ᵃ
Husband's elder brother		*sìd-kpɛ̄ɛňm*ᵐ
Husband's younger brother		*sìd-bīl*ᵃ
Husband's sister		*sìd-pu̯āk*ᵃ

I am my husband's parents' *bīig*ᵃ "child"; all my husband's siblings (of both sexes) call me *pu̯'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-tùa*⁺ to the other; two women married to brothers are *nìn-tāas*ᵉ, "co-wives." "Fiancée" is *pu̯'à-ēlíŋ*ᵃ.

35.2 Personal Names

See Haaf pp87ff for a detailed account of Kusaasi personal naming practices.

Personal names are mostly formed by the Personifier Clitic *À-* 19.10 followed by common nouns, but a few based on adjective stems are preceded by *Ǹ-*, becoming *M̀-* 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-Sīimɔ́ɔ̀n* "Simon"; none take *Ǹ-/M̀-*.

On the form in which Kusaal personal and place names appear in English-language contexts see 35.4.

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-Būgʋr* are especially common male names. Identification of particular individuals often requires further enquiries about kindred or residence.

Many names allude to a guardian spirit (*sīgɪr*[ɛ/]) assigned to a newborn child through the father's consultation with a diviner (*bā'a*[=]); this may be the *wīn*[nɛ/] 1.1 37 of an ancestor, or of a powerful spiritually significant tree:

À-Wīn[nɛ/]	Awini	*wīn*[nɛ/]	person with a *sīgɪr*[ɛ/] from father's side of the family
À-Būgʋr[ɛ]	Abugri	*būgʋr*[ɛ]	person with a *sīgɪr*[ɛ/] from mother's side of the family
À-Tìɪg[a]	Atiga	*tìɪg*[a]	"tree", as *sīgɪr*[ɛ/]
À-Kūdʋg[ɔ]	Akudugu	*kūdʋg*[ɔ]	"piece of iron" (sc. as a marker on a tree-*sīgɪr*[ɛ/]); displaced as a common noun by the pl-as-sg *kūt*[ɛ]

A younger sibling of *À-Wīn*[nɛ/] with the same *sīgɪr*[ɛ/] is called *À-Wīn-bíl*[a] "Awimbillah", of *À-Kūdʋg*[ɔ], *À-Kud-bīl*[a] "Akudibillah" etc. Names for girls may follow the pattern *À-Wīn-pu̯ák*[a] "Awimpoaka."

Other names refer to birth circumstances:

À-Nà'ab[a]	Anaba	*nà'ab*[a]	"chief" but in the sense "afterbirth" (because a chief leaves his house after his retainers) Name for sole survivor of twins
À-Fūug[ɔ/]	Afugu	*fūug*[ɔ/]	"clothing" for child born with a caul
À-Tūl[lɛ]	Atuli	*tùlɪg*[ɛ]	"invert" for breech-delivered child

A whole clause <u>19.10.1</u> is seen as a birth-circumstance personal name in

À-Tìɩm bɔ́dìg 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.

*À-Tàmpū̀ʋr*ᵋ	Tampuri	*tàmpū̀ʋr*ᵋ	"ashpit, rubbish tip"
*À-Dū̄k*ᵓ/	Aruk	*dū̄k*ᵓ/	"pot"

Another strategy is pretended adoption by an outsider, resulting in names like *Jambeedu* "Fulani", or

*À-Sāan*ᵃ/	Asana	*sāan*ᵃ/	"guest, stranger"
À-Sāan-dú⁺	Sandow	*sāan*ᵃ/	"guest" + *dāu̯*⁺ "man"
*À-Zàngbèog*ᵓ	Azangbego	*Zàngbèog*ᵓ	"Hausa person"
*À-Nàsà-pu̯āk*ᵃ	Anasapoaka		"European woman"; also a birth-circumstance name: "child delivered by a European midwife"

Names based on adjectives:

*Ǹ-Dāʋg*ᵓ	Ndago	*dāʋg*ᵓ	"male"
*Ḿ-Pu̯āk*ᵃ	Mpoaka	*pu̯āk*ᵃ	"female"
*Ḿ-Bī̄l*ᵃ	Mbillah	*bī̄l*ᵃ	"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.

À-Tínì⁺	"Girl born on Monday"
À-Tàláatà⁺	"Girl born on Tuesday"
Àrzúmà⁺	"Boy born on Friday"
À-Síbì⁺	"Boy born on Saturday"

Muslims also have formal Islamic Arabic names, sometimes adapted to Kusaal phonology, like *Dàhamáanì*⁺/*Dàsmáanì*⁺ عبد الرحمن *ʕAbdu-r-Raħma:n(i)*.

KKY p6 has the interesting girl's personal name *Amɔryam*, perhaps an adaptation of the Arabic مريم *Maryam(u)* "Mary" as *À-Mɔ̄r 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."

35.3 Place Names

For the form in which Kusaal personal and place names appear in English-language contexts see 35.4.

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:

*Bɔ̀k*ɔ	Bawku	"pit, geographical depression"
*Kūk*ᵃ/	Koka	"mahogany tree"
*Kùkpàrɪg*ᵃ	Kokpariga	"palm tree"
*Tèmpáan*ⁿɛ	Tempane	perhaps "new villages"
*Mṵ'à-nɔ̄ɔr*ɛ/	Mogonori	"lakeside" ("lake-mouth")
*Bàs-yɔ̄n*ⁿɛ/	Basyonde	"abandon sacks" ?reason for name
*Kūgʋr*ɛ/	Kugri	"stone"
*Būgʋr*ɛ	Bugri	*būgʋr*ɛ, object housing a *wīn*ⁿɛ/ "spirit"
*Wìdì-ňyá'aŋ*ᵃ	Woriyanga	archaic for *wìd-ňyá'aŋ*ᵃ "mare"
*Bì-nà'ab*ᵃ	Binaba	"prince"
Gàarʋ⁺	Garu	Hausa *gàaruu* "wall around a town or compound"
*Wìid-nà'ab*ᵃ	Widinaba	"chief of the clan *Wìid*ᵃ"
*Pūsɪg*ᵃ/	Pusiga	"tamarind"
*Tīl*ᶦɛ/	Tilli	"tree trunk" cf Toende Kusaal *tíl id* (Hasiyatu Abubakari, p.c.)
*Dènnʋg*ɔ	Denugu	No known meaning
*Pùlɪma Kú'èm*ᵐ	Pulimakom	"water by *pùlɪma*⁺ (grass sp)"
*Wìdāan*ᵃ	Widana	for *Wìd-dāan*ᵃ "Horse-Owner", title of a chief's *nɔ̄-dí'ès*ᵃ "linguist" 37. Usual informal name for Pulimakom, as the seat of this particular linguist.

*Mì'isɩg*ᵃ	Missiga	Explained locally as from "mission" i.e. the Assemblies of God mission around which the village grew; perhaps influenced by *mì'isʊg*ᵓ "dunking" (not in my materials, but cf Toende *mi'isʊk* "baptism", KED *mi'is* "duck someone")

*Sā-bíl*ᵃ	Zebilla	"small grass"?
*Sā-píəlìg*ᵃ	Sapeliga	"*Isoberlinia Doka*" ("white grass")
*Kɔ̀l-tā'amís*ᵋ	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*⁼ᐟ 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* (<u>Dagomba Plant Names</u> 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 <u>19.8.1</u> <u>19.7.2.1</u>, 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 Isoberlinia doka*; it seems likely that this is the meaning of *sā-píəlìg*ᵃ. The report also lists *ta-anga* "Butyrospermum parkii" (Kusaal *tá'aŋ*ᵃ), and *kulta-anga* "Andira inermis", so *kɔ̀l-tá'aŋ*ᵃ is probably this "dog almond."

*Kʊ̀lʊgʊ́ŋ*ᵓ	Kulungungu	?? *kɔ̀l-gʊ̀ŋ*ᵃ "river-kapok"

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.*"

*Àgɔ̀l*ˡᵋ	Agolle	the Kusaasi area east of the White Volta; cf *àgɔ́l*ˡᵋ "upwards"; for the H toneme see <u>8.3</u>.
*Tùən*ⁿᵋ	Toende	Kusaasi area west of the White Volta; cf *tùən*ⁿᵋ "in front", "West"

For points of the compass, WK gave as accepted terms

N	*Bārʊg*ᵓ/	"Bisa country"
E	*Ñyá'aŋ*ᵃ	"behind"
S	*Zṵēya*⁺	"hills" (i.e. the Gambaga Escarpment)
W	*Tùǝn*ⁿᵋ	"in front"

reflecting the traditional Kusaasi West-facing orientation. For "South" and "North", KB has respectively *ya-dagɔbʊg yà dàgɔ̀bɪg*ᵃ "your left hand" and *ya-datiuŋ yà dàtìṵŋ*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:

*Kùtāṵŋ*ᵓ/	any place inhabited by the clan *Kùtām*ᵐᵃ/
*Kūsáʋ̀g*ᵓ	"Kusaasiland"
*Mɔ̀ɔg*ᵓ	"Mossi country"
	(*Mɔ̀ɔg Ná'àb*ᵃ "Moro Naba, King of the Mossi")

Places outside *Kūsáʋ̀g*ᵓ generally do not have Kusaal names (an exception is *Sānkáàňs*ᵋ "Sankanse" in Burkina Faso.) For "Accra" the Twi-derived name *Ankara* is usual. Niggli's Dictionnaire has Toende *Wa'arʊk* for "Ouagadougou", but I could not elicit any Agolle equivalent. The form looks like **Wā'adʊ́g*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 *kɔlʊg*ᵃ "river"; presumably this is simply because it is the only real river within *Kūsáʋ̀g*ᵓ.

35.4 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 *Wìdɩ-ňyá'aŋ*ᵃ will introduce himself as "Awini" from "Woriyanga." Similarly "Kusaasi" for *Kūsáàs*ᵋ, "Bawku" for *Bɔ̀k*ᶜ, and many other examples in 35.2 and 35.3.

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 *Wìdɩ-ňyá'aŋ*ᵃ shows a characteristically Mampruli rather than Kusaal form for the initial combining form of "horse": Mampruli *wuri-* versus Kusaal *wìd-*. 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 *Wìdāan*ᵃ rather than Mampruli *Wuddaana* "(title of) a chief's linguist" and female personal names like "Awimpoaka" *À-Wīn-pu̞ák*ᵃ even show the characteristic Agolle Kusaal vowel breaking, in contrast to the Toende form *Awɩnpɔka* (Niggli.) Again, the personal name "Akudugu" *À-Kūdʋg*ᶜ shows the postvocalic *-d-* characteristic of Agolle Kusaal rather than Mampruli. The Toende place name *Tīl*ˡᵋ/ "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-Dūk*ᶜ/.

35.5 Ethnic Group and Clan Names

Names for the group belong to the ᵃ|*b*ᵃ or *g*ᵃ|*s*ᵋ Classes (apart from *Zàngbèog*ᵓ "Hausa" and *Nàsāara*⁺ "European") and their language to the *l*ᵋ Subclass of *r*ᵋ|*a*⁺. The place they inhabit has the suffix *-g*ᵓ.

Ethnic gp sg	Ethnic gp pl	Language	Place	
Kūsáa⁼	*Kūsáàs*ᵋ	*Kūsáàl*ᵋ	*Kūsáùg*ᵓ	Kusaasi
*Ňwāmpūrɪg*ᵃ/	*Ňwāmpūrɪs*ᵋ/	*Ňwāmpūrɪl*ᵋ/	*Ňwāmpūrʋg*ᵓ/	Mamprussi
*Bārɪg*ᵃ/	*Bārɪs*ᵋ/	*Bāt*ᵋ/	*Bārʋg*ᵓ/	Bisa
Mùa⁺	*Mɔ̀ɔs*ᵋ	*Mɔ̀ɔl*ᵋ	*Mɔ̀ɔg*ᵓ	Mossi
*Dàgbān*ⁿᵋ/	*Dàgbām*ᵐᵃ/	*Dàgbān*ⁿᵋ/	*Dàgbāu̯ŋ*ᵓ/	Dagomba
*Bìn*ⁿᵋ	*Bìm*ᵐᵃ	*Bìn*ⁿᵋ	*Bìu̯ŋ*ᵓ	Moba
*Sìmīig*ᵃ	*Sìmīis*ᵋ	*Sìmīil*ᵋ	*Sìmīug*ᵓ	Fulɓe
*Yàaŋ*ᵃ	*Yàaňs*ᵋ	*Yàan*ⁿᵋ		Yansi
*Gūríŋ*ᵃ	*Gūrís*ᵋ	*Gūrín*ⁿᵋ		Farefare
*Yārɪg*ᵃ/	*Yārɪs*ᵋ/	*Yāt*ᵋ/		Yarsi
*Zàngbèog*ᵓ	*Zàngbὲεd*ᵋ	*Zàngbὲεl*ᵋ		Hausa
*Bùlɪg*ᵃ	*Bùlɪs*ᵋ	*Bùl*ˡᵋ		Bulsa
*Tàlɪŋ*ᵃ	*Tàlɪs*ᵋ	*Tàlɪn*ⁿᵋ		Tallensi
*Nàbɪd*ᵃ	*Nàbɪdɪb*ᵃ	*Nàbɪr*ᵋ		Nabdema
*Bùsáŋ*ᵃ	*Bùsáàňs*ᵋ	*Bùsáàňl*ᵋ		Bisa
Nàsāara⁺	*Nàsàa-nàm*ᵃ	*Nàsāal*ᵋ		European
*Kàmbùŋ*ᵃ	*Kàmbùmɪs*ᵋ	*Kàmbùnɪr*ᵋ		Ashanti

*Bārɪs*ᵋ/ is "Bisa" generally, not just the Bareka; *Bìm*ᵐᵃ similarly is "Moba" in general, and not only the Bemba (WK.)

Note

*TùƟn*ⁿᵋ	"Toende area"
*TùƟnnɪr*ᵋ	"Toende dialect of Kusaal"
*Àgɔ̀l*ˡᵋ	"Agolle area"
*Àgɔ̀l*ˡᵋ	"Agolle dialect of Kusaal"
Ò pi̯àň'ad Àgɔ̀l.	"She speaks Agolle Kusaal."
3AN speak:**DIPF** Agolle.	

Kusaasi clan names include, among many others:

Singular	Plural	Place	
*Kʋ̀tān*ⁿɛ/	*Kʋ̀tām*ᵐa/	*Kʋ̀tāu̯ŋ*ɔ/	WK's clan
Zùa⁺	*Zùθs*ɛ		
	*Zu̯à-sābɩlís*ɛ		subclans
	*Zu̯à-wìib*ᵃ		
	or *Zu̯à-wìis*ɛ		
*Wìid*ᵃ	*Wìid-nam*ᵃ	*Wìidʋg*ɔ	
*Nàbɩd*ᵃ	*Nàbɩdɩb*ᵃ	*Nàbɩdʋg*ɔ	
*Gɔ̀ɔg*ᵃ	*Gɔ̀ɔs*ɛ	*Gɔ̀ɔg*ɔ	
Sà'dàbùa⁺	*Sà'dàbùθs*ɛ *-bùθb*ᵃ	*Sà'dàbɔ̀ɔg*ɔ	
	*Nà'dàm*ᵐa	*Nà'dau̯ŋ*ɔ	
	*Gùm-dìm*ᵃ	*Gùm*ᵐɛ	

*Nàbɩd*ᵃ as a clan name is different from the ethnic group "Nabdema" (WK.)

35.6 Trees and Fruits

Tree names are almost all *g*ᵃ|*s*ɛ Class, like *tìɩg*ᵃ "tree"; their fruits are Classes *r*ɛ|*a*⁺ or *g*ɔ|*d*ɛ.

Tree sg	Tree pl	Fruit sg	Fruit pl	
*āaňdɩg*ᵃ	*āaňdɩs*ɛ	*āaňdɩr*ɛ	*āaňda*⁺	Vitex doniana
dùaň⁺	*dɔ̀ɔňs*ɛ	*dɔ̀ɔňg*ɔ	*dɔ̀ɔňd*ɛ	dawadawa
gāaň=/	*gāaňs*ɛ/	*gāňr*ɛ/	*gāňyá*⁺	Nigerian ebony
*gùŋ*ᵃ	*gùmɩs*ɛ	*gùm*ᵐɛ	*gùma*⁺	kapok
*kìkàŋ*ᵃ	*kìkàmɩs*ɛ	*kìkàm*ᵐɛ	*kìkàma*⁺	fig tree
*kpʋ̀kpàrɩg*ᵃ	*kpʋ̀kpàrɩs*ɛ	*kpʋ̀kpàr*ɛ	*kpʋ̀kpàra*⁺	palm
*pūsɩg*ᵃ/	*pūsɩs*ɛ/	*pūsɩr*ɛ/	*pūsá*⁺	tamarind
*sīsíbìg*ᵃ	*sīsíbìs*ɛ	*sīsíbìr*ɛ	*sīsíbà*⁺	neem
*tá'aŋ*ᵃ	*tā'amís*ɛ	*tá'am*ᵐɛ	*tā'amá*⁺	shea butter
*tɛ̀'ɛg*ᵃ	*tɛ̀'ɛs*ɛ	*tɛ̀'og*ɔ	*tɛ̀'ɛd*ɛ	baobab
*vúθŋ*ᵃ	*vūθmís*ɛ	*vúθr*ɛ	*vūáa*=	red kapok

The stems for "red kapok" and its fruit are slightly different: tree **vuθm-* fruit **vuθg-*

35.7 Body Parts

Most human and animal body parts belong to the Classes *r*ᵉ|*a*⁺ and *g*ᵓ|*d*ᵉ:

*bi̯āu̯ñk*ᵓ	"shoulder"	*bīən*ⁿᵉ	"shin"
*bì'isɪr*ᵉ	"woman's breast"	*dūm*ᵐᵉ	"knee"
*gbāu̯ŋ*ᵓ/	"animal skin; lip, eyelid"	*gbēr*ᵉ/	"thigh"
*gbɛ̀'og*ᵓ	"forehead"	*gbìn*ⁿᵉ	"buttock"
*gbìn-vɔ̀ɔňr*ᵉ	"anus"	*gūʋr*ᵉ	"ridge of back"
*íɪl*ˡᵉ	"horn"	*kɔ̄bɪr*ᵉ	"bone"
*kɔ̄ňbʋg*ᵓ	"hair"	*kpēňdɪr*ᵉ/	"cheek"
*kpìsukpìl*ˡᵉ	"fist"	*lām*ᵐᵉ/	"gum"
*lān*ⁿᵉ	"testicle"	*lūgʋr*ᵉ	"organ, member"
*nìn-gbīŋ*ᵓ/	"human skin, body"	*nìn-gɔ̀ɔr*ᵉ	"neck"
*nóbòr*ᵉ	"leg"	*nɔ̄b-púmpàu̯ŋ*ᵓ	"foot"
*nɔ̄ɔr*ᵉ/	"mouth"	*ňyīn*ⁿᵉ/	"tooth"
*ňyɔ̄ɔd*ᵉ	"intestines"	*ňyɔ̄'ɔg*ᵓ/	"chest"
*ňyɔ̄ɔr*ᵉ	"nose"	*pɛ̀n*ⁿᵉ	"vagina"
*pūʋr*ᵉ/	"stomach"	*sɔ̄ɔňr*ᵉ	"liver"
*tàsɪntàl*ˡᵉ	"palm"	*tàtàl*ˡᵉ	"palm"
*tìəŋ-gūʋr*ᵉ	"chin"	*tʋ̀b-kpìr*ᵉ	"half of jaw"
*tʋ̀bʋr*ᵉ	"ear"	*yìər*ᵉ	"jaw"
*yū'ər*ᵉ	"penis"	*zàňl*ˡᵉ	"umbilicus"
*zìlɪm*ᵐᵉ	"tongue"	*zūg*ᵓ/	"head"
*zūəbúg*ᵓ	"human head hair"	*zūʋr*ᵉ	"tail"

There are significant exceptions, however:

*g*ᵃ|*s*ᵉ Class:

*nú'ùg*ᵓ	"hand" <u>9.3.2.1</u>	perhaps as the prototypical tool.	
*nū'-bíl*ᵃ	"finger"	but *nū'-dáʋ̀g*ᵓ	"thumb"
nū'-íñ'a⁺	"fingernail"	*nɔ̄b-bíl*ᵃ	"toe"
nɔ̄b-íñ'a⁺	"toenail"	*sīa*⁺	"waist"
*ňyá'aŋ*ᵃ	"back"	*tìəŋ*ᵃ	"beard"

*f*ᵓ|*ɪ*⁺ Class:

*nīf*ᵓ/	"eye"	as a "small round thing"?	
*si̯à-nīf*ᵓ/	"kidney"	as a compound of "eye"	
*sūňf*ᵓ/	"heart"	beside *sūuňr*ᵉ/	*r*ᵉ|*a*⁺ Class

35.8 Colour Terms

Kusaal, like many local languages, has a basic three-colour system:

*zèň'og*ɔ	"red"	covering all reddish shades
*sābʋlíg*ᵃ	"black"	covering all darker shades of colour
*pìəlɪg*ᵃ	"white"	covering all lighter shades of colour

*Wìug*ɔ "red" is synonymous with *zèň'og*ɔ. Kusaal has many more or less standardised expressions for colour (e.g. *wōʋ támpūʋr 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.

35.9 Time Expressions

Answers to *bɔ̀-wìn*ⁿᵋ "what time of day?"

*bēogʋ-n*ᵋ/	"morning"	*àsùbá*⁺	"dawn" (← Arabic)
*bèkèkèoňg*ɔ	"very early morning"	*zàam*ᵐ	"evening"
*wìn-līir*ᵋ	"sunset"	*yʋ́'ʋŋ*ɔ	"night"
*wìn-kɔ̀ɔňr*ᵋ	"sunset"	*nīntāŋ*ᵃ/	"heat of the day, early afternoon"

*Wìn*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:

kɛ́rɪfà àtáň'	"three o'clock"	Hausa:	*karfèe ukù*

The deictic particle *ňwà* "this" is commonly attached to time words:

zàam ňwá	"this evening"	[za:ma]	
yʋ́'ʋŋ ňwá	"tonight"	[yg̊:ŋ:a]	8.5.1

The day begins at sunrise.
Answers to *būn-dáàr*ᵋ "which day?":

zīná⁺	"today"	*sù'əs*ᵃ	"yesterday"
*bēog*ɔ	"tomorrow"	*dāar*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.

Àláasìd dáàr^ɛ	"Sunday"	*Àtínì dáàr*^ɛ	"Monday"
Àtàláatà dáàr^ɛ	"Tuesday"	*Àlárɪbà dáàr*^ɛ	"Wednesday"
Àlàmíisì dáàr^ɛ	"Thursday"	*À(r)zúmà dáàr*^ɛ	"Friday"
Àsíbɪtì dáàr^ɛ	"Saturday"		

Dāar^ɛ "day" is "twenty-four hour period" (*nīntāŋ* "day as opposed to night") and is used with pre-determiners to specify a particular day; the word *dàbɪsɪr*^ɛ is also used for "day" in counting periods of time, occurring usually in the plural:

Dābá àyɔ́pɔ̀ę dáàr kà fù ná lɛ̄b nā.	"You'll come back in a week."
Dābá àyɔ́pɔ̀ę kà fù ná lɛ̄b nā.	"You'll come back for a week."
Àláasìd dáàr kà fù ná lɛ̄b nā.	"You'll come back on Sunday."
Tì kpɛ́lìm ànínā dábɪsà bī'əlá.	"We stayed there a few days."

Longer periods of time:

dābá àyɔ́pɔ̀ę	"week"	also *bákpàę* ← Hausa *bakwài* "seven"
ňwādɪg^{a/}	"moon, month"	
ňwād-kánì kɛ̄n nā lā	"next month"	("the month which is coming")
ňwād-kánì gàad lā	"last month"	("the month which has passed")

There are two seasons:

sɛ̄oňg^ɔ	"rainy season"	*úun*^{nɛ}	"dry season"

The Harmattan part of *úun* is called *sāpál*^{lɛ} and the very hot humid part before the rains is *dàwàlɪg*^a.

yʋ̀ʋm^{mɛ}	"year"	*dūnná*⁺	"this year"

"Time" in general is the irregular noun *sāŋá*⁺ pl *sānsá*⁺ cb *sān-*; "time of day" is *wìn*^{nɛ}; "time" as in "several times" is *nɔ̄ɔr* [16.2.5]. Examples with *sāŋá*⁺:

sān-kánɛ̀?	"when?"	*sān-kán lā*	"at that time"
sāŋá kám	"all the time"	*sāŋá bɛ̀dʋgū*	"a long time"
sānsá bɛ̀dʋgū	"many times"	*sāŋá bī'əlá*	"for/in a short time"

36 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.

36.1 Tense and Lax Vowels

There are few minimal pairs for the contrast *u*/*ʋ* in short root vowels and very few indeed for *i*/*ɩ*; there is no contrast in the corresponding nasal short vowels 4.2.1. There is a robust contrast between long *uu*/*ʋʋ* and long *ii*/*ɩɩ*, and thus between the corresponding vowels shortened by Apocope, but even here it is difficult to find true minimal pairs; *lì* "fall", for example, certainly contrasts phonetically with *lì* "it", but the words contain a root vowel and an affix vowel respectively.

Minimal and near-minimal pairs include

lìdɩg	"astonish, be amazed"	*lìdɩg*	"turn a shirt" WK
sīd	"husband"	*sīn*	"be silent"
sībɩg	antelope species KED	*sībɩg*	"termite"
bʋ̀l	"astonish"	*bùl*	"germinate" base form
ʋ̀k	"vomit"	*ūk*	"bloat"
bʋ̄n	"thing"	*bùn*	"germinate" dipf
kūdʋg	"old"	*kūdʋg*	"piece of iron"
kūg-káŋā	"this mahogany tree"	*kūg-káŋā*	"this stone"
tʋ̄lɩg	"heat up"	*tùlɩg*	"invert"
yūgʋ́m	"camel"	*yūgʋdɩr*	"hedgehog"

Although contrasts do thus exist in short *i*/*ɩ u*/*ʋ* even when these are not the result of Apocope, written sources show great fluctuation in the writing of *e*/*i* and *o*/*u*/*ʋ*, 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*/*ɩ*; 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.

36.2 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

*àgɔ́l*ˡᵉ	"upwards"	*Àgɔ̀l*ˡᵉ	"Eastern Kusaasiland"
*bāŋ*ᵃ	"ring, chain"	*bàŋ*ᵃ	"agama lizard"
*bū'ar*ᵉ/	"skin bottle"	*bʋ̀'ar*ᵉ	"hole"
*būk*ᵉ/	"weaken"	*bùk*ᵉ	"cast lots"
*dāʋg*ɔ	"male"	*dàʋg*ɔ	"piece of wood"
*dīgɪr*ᵉ/	"lying-place"	*dìgɪr*ᵉ	"dwarf"
*dúər*ᵉ	"raising" (gerund)	*dūər*ᵉ/	"stick"
*gāŋ*ᵉ/	"choose"	*gàŋ*ᵉ	"step over"
*gbāu̯ŋ*ɔ/	"skin", "book" DK	*gbàu̯ŋ*ɔ	"book" WK
*kūk*ᵃ/	"mahogany tree"	*kùk*ᵃ	"ghost"
*kūk*ᵃ	"chair"		
*māk*ᵉ/	"measure"	*màk*ᵉ	"crumple up"
*mɔ̄ɔg*ɔ	"bush, wilderness"	*Mɔ̀ɔg*ɔ	"Mossi realm"
*nɛ̄ɛm*ᵐ/	"grind with millstone"	*nɛ̀ɛm*ᵐ	"emptiness; for free"
*nɛ̄ɛr*ᵉ/	"millstone"	*nɛ̀ɛr*ᵉ	"empty"
*níis*ᵉ	"birds"	*nīis*ᵉ	"bodies"
*pīd*ᵉ	"get bloated"	*pìd*ᵉ	"put on hat, shoes etc"
*pīəs*ᵉ/	"wash"	*pìəs*ᵉ	"fool somebody"
*sáam*ᵐᵃ	"guests"	*sàam*ᵐᵃ	"father"
*sāam*ᵐ/	"mash up"		
*si̯āk*ᵉ/	"suffice"	*si̯àk*ᵉ	"agree"
*wēog*ɔ	"cheap/common thing"	*wèog*ɔ	"deep bush"
*yáaŋ*ᵃ	"grandchild"	*Yàaŋ*ᵃ	"Yansi, Yanga person"
*yīdɪg*ᵉ/	"untie"	*yìdɪg*ᵉ	"go astray"
yɔ̄⁺	"pay"	*yɔ̀*⁺	"close"
SFs: *lābɪs*ᵃ/	"be wide"	*làbɪs*ᵉ	"walk stealthily"
cbs: *nā'-káŋā*	"this cow"	*nà'-kàŋā*	"this chief"

Certain particles differ in tone alone:

dāa	"two days ago"	*dàa*	"day after tomorrow"
dā	negative Imperative	*dà*	"before two days ago"

37 General Vocabulary

Words are ordered by Short Forms.

Vowel glottalisation, and the distinctions *n*/*ň*, *ə*/*e*/*ẹ̄*/*ɛ*, *i*/*ι*/*i̠*, *ɵ*/*o*/*ɔ* and *u*/*ʋ*/*u̠* 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*ᵋ Class form if extant, if not, then *g*ᵓ|*d*ᵋ or *r*ᵋ|*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 Deverbal 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 35.2 35.3 for examples.

I have attempted to list all function words, with references to the sections in which they are treated above.

All words occuring 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 *ι ʋ* 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 18.1.

Binomial names of plants taken from Haaf (see sources) are likely to be reliable; he checked the identifications with local botanical experts.

Abbreviations:

adj	Adjective	*adv*	Adverb
agt	Agent Noun	*cb*	Combining Form
dipf	Dynamic Imperfective	*ger*	Gerund
imp	Imperative	*iv*	Invariable Verb
n	Noun	*pl*	Plural
q	Quantifier	*res*	Resultative
sg	Singular	*vv*	Variable Verb

A

à- Personifier proclitic <u>19.10</u>

āañdɪgᵃ *pl* āañdɪsᵋ *cb* àañd- *n.* black plum tree, *Vitex doniana* <u>35.6</u>

āañdɪrᵋ *pl* āañda⁺ *n.* black plum fruit <u>35.6</u>

àañsᵋ *vv.* tear

àbʊ̀lá⁺ how many-fold? <u>16.2.5</u>

àbʊ̀yí⁺ àbʊ̀táñ'⁺ àbʊ̀nāasí⁺ *adv.* twice, three times etc <u>16.2.5</u>

à-dàalʊ́ŋᵓ *pl* à-dàalísᵋ à-dàalímìsᵋ *cb* à-dàalʊ́ŋ- *n.* stork <u>19.10</u>

àdàkɔ́ñ'⁺ *q.* one <u>16.2.3</u>

àe̯ñᵃ *ger* àañlímᵐ *iv.* be something/somehow <u>24.2</u> <u>8.5.3</u> <u>8.5.2</u>

àe̯ñ⁺ *vv.* get torn; *res adj* àañlʊ́ŋᵓ torn

à-gáʊ̀ŋᵓ *pl* à-gáàñdᵋ *cb* à-gāñ- *n.* pied crow <u>19.10</u>

àgɔ́lⁱᵋ àgɔ̄lá⁺ *adv.* upwards

Àgɔ̀lⁱᵋ *n.* Agolle district of Kusaasi territory; *n.* Agolle Kusaal dialect

à-kɔ̄ra-díè̯mᵐᵃ *pl* à-kɔ̄ra-díè̯m-nàmᵃ *n.* praying mantis <u>19.10</u>

àlá⁺ *adv.* thus <u>17.1</u>

àlá⁺ *q.* so many; how many? <u>17.1</u>

àláafʊ̀⁺ *n.* health; in greetings <u>34</u> *cf* láafìya⁺ ← Arabic العافية *Ɂal-ʕa:fiya(tu)*

Àláasɪ̀d dáàrᵋ *n.* Sunday <u>35.9</u> ← Arabic

Àlàmíìsɪ̀ dáàrᵋ *n.* Thursday <u>35.9</u> ← Arabic

Àlárɪbà dáàrᵋ *n.* Wednesday <u>35.9</u> ← Arabic

àlá zùgᵓ therefore <u>28.1.1</u> <u>17.1</u>

àlɔ́pìrᵋ *pl* àlɔ́pìya⁺ *n.* aeroplane ← English

àmáa⁼ but <u>27.1.3</u> ← Hausa ← Arabic

àmēŋá⁺ *adv.* really, truly <u>20.4</u>

àmí amen ← Arabic آمين; in replies to greetings <u>34</u>

à-músᵋ *pl* à-mús-nàmᵃ *n.* cat <u>19.10</u>; *cf* Hausa *mussàa id*

ànāasí⁺ *q.* four <u>16.2.2</u>

àní⁺ *adv.* there <u>17.1</u>

àníì⁼ *q.* eight <u>16.2.2</u>

àní nā⁺ᐟ *adv.* there <u>17.1</u>

àníŋà⁺ *adv.* promptly <u>20.4</u>

ànɔ́'ɔ̀nᵋ who? <u>15.4</u>

àñrʊŋᵓ *pl* àñrɪma⁺ *cb* àñrʊŋ- *n.* boat (written *aaruŋ* in the 1976/1996 NT)

āñsᵋ *vv.* pluck (leaves)

áñsìbᵃ *pl* āñs-námᵃ *cb* āñs- *n.* mother's brother <u>35.1</u>

āñsɪgᵋᐟ *vv.* break at an angle

āñsíŋᵃ *pl* āñsísᵋ *cb* āñsɪŋ- *n.* (man's) sister's child <u>35.1</u>

àntù'a⁼ *pl* àntù'ɵsᵋ *cb* àntʊ̯'à- *n.* lawsuit

ànū̄⁺ *q.* five <u>16.2.2</u>

àŋwá⁺ *adv.* like this 17.1

ānzúrɩfà⁺ *n.* silver; cf Hausa *azùrfaa* ← Berber *a-ẓrəf, Souag 2016

àrazàkᵃ *pl àrazà'asᵋ cb àrazà'- Generally used in pl:* *n.* wealth, riches ← Arabic الرزق
Ɂar-rizq(u)

àrazánà⁺ *n.* heaven, sky ← Arabic الجنة *Ɂal-ɟanna(tu)*

Àrzúmà dáàrᵋ *n.* Friday 35.9 ← Arabic

àsɛ́ɛ except, unless 21.2 27.1.3 ← Hausa *sai*

Àsíbɩtì dáàrᵋ *n.* Saturday 35.9 ← Arabic

àsīda⁺ *adv.* truly 20.4

àsùbá⁺ *n.* dawn ← Arabic الصباح *Ɂasˤ-sˤaba:ħ(u)*

àtáŋ'⁺ *q.* three 16.2.2

Àtàláatà dáàrᵋ *n.* Tuesday 35.9 ← Arabic

àtáŋā⁺ᐟ *q.* three exactly 16.2.2

Àtínì dáàrᵋ *n.* Monday 35.9 ← Arabic

àtìu̟kɔ *n.* sea ← Hausa *tèeku*

àwánā⁺ᐟ *adv.* like this 17.1

àwāe̟⁺ *q.* nine 16.2.2

àyí⁺ *q.* two 16.2.2

áyɩɩ no 28.2.4

àyíŋā⁺ᐟ *q.* two exactly 16.2.2

àyɔ́pɔ̀e̟⁺ *q.* seven 16.2.2

àyúθbʋ̀⁺ *q.* six 16.2.2

B

bà they, their (Proclitic) 15.1

ba⁺ them (Enclitic object) 15.1

bā'⁺ᐟ *pl bā'-námᵃ cb bā'-* *n.* father 9.4

bāa⁼ *pl bāasᵋ cb bà-* *n.* dog

bā'a⁼ *pl bā'abᵃ cb bà'a-* *n.* traditional diviner; **bà'a-kɔ̀lʋgɔ** *pl bà'a-kɔ̀nⁿᵋ cb bà'a-kɔ̀l-*
n. diviner's bag

bā'a⁼ *pl bā'asᵋ cb bà'-* *n.* peg to hang things on

bà'anⁿᵋ *pl bà'ana⁺ cb bà'an-* *n.* stocks (punishment)

bàaŋlɩgᵃ *pl bàaŋlɩsᵋ adj.* narrow, slender

bāaŋlígᵃ *adj.* quiet

bāaŋlímᵐ *adv.* quietly

bà'arᵋ *pl bàda⁺ bà'a⁺ cb bà'-* *n.* idol

bābá⁺ beside, postposition 20.6; cf *bābɩrᵋᐟ* sphere of activity

bàbɩgā⁺ᐟ *q.* many 16.1

bákpàe̟⁺ *n.* week ← Hausa *bakwài* "seven"

bàlàar^ɛ *pl bàlàya*⁺ *cb bàlà- n.* stick, staff, club

bàlàŋɪr^ɛ *pl bàlàŋa*⁺ *cb bàlàŋ- n.* hat

bālɛ̄rʊg^{ɔ/} *pl bālɛ̄rɪd*^{ɛ/} *bālɛ̄rɪs*^{ɛ/} *cb bālɛ́r- n.* ugly person; cf *lɛ̄r*^ɛ "get ugly"

bàmmā^{+/} these, those (Demonstrative 15.2)

bàn^ɛ these, those (Demonstrative 15.2)

bán they (Subject of *ǹ*-Clause) 15.1

bān^ɛ they, them (Contrastive) 15.1

bāň'⁺ *vv.* ride

bānāa⁼ *pl bānāas*^ɛ *cb bànà-* (tone *sic* in my materials) *n.* traditional "fugu" smock

bàň'ad^a *pl bàň'ad-nàm*^a *n.* ill person

bāň'al^{ɛ/} *vv.* make to ride (horse, bicycle)

bāň'as^ɛ *cb bàň'- n. pl as sg* disease

bàn-dāʊg^ɔ *pl bàn-dāad*^ɛ *cb bàn-dà- n.* crocodile

bān-kúsɛ́l^{lɛ} *pl bān-kúsɛ̄lá*⁺ *cb bān-kúsɛ̄l- n.* lizard

bāŋ^a *pl bāaňs*^ɛ *cb bàŋ- n.* ring, chain, fetter

bàŋ^a *n.* agama lizard

bàŋ^ɛ *vv.* come to know

báp wallop!

Bārɪg^{a/} *pl Bārɪs*^{ɛ/} *cb Bār- n.* Bisa person 35.5; not only the Bareka, WK

bárɪkà⁺ *n.* blessing; in greetings 34 ← Arabic بركة *baraka(tun)*

Bārʊg^{ɔ/} *n.* Bisa country; North 35.3

bàs^ɛ *vv.* go away; abandon; throw out

Bāt^{ɛ/} *n.* Bisa language 35.5

bàtáň'⁺ *q.* three (after personal pronoun 16.2.2)

bàu̯ŋʊ⁺ *n.* found only as in *Ò kpèň' báu̯ŋʊ̀.* "He was circumcised." ← Songhay "pool"; for the idiom 18.1

bàyɛ̄og^{ɔ/} betrayer of secrets cf *yɛ̄ɛs*^{ɛ/}

bàyí⁺ *q.* two (after personal pronoun 16.2.2)

bàyɔ́pɔ̀e̯⁺ *q.* seven (after personal pronoun 16.2.2)

bè⁺ *ger bèllím*^m *(sic) iv.* exist; be in a place 24.1

bɛ̄dɪg^{ɛ/} *vv.* go rotten

bèdʊg^ɔ **bèdɪr**^ɛ *pl bèda*⁺ *cb bèd- adj.* great

bèdʊgū^{+/} *q.* much, a lot 16.1

bɛ̄ɛ or 27.1.2 28.2.2

bèkèkèoňg^ɔ or **bèkèoňg**^ɔ *n.* very early morning

bèlɪm^m *vv.* beg

bèlɪs^ɛ *vv.* comfort

bɛ̄n^{nɛ} *pl bɛ̄na*⁺ *cb bèn- n.* end

bèň'⁺ *ger bɛ̄ň'ɛs*^ɛ *vv.* fall ill

bèňsɪg^ɛ *vv.* serve soup

bèŋ^ɛ *vv.* mark out a boundary

bɛ̄ŋíd^ɛ *cb bɛ̄ŋ- n. pl* bean leaves, *Vigna unguiculata* (Haaf); *bɛ̄ŋíd nɛ̄ kī⁺/ n.* beanleaf-
    and-millet, a traditional snack

bɛ̄ŋír^ɛ *pl bɛ̄ŋá⁺ cb bɛ̄ŋ- n.* brown bean

bɛ̄og^ɔ *n.* tomorrow 35.9; *Kà bɛ̄og níe kà ...* "The next day ..."

bɛ̄ogʋ-n^{ɛ/} *n.* morning 35.9

bɛ̄'og^ɔ bī'a⁺ *pl bɛ̄'ɛd^ɛ bī'əs^ɛ cb bɛ̀'- bi̯à'- adj.* bad

bɛ̀rɩŋ^a *pl bɛ̀rɩgɩs^ɛ sic n.* a plant used for fibre (KED), *Hibiscus cannabinus* (Haaf)

bɛ̄rɩga⁺ *cb bɛ̀rɩg- pl* leaves of *bɛ̀rɩŋ* used for soup (KED)

bɛ̄sʋg^ɔ *pl bɛ̄sɩd^ɛ cb bɛ̀s- n.* a kind of wide-mouthed pot

bi̯āň'ar^{ɛ/} *pl bi̯āň'adá⁺ bi̯áň'a⁺ cb bi̯āň'- n.* wet mud, black mud; riverbed

bi̯āu̯ňk^ɔ *pl bi̯āň'ad^ɛ cb bi̯àň'- n.* shoulder

bīál^{lɛ} *pl bīəlá⁺ adj.* naked

bìəl^ɛ *vv.* accompany

bī'əlá⁺ *q.* a little 16.1; **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^{nɛ} *pl bīəna⁺ cb bìən- n.* shin

bīər^{ɛ/} *pl bi̯ēyá⁺ cb bi̯ā- n.* elder sibling of the same sex

bì'əs^ɛ *vv.* doubt

bìgɩs^ɛ *vv.* show, teach

bīig^a *pl bīis^ɛ 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 35.1; **bī-púŋ^a** *n.* girl

bì'ig^ɛ *vv.* ripen, become pregnant

bīilíf^ɔ *pl bīilí⁺ cb bīil- n.* seed

bìilím^m *n.* childhood

bīɩm^{m/} *cb bī- n.* soup, stew

bì'isím^m *n.* milk (human or animal)

bì'isɩr^ɛ *pl bì'isa⁺ cb bì'is- n.* woman's breast

bīl^a *pl bībɩs^ɛ cb bìl- or bì- adj.* little, small

bìlɩg^ɛ *vv.* roll (transitive)

bìlɩm^m *vv.* roll (intransitive)

bìmbìm^{mɛ} *pl bìmbìma⁺ cb bìmbìm- n.* altar NT (KED: "mound or pillar of earth")

Bìn^{nɛ} *pl Bìm^{ma} cb Bìn- n.* Moba, Bimoba person 35.5; not only Bemba, WK

Bìn^{nɛ} *n.* Moba language 35.5

bīn^{nɛ} *n.* excrement

Bì̯u̯ŋ^ɔ *n.* Moba country 35.5

bɔ̀⁺ *vv.* seek; **bɔ̀ɔd^a** *dipf* used for: want, like, love (sexual, romantic); imperfective
        gerund **bɔ̀ɔdɩm^m** "will" 13.1.1.4

bɔ̄⁺ *cb bɔ̀- what?* why? 15.4; **bɔ̀-būudɩ⁺** what sort of ..?; **bɔ̄-zúgɔ̄** because 27.1.3,
        why? 17.1; **bɔ̀-wìn^{nɛ}** what time of day?

bɔ̀bɩg^ɛ *vv.* wrap round, tie round

bɔ̀dɩg^ɛ *vv.* lose, become lost

bɔ̀dɔ̀bɔ̀dɔ̀⁺ *n.* bread (? ultimately ← English)

bɔ̀kˀ *pl* *bʊ̀'ad*ᵉ *cb* *bʊ̰'à-* *n.* pit

bɔ̄sʊr*ᵉ* *pl* *bɔ̄sa*⁺ *cb* *bɔ̀s-* *n.* a kind of small, very poisonous snake

bʊ̄'⁺ *vv.* beat

bʊ̰àk*ᵉ* *vv.* split

bʊ̀'ar*ᵉ* *pl* *bʊ̰'àa*⁺ *cb* *bʊ̰'à-* *n.* hole

bʊ̄'ar*ᵉ/* *pl* *bʊ̰'áa*⁺ *cb* *bʊ̰'ā-* *n.* skin bottle

bʊ̀d*ᵉ* *ger* *bʊ̄dɪg*ᵃ *bʊ̄dʊg*ˀ *vv.* plant seeds

bùdɪm*ᵐ* *vv.* get confused

bùdɪmís*ᵉ* *n.* confusion

bù'e⁺ *vv.* pour out

bùg*ᵉ* *vv.* get drunk; cf Hausa *bùgu id*

bʊ̄gʊd*ᵃ* *n.* client of a *bā'a*⁼ (traditional diviner)

bùgʊlɪm*ᵐ* *vv.* cast lots

bʊ̄gʊr*ᵉ* *pl* *bʊ̄ga*⁺ *cb* *bʊ̀g-* *n.* dwelling-place of a *wɪ̄n*ⁿᵉ (localised spirit); also a *wɪ̄n*ⁿᵉ/
       as a *sɪ̄gɪr*ᵉ/ 35.2 inherited from one's mother's family

bùgúm*ᵐ* *cb* *bùgūm- bùgúm-* *n.* fire; **Bùgúm-tɔ̄ɔŋr*ᵉ*** *n.* Fire Festival

bʊ̄gʊs*ᵃ/* *iv.* be soft

bʊ̄gʊsíg*ᵃ* bʊ̄gʊsír*ᵉ* *pl* *bʊ̄gʊsá*⁺ *cb* *bʊ̄gʊs-* *adj.* soft, weak

bʊ̄gʊsígā⁺/ *adv.* softly 20.4

bʊ̄gʊsím*ᵐ* *n.* softness, weakness

bʊ̄k*ᵉ/* *vv.* weaken

bòk*ᵉ* *vv.* cast lots

bùl*ᵉ* *vv.* germinate, ooze

bòl*ᵉ* *vv.* astonish

Bùl*ˡᵉ* *n.* Buli language 35.5

Bùlɪg*ᵃ* *pl* *Bùlɪs*ᵉ *cb* *Bùl-* *kn.* Bulsa person 35.5

bùlɪg*ᵃ* *pl* *bùlɪs*ᵉ *cb* *bùl-* *n.* well, pond

bùmbàrɪg*ᵃ* *pl* *bùmbàrɪs*ᵉ *cb* *bùmbàr-* *n.* ant

bùn*ᵉ* *vv.* reap, harvest

bʊ̄n*ⁿᵉ/* *pl* *bʊ̄ná*⁺ *bʊ̄n-nám*ᵃ *cb* *bʊ̄n-* *n.* thing (concrete or abstract) 19.9.3; **bʊ̄n-
       bʊ́ʊdɪ̀f*ˀ** *n.* plant; **bʊ̄n-gíŋ*ᵃ** *n.* short chap (informal, joking); **bʊ̄n-kɔ́�̃bʊ̀g*ˀ**
       pl *bʊ̄n-kɔ́ŋbɪ̀d*ᵉ *cb* *kɔ̀ŋb-* (sic) *n.* animal; **bʊ̄n-kúdʊ̀g*ˀ** *n.* old man

bʊ̄n-dáàr*ᵉ* which day? 17.1

bùŋ*ᵃ* *pl* *bùmɪs*ᵉ *cb* *bùŋ-* *n.* donkey

bùŋ*ᵉ* *vv.* take a short cut

bùɵl*ᵉ* *vv.* call, summon; *Ò yʊ̄'ʊr búɵ̀n* X. "She is called X." 23.2

bùɵr*ᵉ* *pl* *bʊ̰èya*⁺ *cb* *bʊ̰à-* *n.* grain store, silo

bʊ̄'ɵs*ᵉ* *vv.* ask; *ger* **bʊ̄'ɵsúg*ˀ** *n.* question

bù-pīiga *adv.* ten times 16.2.5

būráa⁼ *n.* man, male adult; in ILK but characteristically *Toende* Kusaal; no examples in NT. See *dāu̯*⁺

būrɩyá⁺ *n.* Christmas ← Twi/Fante *bronya*

bùrkìnᵃ *pl* *bùrkìn-nàm*ᵃ *cb* *bùrkìn-* *n.* free person; honourable person ← Songhay 18.1

Bùsáàn̆lᵋ *n.* Bisa language 35.5

Bùsáŋᵃ *pl* *Bùsáàn̆s*ᵋ *cb* *Bùsāŋ-* *n.* Bisa person 35.5

būtɩŋᵃ *pl* *būtɩɩs*ᵋ *irregular* 6.2.1 2.4; *cb* *bùtɩŋ-* *n.* cup (in general; etymologically ← "seed planting [cup]")

būʋdᵋ *n. pl as sg* innocence

būudɩ⁺ *cb* *bùud-* *n.* kind, sort, ethnic group

būʋgᵃ *pl* *būʋs*ᵋ *cb* *bù-* *n.* goat; **bù-dìbɩg**ᵃ *n.* male kid

D

dà before two days ago, Tense Particle 22.3.1

dā "not" with Imperative Mood 22.5

dàa day after tomorrow, Tense Particle 22.3.1

dāa before yesterday, Tense Particle 22.3.1

dà'⁺ *vv.* buy

dà'a⁼ *pl* *dà'as*ᵋ *cb* *dà'-* *n.* market

dà'abɩrᵋ *n.* slave

dàalɩmᵐ *n.* masculinity

dàalímᵐ *pl* *dàalímìs*ᵋ *n.* male organs

dāamᵐ/ *cb* *dā-* *n.* millet beer, "pito"; **dā-núùr**ᵋ *n.* beer-drinking; **dā-bín**ⁿᵋ *cb* *dā-bín-* *n.* residue of beer; NT "yeast" (cf *bīn*ⁿᵋ)

dàamᵐ *vv.* disturb, trouble; cf Hausa *dàamaa id*

dāanᵃ *pl* *dàan-nàm*ᵃ *cb* *dàan-* *n.* owner of ... 19.9.3

dāarᵋ *pl* *dābá*⁺*cb* *dà-* *n.* day, 24-hour period 35.9; **dà-pīiga**⁺ *n.* ten days

dābíèmᵐ *tone sic n.* fear

dàbīogᵓ *pl* *dàbīəd*ᵋ *cb* *dàbi̯à-* *n.* coward

dàbɩsɩrᵋ *pl* *dàbɩsa*⁺ *cb* *dàbɩs-* *n.* day (as one of several)

dādúkᵓ *n.* a kind of large pot

dā'e⁺/ *vv.* push; blow (of wind)

Dàgáàdᵃ *pl* *Dàgáadìb*ᵃ *Dàgáàd-nàm*ᵃ *cb* *Dàgáàd-* *n.* Dagaaba person (L prefix *sic*)

Dàgbānⁿᵋ/ *pl* *Dàgbām*ᵐᵃ/ *cb* *Dàgbān-* *n.* Dagomba person 35.5

Dàgbānⁿᵋ/ *n.* Dagbani language 35.5

Dàgbāu̯ŋᵓ/ *n.* Dagomba country, Dagbon 35.5

dàgɔbɩgᵃ *n.* left-hand; (*yà*) *dàgɔbɩg*ᵃ South KB 35.3

dāká⁺ *pl* *dāká-nàm*ᵃ *cb* *dāká-* *n.* box ← Hausa *àdakàa*

dàkīigᵃ *pl* *dàkīis*ᵋ *cb* *dàkì-* *n.* wife's sibling 35.1; **dàkì-dāu̯**⁺ *n.* wife's brother; **dàkì-pu̯āk**ᵃ *n.* wife's sister; **dàkì-tùa**⁺ *n.* wife's sister's husband

dà-kɔ̀ɔ̌r^ɛ *pl dà-kɔ̀ňya*⁺ *cb dà-kɔ̀ň-* *n.* unmarried son <u>35.1</u>

dàm^m *dipf dàmmɩd*^a *vv.* shake

dàmà'a⁼ *n.* liar cf *mà'*⁺

dàmà'am^m *n.* lie, untruth, lying

dàmà'ar^ɛ *n.* lie, untruth

dāmpūsāar^ɛ *n.* stick

dànkɔ̀ŋ^ɔ *n.* measles

dà-pāal^{a/} *n.* young man, son

dà-sāŋ^a *pl dà-sāaňs*^ɛ *dà-sām*^{ma} *cb dà-saŋ-* *n.* young man

dà-tāa⁼ *pl dà-tāas*^ɛ *cb dà-tà-* *n.* enemy

dàtìṳŋ^ɔ *n.* right-hand; *(yà) dàtìṳŋ*^ɔ North KB <u>35.3</u>

dāṳ⁺ *pl dāp*^a *cb dàṳ- dàp-* <u>9.2.2</u> *n.* man (as opposed to woman)

dàʋg^ɔ *pl dàad*^ɛ *cb dà-* *n.* piece of wood, log; *pl* also: wood (material); **dà-kīəd^a**
   n. wood-cutter; **dà-kpī'əd^a** *n.* carpenter; **dà-pūʋdír^ɛ** *n.* cross-piece, *pl* **dà-**
   pūʋdá⁺ *n. used as sg* cross NT

dāʋg^ɔ *pl dāad*^ɛ *cb dà-* *adj.* male

dàwàlɩg^a *n.* hot humid season before the rains

dàwān^{nɛ/} *pl dàwāná*⁺ *cb dàwān-* *n.* pigeon

dàyáam^{ma} *pl dàyāam-nám*^a *cb dàyāam-* *n.* husband's parent <u>35.1</u>; **dàyāam-dáṳ⁺** *n.*
   husband's father; **dàyāam-pṵák^a** *n.* husband's mother

dàyūug^{ɔ/} *pl dàyūud*^{ɛ/} *cb dàyū-* *n.* rat

dèbɩr^ɛ *pl dèba*⁺ *n.* mat, pallet, bed

dɛ̄ɛŋ^a *pl dɛ̄ɛňs*^ɛ *dɛ̄ɛmɩs*^ɛ *dɛ̄ɛna*⁺ *cb dèɛŋ-* *q.* first <u>16.2.4</u>

dɛ̄l^{la/} *ger dɛ̄llúg*^ɔ *dɛ̄llím*^m *iv.* lean on something (of a person)

dèlɩm^m *vv.* begin to lean on something (of a person)

dɛ̄ŋ^a *pl dɛ̄mɩs*^ɛ *cb dèŋ-* *n.* accidental bruise

dèŋ^ɛ *vv.* go, do first

dèŋɩm beforehand, Particle-Verb <u>22.7.2</u>

dì it, its (Proclitic) <u>15.1</u> = *lì*

dì⁺ *dipf dìt*^a *imp dìm*^{ma} *vv.* eat, receive; *ger* **dīɩb^ɔ** *n.* food; *Ò dì pṵ'ā.* "He's married a
   wife." *Ò dì ňyán.* "She's ashamed."

dḭā'^a *vv.* get dirty

dḭā'ad^{ɛ/} *n.* dirt

dī'e^{+/} *vv.* receive, get

dìəm^{ma} *pl dìəm-nàm*^a *cb dìəm-* *n.* wife's parent <u>35.1</u>; also polite address by a man to
   an unrelated woman of similar or greater age; **dìəm-dāṳ⁺** *n.* wife's father;
   dìəm-pṵāk^a *n.* wife's mother

dì'əm^m *vv.* play, not be serious

dì'əma⁺ *n.* festival

dī'əs^{ɛ/} *vv.* receive (many things)

dīgɩ^{ya/} *ger dīk*^{a/} KT *dīgɩr*^{ɛ/} WK *iv.* be lying down

díɡ̄ısá⁺ *n. pl* lairs

díɡ̄ıl^(ɛ/) *vv.* lay down

dìɡ̄ın^ɛ *vv.* lie down

dìɡ̄ır^ɛ *pl dìga⁺ cb dìg- n.* dwarf

dìıs^ɛ *vv.* feed; *agt* **dìıs^a** *n.* glutton

dìısʊ́ŋ^ɔ *pl dìısímà⁺ dìısís^ɛ cb dìısʊ́ŋ- n.* spoon

dìm^a dummy head pronoun, animate pl <u>19.9.3</u>

dìn^(nɛ) dummy head pronoun, inanimate <u>19.9.3</u>

dín it (Subject of *ǹ*-Clause) <u>15.1</u>

dīn^ɛ it (Contrastive) <u>15.1</u> = *līn^ɛ*

dìndɛ̄og^(ɔ/) *pl dìndɛ̄ɛd^(ɛ/) cb dìndɛ̄- n.* chameleon

dìndìıs^a *n.* glutton

dìn zúg^ɔ therefore <u>17.1</u>

dìtʊ́ŋ^ɔ *n.* right-hand: see *dàtìu̜ŋ^ɔ*

dì-zɔ̄rʊg^(ɔ/) *pl dì-zɔ̄rá⁺ cb dì-zɔ̄r- n.* crumb

dɔ̄l^(la/) *ger dɔ̄llím^m iv.* accompany in a subordinate rôle; *Ànɔ́ˈɔnì dɔ̄llí fɔ̀?* "Who has come with you?" (to an elderly patient.) *Bà dɔ̀l nɛ̄ tāaba.* "They went together."

dɔ̄lıg^(ɛ/) *vv.* make accompany, send along with

dɔ̄lıs^(ɛ/) *vv.* investigate, trace

dɔ̄ňlıg^(ɛ/) *vv.* stretch oneself

dɔ̀ňˈɔs^ɛ *vv.* water plants

dɔ̀og^ɔ *pl dɔ̀ɔd^ɛ dɔ̀t^ɛ cb dɔ̀- n.* house, hut; clan; *dɔ̀og bîîg^a n.* (house) cat

dɔ̀ɔňg^ɔ *pl dɔ̀ɔňd^ɛ cb dɔ̀ň- n.* dawadawa fruit <u>35.6</u>

dū⁺ *dipf dūt^(a/) imp dùm^(ma) vv.* go up

du̜ˈà^a *vv.* bear, beget; *agt* **dū'ad^a** *n.* elder relation

dʊ̀ˈal^ɛ *vv.* make interest (of a loan)

dū'am^m *n.* birth

dùaň⁺ *pl dɔ̀ɔňs^ɛ cb dɔ̀ň- n.* dawadawa <u>35.6</u> *Parkia clappertoniana [biglobosa]* (Haaf)

du̜'átà⁺ *n.* doctor ← English

dūe^(+/) *vv.* raise, rise

dūg^ɛ *vv.* cook

dūk^(ɔ/) *pl dūgʊd^(ɛ/) dút^ɛ cb dūg- n.* cooking pot; **dūg-pɛ́ˈɛ̀la⁺** *n.* full pots

dùm^m *vv.* bite

dūm^(mɛ) dūm^(nɛ) *pl dūma⁺ cb dùm- n.* knee

dòndùug^ɔ *pl dòndùud^ɛ cb dòndù- n.* cobra

dūnıya⁺ *cb dūnıyá- <u>9.7</u> n.* world ← Arabic دنيا *dunya:*

dūnná⁺ *adv.* this year <u>35.9</u>

dūŋ^a *pl dūmıs^ɛ cb dùŋ- n.* mosquito

dūɵr^(ɛ/) *pl du̜ēyá⁺ cb du̜ā- n.* stick

dū'ɵs^(ɛ/) *vv.* lift up, honour

dùr^a *iv.* be many

dū'un^{ɛ/} *vv*. pass water (*ger* recorded as **dū'unʊ́g^ɔ**)
dū'uním^m *cb dū'un-* *n.* urine
dʊ̄ʊsá⁺ *n. pl.* steps

E

ɛ̄ɛň yes <u>28.2.4</u>
ɛ̄ɛň or **ɛ̄ɛň tí** see *ňyɛ̄ɛ*, *ňyɛ̄ɛ tí* Particle-Verb <u>22.7.2</u>
ɛ̄ɛňb^{ɛ/} *vv*. lay a foundation
ɛ̄ɛňbír^ɛ *n.* foundation <u>12.1.2</u>
ɛ̀ňbɪs^ɛ *vv*. scratch
ɛ̀ňd^ɛ *vv*. block up, plug up
ɛ̀ňdɪg^ɛ *vv*. unblock, unplug
ɛ̀ňrɪg^ɛ *vv*. shift along (e.g. a bench)

F

fāaň⁼ *q*. every <u>16.1</u>
fāeň^{+/} *vv*. save; *agt* **fāaňd^{a/} fāaňgíd^a** *n.* saviour <u>18.1</u>
fāň⁺ *vv*. grab, rob
fáss ideophone for *pìəlɪg^a* "white" <u>19.8.1.3</u>
fɛ̄ɛg^{ɛ/} *vv*. (of food) get old, cold
fɛ̄ň'og^{ɔ/} *pl fɛ̄ň'ɛd^{ɛ/} cb fɛ̄ň'-* *n.* ulcer
fìəb^ɛ *vv*. beat
fì'ig^ɛ *vv*. cut off
fiiň⁼ *q*. a little (liquid) <u>16.1</u>
fìtlá⁺ *n.* lamp ← Hausa *fitilàa*
fɔ̄ɔs^{ɛ/} *vv*. blow, puff (wind); *ger* **fɔ̄ɔsʊ́g^ɔ** *n.* hypocrisy NT
fʊ̀ you, your sg (Proclitic) <u>15.1</u>
f^ɔ you sg (Enclitic object) <u>15.1</u>
fùe⁺ *vv*. draw out
fʊ̄fʊ̄m^{mɛ} *pl fʊ̄fʊ̄ma⁺ cb fʊ̄fʊ́m-* *n.* envy; also: stye (believed to result from envy)
fʊ́n you *sg* (as subject of *ǹ*-Clause) <u>15.1</u>
fʊ̄n SF **fʊ́nɛ̄** LF you *sg* (contrastive) <u>15.1</u>
fʊ̄ug^{ɔ/} *pl fʊ̄ud^{ɛ/} fʊ̄t^{ɛ/} cb fʊ̄-* *n.* shirt, clothing; *pl* also: cloth

G

gàad^ɛ *vv*. pass, surpass <u>26.3.2</u>
gáafàra sorry (formula <u>34</u>); Hausa *gaafaràa*, ultimately ← Arabic
gà'al^ɛ *vv*. button up

gà'am^m *vv.* grind teeth

gāaň^=/ *pl gāaňs^ε/ cb gāň- n.* Nigerian ebony 35.6 *Diospyros mespilliformis* (Haaf)

gàas^ε *vv.* pass by

gādʊ^+ gādʊg^ɔ/ *pl gādʊ-nám^a gāt^ε/ cb gād- gādʊ- n.* bed ← Hausa *gadoo*

gàlɩm^m *vv.* joke

gàlɩs^ε *vv.* exceed, get to be too much

gāňr^ε/ *pl gāňyá^+ cb gāňr- n.* fruit of Nigerian ebony 35.6

gàŋ^ε *vv.* step over

gāŋ^ε/ *vv.* choose

gbāň'e^+/ *vv.* catch

gbáňyà'a^= *n.* lazy person 18

gbáňyà'am^m *n.* laziness; 1976 NT *gonya'am*

gbàʊ̪ŋ^ɔ *pl gbàna^+ cb gbàn- gbàʊ̪ŋ- n.* book WK

gbāʊ̪ŋ^ɔ/ *pl gbāná^+ cb gbān- gbāʊ̪ŋ- n.* animal skin WK; animal skin, book DK

gbέὲňm^m *cb gbēň- n.* sleep

gbὲ'og^ɔ *pl gbὲ'εd^ε gbὲda^+ cb gbὲ'- n.* forehead; shore of a lake

gbēr^ε/ *pl gbēyá^+ cb gbēr- n.* thigh

gbīgɩm^nε *pl gbīgɩma^+ cb gbìgɩm- n.* lion

gbìn^nε *pl gbìna^+ cb gbìn- n.* buttock; base (e.g. of a mountain); postposition 20.6

gbìn-vɔ̀ɔňr^ε *n.* anus

gbīs^ε *vv.* sleep

gēεl^ε/ *vv.* place between one's legs; Pattern H

gēεňm^m/ *vv.* go mad, madden

gēεňmís^ε *n. pl as sg* madness

géεňŋ^a *pl gēεňmís^ε n.* madman

gél^lε *pl gēlá^+ cb gēl- n.* egg

gēň^+ *vv.* get tired; *res adj* **gēεňlúŋ^ɔ** *adj.* tired

gēň'^+ *vv.* get angry

gēog^ɔ *n.* place between one's legs; Pattern O *sic*

gīiňlím^m *n.* shortness

gìk^a *pl gìgɩs^ε cb gìg- n.* dumb person

gīlɩg^ε/ *dipf gīn^na/ vv.* go around 11.1.1

gīm^ma/ *iv.* be short

gīŋ^a *pl gīma^+ cb gìŋ- adj.* short

gìŋ^ε *vv.* scrimp

gīŋa^+ *adv.* shortly 20.4

gīŋɩlím^m *n.* shortness

gōdɩg^ε/ gò'ɔn^ε *vv.* look up

gōl^la/ gōr^a/ gō'e^ya/ *iv.* be looking up

gòň^+ *vv.* hunt; *dipf* **gòɔňd^a** wander, *ger gòɔňdɩm^m* wandering 13.1.1.4

Gòɔg^a *pl Gòɔs^ε n.* clan name 35.5

Gɔ̀ɔgꜝ *n.* place of the *Gɔ̀ɔs*ᵋ Goosi clan

***gɔ̀'ɔn*ᵋ** *vv.* look up

***gɔ̄r*ᵃ/** *iv.* be looking up

***gɔ̄s*ᵋ** *dipf gɔ̄sɪd*ᵃ/ *gɔ̄t*ᵃ/ *imp gɔ̀sɪm*ᵃ *gɔ̀m*ᵐᵃ *ger gɔ́sìg*ᵃ *vv.* look; *agt **gɔ̄t**ᵃ/ n.* seer,
      prophet

***gʊ̀l*ᵋ** *dipf gʊ̀n*ⁿᵃ *vv.* suspend

***gʊ̀l*ˡᵃ** *ger gʊ̄lɪb*ꜝ *iv.* be suspended

***gʊ̀llɪm*ⁿᵋ** only; Post NP/AdvP Particle 33.6

***gʊ̀m*ᵐᵋ** *pl gʊ̀ma*⁺ *n.* kapok fruit 35.6; also "thread" WK

***Gʊ̀m*ᵐᵋ** *n.* place of the clan *Gʊ̀m-dìm*ᵃ 35.5

***gʊ̄mpʊ̄zɛ̄r*ᵋ/** *pl gʊ̄mpʊ̄zɛ̄yá*⁺ *cb gʊ̄mpʊ̄zér- n.* duck

***gʊ̀ň'a*⁺** *pl gɔ̀ň'ɔs*ᵋ *cb gɔ̀ň'- n.* thorn

***gʊ̀ngʊ̄m*ᵐᵋ** *n.* kapok material

***gʊ̀ŋ*ᵃ** *pl gʊ̀mɪs*ᵋ *cb gʊ̀ŋ- n.* kapok tree 35.6 *Ceiba pentandra* (Haaf)

***gūr*ᵃ/** *ger gūrím*ᵐ *iv.* be on guard, watch for 29.1

***Gʊ̄rín*ⁿᵋ** *n.* Farefare language 35.5

***Gʊ̄ríŋ*ᵃ** *pl Gʊ̄rís*ᵋ *n.* Farefare person 35.5

***gū'ul*ᵋ/** *vv.* put on guard

***gʊ̀'ʊlɪm*ᵐ** *vv.* become half-ripe

***gʊ̀ʊr*ᵋ** *pl gʊ̀ya*⁺ *cb gʊ̀- n.* upland; bank of river

***gʊ̄ʊr*ᵋ** *pl gʊ̄ya*⁺ *cb gʊ̀- n.* ridge of back

***gū'us*ᵋ/** *vv.* take care, watch out

***gʊ̄'ʊs*ᵋ** *n. pl* half-ripe fruit

H

***hālí*⁺** until, up to and as far as 27.1.3 26.4 21.2; ? ← Arabic حتى *ħatta:*

I

***i̠ā*⁺** *vv.* seek

***i̠āň'as*ᵋ/** *vv.* leap

***i̠āňk*ᵋ/** *ger i̠āň'ad*ᵃ/ *agt i̠āň'ad*ᵃ/ *vv.* leap, fly 11.1.1

***īgɪ*ʸᵃ/** *ger īk*ᵃ/ KT *īgɪr*ᵋ/ WK *iv.* be kneeling

***īgɪl*ᵋ/** *vv.* make to kneel

***ìgɪn*ᵋ** *vv.* kneel down

***íɪl*ˡᵋ** *pl īɪlá*⁺ *cb īɪl- n.* horn

***īsɪr*ᵋ** *pl īsa*⁺ *cb ìs- n.* scar

***ìsɪg*ᵋ** *vv.* get up early

K

kà and, that <u>27.1.2</u> <u>28.3.2</u>

kāab^{ɛ/} *vv.* offer, invite

kāal^{ɛ/} *vv.* count

kāas^{ɛ/} *vv.* cry out, weep; (cock) crow

kà'asɪgē LF *only*; *iv.* not exist <u>32.1.1</u>

kābɪg^{ɛ/} *vv.* ladle out (liquid)

kābɪr^{ɛ/} *vv.* call out asking for admission <u>34</u>; *ger* **kābɪrí⁺** *n.* calling out for admission

kàd^ɛ *vv.* drive away; **kàd sàríyà** *vv.* judge <u>23.1</u>; *agt* **sàríyà-kāt^a** *n.* judge NT

kā'e̱⁺ *ger* **kā'alím^m** *iv.* not exist, not be, not have <u>32.1.1</u> <u>8.5.3</u>

kāl^{lɛ/} *pl* **kālá⁺** *cb* **kāl-** *n.* number

kàlɪgā^{+/} *q.* few <u>16.1</u>

kàm^a *q.* every <u>16.1</u>

Kàmbònɪr^ɛ *n.* Twi language <u>35.5</u>

Kàmbòŋ^a *pl* **Kàmbòmɪs^ɛ** *cb* **Kàmbòŋ-** *n.* Ashanti person <u>35.5</u>

kàn^ɛ this, that (Demonstrative <u>15.2</u>)

kàn̆b^ɛ *ger* **kān̆bɪr^ɛ** *vv.* scorch

kàŋā^{+/} this, that (Demonstrative <u>15.2</u>)

kàr^a *iv.* be few

kàrɪm^m *vv.* read

kàsɛ̄t^{a/} *n.* witness; testimony: Mooré **kàsétò** "proof, testimony";probably ultimately ← French *cachet* <u>18.1</u>; *pl* **kàsɛ̄tíb^a** witnesses

kɛ̄⁺ *dipf* **kɛ̄t^{a/}** *imp* **kɛ̀l^a** *vv.* let, cause to … <u>11.1.1</u> <u>29.1</u>

kɛ̀ɛkɛ̀⁺ *pl* **kɛ̀ɛkɛ̀-nàm^a** *cb* **kɛ̀ɛkɛ̀-** *n.* bicycle ← Hausa **kèekè**

kɛ̀ɛs^ɛ *vv.* say farewell to

kɛ̀lɪs^ɛ *vv.* listen

kɛ̄n̆⁺ *dipf* **kɛ̄n^{a/}** *imp* **kɛ̀m^a** *ger* **kɛ̄n^{nɛ/}** *vv.* come <u>11.1.1</u>; always with *nā* <u>23.7</u>; **kɛ̄n kɛ̄n** welcome! <u>34</u>

kɛ̄ŋ^{ɛ/} *dipf* **kɛ̄n^{na/}** *imp* **kɛ̀m^{ma}** (disambiguated with *sà* <u>23.7</u>) *vv.* go; walk <u>11.1.1</u>; *agt* **kɛ̄n^{na/}** *n.* traveller

kérɪfà or **kárɪfà** ← Hausa **karfèe**; in telling time <u>35.9</u>

kī^{+/} *cb* **kī- kā-** *n.* cereal, millet; **kì-dà'ar^ɛ** *pl* **kì-dà'ada⁺** *n.* purchased millet; **kā-wɛ̄nnɪr^ɛ** *pl* **kā-wɛ̄nna⁺** *cb* **kā-wɛ́n-** *n.* corn

ki̱à⁺ *vv.* cut

kīdɪg^{ɛ/} *vv.* cross over, meet; **À-Kīdɪgɪ Bū'ɵs** *n.* the constellation Orion

kīibú⁺ *cb* **kīib-** *n.* soap WK; ← Mampruli <u>18.1</u>; written materials **ki'ibɔ**, probably **kī'ɪbɔ/**

kíin̆fɔ *pl* **kīiní⁺** *n.* millet seed

kìɪs^ɛ *vv.* listen

kī'ɪs^{ɛ/} *vv.* deny

kìkàm^{mɛ} *pl* **kìkàma⁺** *n.* fig <u>35.6</u>

kìkàŋᵃ **kìnkàŋ**ᵃ *pl kìkàmɩs*ᵋ *cb kìkàŋ- n.* fig tree <u>35.6</u> *Ficus capensis* (Haaf)

kìkīrɪgᵃ⁄ *pl kìkīrɪs*ᵋ⁄ *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 *kìkīrɪs*ᵋ⁄ hostile to man live in the bush: "Their feet are attached backwards to confuse trackers." WK; **kìkīr-bɛ́'ɛ̀d**ᵋ *n.* NT evil spirit, demon; KB just uses *kìkīrɪg*ᵃ⁄

kīlɪmᵐ⁄ *vv.* become, change into

kìmᵐ *vv.* tend flock, herd; *agt* **kɔ̀ňb-kīm**ⁿᵃ *n.* herdsman, shepherd

kīrᵋ *ger kɪkírʊg*ᵓ *kīrɪb*ᵓ *vv.* hurry, tremble

kīsᵃ⁄ *ger kísʊg*ᵓ *agt kīs*ᵃ⁄ *kīsɪd*ᵃ⁄ *iv.* hate

kísʊgᵓ *adj.* hateful, taboo

kɔ̀⁺ *vv.* get broken, break (intransitive); *res adj* **kɔ̀ɔlʊ́ŋ**ᵓ *adj.* broken

kɔ̀bɪgā kɔ̀bɪsí⁺ *q.* one hundred, two hundred <u>16.2.2</u>

kɔ̄bɪrᵋ *pl kɔ̄ba*⁺ *cb kɔ̀b- n.* bone

kɔ̄dʊ́⁺ *n.* banana ← Twi *kwadu*

kɔ̀lᵋ *vv.* put something around the neck

kɔ̄lɪgᵃ *pl kɔ̄lɪs*ᵋ *cb kɔ̀l- n.* river; **kɔ̄lʊgʊ-n nɔ́-dáʊg**ᵓ *n.* crayfish

kɔ̀lʊgᵓ *pl kɔ̀n*ⁿᵋ *cb kɔ̀lʊg-* <u>9.2.2</u> *n.* sack, bag

kɔ̄mᵐ⁄ *cb kɔ̄m- n.* hunger

kɔ̄ňbʊgᵓ *pl kɔ̄ňbɪd*ᵋ *cb kɔ̀ňb-* (also used as *cb* of *bōn-kɔ́ňbʊg*ᵓ "animal") *n.* animal hair or human body hair; *cf zūθbʊ́g*ᵓ; **kɔ̀ňb-kīm**ⁿᵃ *pl kɔ̀ňb-kīmmɪb*ᵃ *n.* shepherd, herdsman

kɔ̄ň'ɔkɔ̄⁺ *adv.* alone, by oneself <u>20.4</u>

kɔ̀ňsᵋ *vv.* cough

kɔ̀ňsɪmᵐ *vv.* cough

kɔ̀'ɔgᵋ *vv.* break (transitive or intransitive)

kɔ̀'ɔsᵋ *vv.* break several times

kɔ̀tàaⁿᵋ at all; Post NP/AdvP Particle <u>33.6</u>

kɔ́tʊ̀⁺ *n.* lawcourt ← English, probably via Hausa

kpà'a⁼ *pl kpà'a-nàm*ᵃ *n.* rich person

kpāadᵃ⁄ *pl kpāadíb*ᵃ *cb kpāad- n.* farmer, cultivator

kpà'amᵐ *n.* riches

kpāaňmᵐ⁄ *cb kpāň- n.* grease, ointment; **kpāň-sɔ́ň'ɔdìm**ᵐ *n.* anointing oil

kpàkʊ̄rᵋ⁄ *pl kpàkʊ̄yá*⁺ *cb kpàkʊ̄r- n.* tortoise

kpānⁿᵋ *pl kpāna*⁺ *cb kpàn- n.* spear

kpàňdɪrᵋ *pl kpàňda*⁺ *cb kpàňd- n.* baboon

kpàrᵋ *vv.* lock

kpār-kɛ́òňgᵓ *pl kpār-kɛ́ɛ̀ňd*ᵋ *cb kpār-kɛ́ň- n.* rag

kpā'ʊ́ŋᵓ *pl kpīˀiní*⁺ *cb kpā'- n.* guinea fowl

kpɛ̄⁺ *adv.* here <u>17.1</u>

kpɛ̄ɛňmᵐ *pl kpɛ̀ɛňm-nàm*ᵃ *cb kpɛ̀ɛňm- n.* elder

kpɛ̄ɛňm^**ma/** *iv.* be older than

kpɛ̄lá^**+** *adv.* here <u>17.1</u>

kpèlɪm still; immediately after, Particle-Verb <u>22.7.2</u>

kpèlɪm^**m** *vv.* remain

kpèn reduced form of the Particle-Verb *kpèlɪm*

kpèň'^**+** *vv.* enter

kpɛ̄ňdɪr^**ɛ/** *pl* *kpɛ̄ňdá*^+ *cb* *kpɛ̄ňd- n.* cheek

kpèň'ɛs^**ɛ** *vv.* make enter

kpè'ŋ^**ɛ** *vv.* strengthen

kpɛ̄oňŋ^**ɔ** *n.* seniority

kpì^**+** *vv.* die; *res adj* **kpìilúŋ**^**ɔ** *adj.* dead

kpì'a^**+** *pl* *kpì'əs*^ɛ *cb* *kpi̯à'- n.* neighbour

kpi̯à'^**+** *vv.* shape wood with axe etc

kpì'e^**+** *vv.* approach

kpī'əm^**ma/** *iv.* be strong, hard

kpìibɪg^**a** *pl* *kpìibɪs*^ɛ *cb* *kpìib- n.* orphan

kpìig^**ɛ** *vv.* go out (fire)

kpī'im^**m/** *pl* *kpī'imís*^ɛ *cb* *kpī'im- n.* dead person, corpse

kpìis^**ɛ** *vv.* quench (fire)

kpīkpīn^**na/** *pl* *kpīkpīnníb*^a *cb* *kpīkpín- n.* merchant

kpī'oŋ^**ɔ** *pl* *kpī'əma*^+ *cb* *kpì'oŋ- adj.* strong, hard

kpìsɪnkpìl^**lɛ** *pl* *kpìsɪnkpìla*^+ *cb* *kpìsɪnkpìl- n.* fist

kpìsʋkpìl^**lɛ** *n.* fist

kpòkpàr^**ɛ** *pl* *kpòkpàra*^+ *n.* palm tree fruit <u>35.6</u>

kpòkpàrɪg^**a** *pl* *kpòkpàrɪs*^ɛ *cb* *kpòkpàr- n.* palm tree <u>35.6</u> (Probably *Borassus akeassii* or *aethiopum*)

kpòkpàu̯ŋ^**ɔ** *pl* *kpòkpàma*^+ *cb* *kpòkpàu̯ŋ- n.* arm, wing

kʋ̀ not; negates Irrealis Mood <u>22.5</u>

kū̄^**+** *vv.* kill

kū̄^**+** *vv.* gather, threaten (of rain): *Sāa kú̄ yā.* "It looks like rain."

ku̯ā̄^**+** *vv.* hoe, farm

kū̄'alíŋ^**a** *pl* *kū̄'alímìs*^ɛ *kū̄'alís*^ɛ *cb* *kū̄'alíŋ- n.* sleeveless traditional smock

kʋ̀d^**ɛ** *vv.* work iron

kʋ̀dɪg^**ɛ** *vv.* shrivel up, dry out, age

kū̄dɪm^**m** *n.* the olden days

kū̄dʋg^**ɔ** **kū̄dɪr**^**ɛ** *pl* *kū̄da*^+ *kū̄t*^ɛ *cb* *kʋ̀d- adj.* old

kū̄dʋg^**ɔ** *pl* **kū̄t**^**ɛ** (used as sg <u>9.5</u>)*cb* *kʋ̀t- n.* iron, nail; sg obsolete except in names <u>35.2</u>

kū̄gʋr^**ɛ/** *pl* *kū̄gá*^+ *cb* *kū̄g- n.* stone

kū̄k^**a** *pl* *kū̄gʋs*^ɛ *cb* *kʋ̀g- n.* chair

kū̄k^**a/** *n.* mahogany tree, *Khaya senegalensis* (Haaf); cf Hausa *kuukàa*

kʋ̀kɔ̀m^**mɛ** *pl* *kʋ̀kɔ̀ma*^+ *cb* *kʋ̀kɔ̀m- n.* leper

kòkɔ̄r^{ɛ/} *pl kòkɔ̄yá*⁺ *cb kòkɔ̄r- n.* voice

kòkpàrɪg^a see *kpòkpàrɪg*^a *id*

kūl^ɛ *ger kūlɪg*^{a/} *vv.* return home; transitive "marry" (woman subject, man object)

kūlɪm always, Post-Subject Particle 27.1.4

kòlɪŋ^a *pl kòlɪmɪs*^ɛ *kòlɪs*^ɛ *cb kòlɪŋ- n.* door

kòm^m *vv.* cry, weep

kūm^m *cb kùm- n.* death; **kùm-vū'ʋgír**^ɛ *n.* resurrection NT

kòndò'ar^ɛ *pl kòndò'ada*⁺ *cb kòndu̱'à- n.* barren woman

kòndòŋ^a *pl kòndòmɪs*^ɛ *kòndòna*⁺ *n.* jackal, hyena

kù'ɵm^m *cb ku̱'à- n.* water; **ku̱'à-nūud**^{ɛ/} *n.* thirst; **ku̱'à-ňwīig**^{a/} *pl ku̱'à-ňwīis*^{ɛ/} *n.* current in a river

kùɵs^ɛ *vv.* sell

kòrkūr^{ɛ/} *pl kòrkūyá*⁺ *cb kòrkūr- n.* pig

Kūsáa⁼ *pl Kūsáàs*^ɛ *cb Kūsá- n.* Kusaasi person 35.5

Kūsáàl^ɛ *n.* Kusaal language 35.5

Kūsáòg^ɔ *n.* Kusaasi country 35.5

Kòtān^{nɛ/} *pl Kòtām*^{ma/} *cb Kòtān- n.* member of WK's clan

Kòtāu̱ŋ^{ɔ/} *n.* country of clan *Kòtām*^{ma/} Kutamba

kūʋ or 27.1.2 28.2.2 ← Hausa

kūug^{a/} **kūug**^{ɔ/} *pl kūus*^{ɛ/} *cb kū- n.* mouse

kòʋl^ɛ *vv.* get drunk

L

lā^{+/} definite article 19.3

là'⁺ *vv.* laugh

lā'af^ɔ *n.* cowrie; *pl* **līgɪdɪ**⁺ *n.* cowries, money; *cb lìg- là'-;* **là'-bīəlíf**^ɔ *n.* small coin

láafɪya⁺ *n.* health ← Arabic العافية *Ɂal-ʕa:fiya(tu)*; replaced throughout by *laafe* **láafɪ** in 1996 NT and KB

là'am together, Particle-Verb 22.7.2

là'am^m *vv.* associate with; together with 26.3

là'as^ɛ *vv.* gather together (transitive); *Bà là'as tāaba* "They gathered together."

làbāar^ɛ *cb làbà- n.* news ← Arabic الاخبار *Ɂal-Ɂaxba:r(u)*

làbɪ^{ya} *iv.* be crouching, hiding behind something; cf Hausa *laɓèe* "crouch behind something to eavesdrop" 18.1

làbɪl^ɛ *vv.* make crouch behind something

làbɪn^ɛ *vv.* crouch behind something

làbɪs^ɛ *vv.* walk stealthily

lābɪs^{a/} *iv.* be wide

lābɪsíg^a **lābɪsír**^ɛ *pl lābɪsá*⁺ *cb lābɪs- adj.* wide

lābɪsím^m *n.* wideness

lāk ᵉ/ *vv.* open (eye, book)

lāl ˡᵃ/ *iv.* be distant

lālɩg ᵉ/ *vv.* get to be far, make far

lāllí ⁺ *adv.* far off

lāllíŋ ᵃ *pl lāllís* ᵉ *cb lāllíŋ- adj.* distant

lāllúg ᵓ *pl lāllá* ⁺ *cb lāl- adj.* distant

lām ᵐᵉ/ *pl lāmá* ⁺ *cb lām- n.* gum (of tooth); ***lām-fɔ́ɔ̀g*** ᵓ *pl lām-fɔ́ɔ̀d* ᵉ *adj.* toothless
    19.8.1.4

làmpɔ̄-dí'ə̀s ᵃ *n.* tax collector 18 (French *l'impôt*)

lān ⁿᵉ *pl lāna* ⁺ *cb làn- n.* testicle

làngáʊŋ ᵓ *pl làngáam* ᵐᵉ *làngāamá* ⁺ *cb làngāʊŋ- n.* crab (cf *màngáʊŋ* ᵓ *id*)

lànnɩg ᵃ *pl lànnɩs* ᵉ *cb lànnɩg-* 9.2.2 *n.* squirrel

lā'ŋ ᵉ/ *vv.* set alight

lāŋím ᵐ *vv.* wander around searching

lāṵk ᵓ *pl lā'ad* ᵉ *cb là'- n.* item of goods *pl* goods

là'ʊŋ ᵓ *pl là'ama* ⁺ *n.* fishing net

lèb ᵉ *ger lēbɩg* ᵃ *vv.* return (intrans)

lèbɩg ᵉ *vv.* turn over

lèbɩs ᵉ *vv.* answer; send back; divorce (wife)

lèɛ but, Verbal Predicator particle 22.7.1

lèm again, Particle-Verb 22.7.2

lèm ᵐ *dipf lèmmɩd* ᵃ *vv.* sip, taste

lēr ᵉ *vv.* get ugly

lì it, its (Proclitic) 15.1

lɩ ⁺ it (Enclitic object) 15.1

lì ⁺ *dipf lìt* ᵃ *imp lìm* ᵐᵃ *ger līig* ᵃ *vv.* fall

lī ⁺ *vv.* block up

lìa where is ...? 25

lìdɩg ᵉ *vv.* turn a shirt WK

lìdɩg ᵉ *vv.* astonish, be amazed

lìəb ᵉ *vv.* become

lì'əl ᵉ *vv.* approach, come near

líəŋ ᵃ *pl līəmís* ᵉ *cb līəŋ- n.* axe

lìg ᵉ *vv.* patch

lìgɩl ᵉ *vv.* cover

lìgɩn ᵉ *vv.* cover oneself

līɩbɩr ᵉ *pl līɩba* ⁺ *cb lìɩb- n.* twin

līk ᵃ *pl līgɩs* ᵉ *n.* darkness

lìlāalíŋ ᵃ *pl lìlāalís* ᵉ *lìlāalímìs* ᵉ *cb lìlāalíŋ- n.* swallow

lín it (subject of *ǹ*-Clause) 15.1

līn ᵉ it (Contrastive) 15.1

lìnᵉ that (Demonstrative [15.2](#))

lìná⁺ that (Demonstrative [15.2](#))

lɔ́⁺ *vv.* tie

lɔ́bᵉ *vv.* throw stones at

lɔ́bɪdígᵃ *pl lɔ́bɪdís*ᵉ *n.* water drawing vessel

lɔ́dɪgᵃ/ *pl lɔ́dɪs*ᵉ/ *cb lɔ́d-* *n.* corner; **lɔ́dɪgín kúg-súŋ**ᵓ "cornerstone" NT

lɔ́dɪgᵉ/ *vv.* untie

lɔ̀kᵓ *pl lʊ̀'ad*ᵉ *cb lu̲'à-* *n.* quiver (for arrows)

lɔ̀mbɔ̀'ɔgᵓ *pl lɔ̀mbɔ̀'ɔd*ᵉ *cb lɔ̀mbɔ̀'-* *n.* garden ← Hausa *làmbuu*

lɔ́ŋᵃ *pl lɔ́mɪs*ᵉ *cb lɔ̀ŋ-* *n.* a kind of frog

lɔ́'ŋᵉ/ *vv.* go across river, road etc

lɔ́rᵉ *pl lɔ́yà*⁺ *lɔ́ɔm*ᵐᵃ *cb lɔ́r-* *n.* car, lorry ← English

lù⁺ *dipf lùt*ᵃ *imp lùm*ᵐᵃ *vv.* fall

lūbᵉ *ger lūbɪr*ᵉ/ *vv.* buck, kick, struggle, throw off rider

lūgᵉ *vv.* swim

lūgʊrᵉ *n.* organ, member

M

m̀ I, my (Proclitic) [15.1](#)

mᵃ me (Enclitic) [15.1](#)

mà⁺ *cb mà-* *n.* mother; *pl mà nám*ᵃ (tone *sic*) mother's sisters/co-wives; **mà-bīig**ᵃ *n.* sibling with same mother; **mà-bīl**ᵃ *n.* mother's younger sister or junior co-wife; **mà-kpɛ̀ɛ̌ňm**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'anɛ̄** LF only; Post NP/AdvP Particle [33.6](#)

màalᵉ *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 *tὲŋ-dāan*ᵃ earth-priest himself

mā'alᵉ/ *vv.* make cool, wet

māanⁿᵉ *pl māana*⁺ *cb màan-* *n.* sacrifice [12.1.2](#)

má'anⁿᵉ *pl mā'aná*⁺ *cb mā'an-* *n.* okra

mā'asᵃ/ *iv.* be cool, wet

mā'asígᵃ **mā'asír**ᵉ *pl mā'asá*⁺ *cb mā'as-* *adj.* cool, wet

mā'asígā⁺/ *adv.* coolly [20.4](#)

mā'asímᵐ *n.* coolness, wetness

mādɪgᵉ/ *vv.* overflow, abound

mā'e⁺/ *vv.* cool down

màkᵉ *vv.* crumple up

mākᵉ/ *vv.* measure, judge

màl̪i̯ak^{a/} *pl* **màl̪i̯ā'as**^{ε/} **màl̪i̯ak-nám**^a *cb* **màl̪i̯ā'-** *n.* angel ← Arabic ملاك *malʔak(un)* <u>18.1</u>
　　　written *malek* in NT versions before 2016

màlıgım again; Particle-Verb <u>22.7.2</u>

mālıs^{a/} *iv.* be sweet, pleasant

mālısíg^a **mālısír**^ε *pl* **mālısá**⁺ *cb* **mālıs-** *adj.* sweet, pleasant

mālısím^m *n.* sweetness

mālısíŋ^a *pl* **mālısís**^ε *cb* **mālısíŋ-** *adj.* sweet, pleasant

mālʋŋ^ɔ *pl* **mālıma**⁺ *cb* **màlʋŋ-** *n.* sacrifice

mām I, me <u>15.1</u>

mán I (as subject of *ǹ*-Clause) <u>15.1</u>

mān SF **mánɛ** LF I, me (contrastive) <u>15.1</u>

màngávʋŋ^ɔ *pl* **màngáam**^{mε} **màngāamá**⁺ *cb* **màngāʋŋ-** *n.* crab (cf *làngávʋŋ*^ɔ id)

màṵk^ɔ *pl* **mà'ad**^ε *adj.* crumpled up

mɛ̀⁺ *vv.* build

mɛ̀ mɛ̀n^ε too, also; Post NP/AdvP Particle <u>33.6</u>; **mɛ̀-kàma** -soever <u>15.3</u>

mɛ̄d^ε *vv.* mash up

mɛ̀ɛŋ^a *pl* **mɛ̀ɛmıs**^ε *cb* **mɛ̀ɛŋ-** *n.* turtle

mɛ̀lıgım^m *n.* dew

mɛ̄ŋ^{a/} self <u>19.9.3</u>

mɛ̄ŋír^ε *adj.* genuine

mɛ̄t^{ε/} *cb* **mɛ̄t-** *n.* pl as sg pus

mī'⁺ *ger* **mī'ilím**^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'isʋg^ɔ *pl* **mì'isa**⁺ *cb* **mì'is-** *adj.* sour

mīlıg^{ε/} *vv.* get dirty

mìmīilím^m **mìmīilúg**^ɔ *n.* sweetness

mìt see that it doesn't happen that... <u>32.1.1</u>; always *mid* in KB

mɔ̄⁺ *vv.* strive, struggle

mɔ̄d^ε *vv.* swell

mɔ̄dıg^{ε/} *vv.* be patient, endure

mɔ̀lıf^ɔ *pl* **mɔ̀lı**⁺ *cb* **mɔ̀l-** *n.* gazelle

mɔ̄n^ε *vv.* grind millet to make *sā'ab*^ɔ porridge

mɔ̄ŋ^{ε/} *vv.* refuse to lend

mɔ̄ɔg^ɔ *pl* **mɔ̄ɔd**^ε *cb* **mɔ̀-** *n.* grass, "bush"; **mɔ̀-pīl**^{lε} *n.* grass thatch

Mɔ̀ɔg^ɔ *n.* Mossi realm; **Mɔ̀ɔg Ná'àb**^a *n.* the Moro Naba, King of the Mossi

mɔ̄ɔl^{ε/} *vv.* proclaim; *agt* **mɔ̄ɔl-mɔ́ɔ̀n**^{na} *n.* proclaimer

Mɔ̀ɔl^ε *n.* Mooré language

Mɔ̄r^{ε/} *pl* **Mɔ́ɔm**^{ma} *cb* **Mɔ̄r-** *n.* Muslim

mɔ̄r^{a/} *ger* **mɔ̄rím**^m *iv.* have, possess; **mɔ̄r nā** "bring" <u>23.7</u>

Mùa⁺ *pl Mɔ̀ɔsᵋ cb Mɔ̀-* *n.* Mossi person 35.5

mṵ'àᵃ *vv.* suck (of a baby)

mṵàkᵃ *pl mʋ̀'asᵋ cb mṵ'à-* *n.* maggot

mʋ̀'arᵋ *pl mṵ'àa⁺ mʋ̀'ada⁺ cb mṵ'à-* *n.* dam; reservoir

mʋ̀'asᵋ *vv.* give (to baby) to suck

mù'e⁺ *vv.* redden

mùi̤⁺ *cb mùi̤-* *n. pl as sg* rice

mùlᵋ *vv.* itch

mùmᵐ *vv.* bury

N

ǹ Clause Complementiser particle 31

n VP Serialiser particle 26.1

ǹ- Personifier proclitic before an adjective 19.10

nᵋ Remoteness Marker Enclitic 30.1.1

nᵋ nī⁺/ Locative Enclitic 20.3

nà Positive Irrealis Mood marker 22.4

nā⁺/ hither: VP-final particle 23.7

nā⁺ *vv.* join

náa reply to greetings invoking blessings 34

nà'abᵃ *pl nà'-nàmᵃ cb nà'-* *n.* chief, king; **nà'-bīigᵃ** *n.* prince, princess

náafɔ *pl nīigí⁺ cb nā'-* *n.* cow; **nā'-lɔ́rᵋ** *n.* place in compound for tying up cows;
      nā'-dáʋ̀gɔ *pl nā'-dáàdᵋ cb nā'-dá-* *n.* ox; **nā'-dá-kūɵdírᵋ** *n.* ox for ploughing

nā'amᵐ *cb nà'am-* *n.* chieftaincy, kingdom

nāan next, afterwards = *ňyāan*

nāan or **nāanι** then, in that case, being thus/there 30.1.2

nà'anā⁺/ *adv.* easily 20.4

nà'asᵋ *vv.* honour; *ger* **nà'asι⁺** *n.* honour

Nàbιdᵃ *pl Nàbιdιbᵃ cb Nàbιd-* *n.* Nabdema person 35.5

Nàbιdʋgɔ *n.* Nabdema country

Nàbιrᵋ *n.* Nabit language 35.5

Nà'dàmᵐᵃ *n.* clan name 35.5

Nà'dàṵŋɔ *n.* place of clan Nadamba

nà'-dàwānⁿᵋ/ *n.* pigeon KED (= *dàwānⁿᵋ/*)

nāe⁺/ *vv.* finish

nàm still, yet; auxiliary tense particle 22.3.1

nàmᵃ pluraliser 9.4

nā'mιsᵋ/ *vv.* persecute, suffer

nānᵋ *vv.* love, respect, appreciate

nà'-nēsιnnɛogɔ/ *n.* centipede WK

nānná⁺ *adv.* now <u>17.1</u>

nānná-nā⁺ᐟ *adv.* now <u>17.1</u>

nànzù'usᵋ *n.* pepper ?tones

nāŋᵃ *pl nāmɪsᵋ cb nàŋ- n.* scorpion

nārᵃᐟ *ger nārímᵐ iv.* be obliged to; impersonal: to be necessary; with following purpose clause <u>29.1</u>; negated: "be obliged not to"

nàrʊŋᵓ *pl nàrɪma⁺ cb nàrʊŋ- adj.* necessary

Nàsāalᵋ *n.* English/French language

Nàsāara⁺ *pl Nàsàa-nàmᵃ Nàsàar-nàmᵃ cb Nàsàa- Nàsàar- n.* European person ← Arabic نصارى *Nasˤa:ra:*; **Nàsàa-bīigᵃ** *n.* European child

nàyīigᵃ *pl nàyìig-nàmᵃ nàyìisᵋ n.* thief

nàyīigɪmᵐ *n.* thievery

nà'-zɔ̀mᵐᵋ *n.* locust

nɛ̄ preposition: with <u>21.1</u>; linking NPs and AdvPs: and <u>19.4</u>

nɛ̄⁺ᐟ focus particle <u>33.1.2</u>; aspectual marker <u>22.2</u>

nɛ̄⁺ᐟ meaningless particle after objects of *wʊ̄ʊ* and *wɛ̄n*ⁿᵃᐟ <u>21.1</u>

nɛ̄'⁺ᐟ this (pronoun) <u>15.2</u>

nɛ̀ɛlᵋ *vv.* reveal

nɛ̀ɛmᵐ *adv.* for free

nɛ̄ɛmᵐᐟ *vv.* grind with a millstone

nɛ̄ɛrᵋᐟ *n.* millstone

nɛ̀ɛsᵋ *vv.* reveal

nɛ̀ɛsɪmᵐ *n.* light

nɛ̄m-nɛ́ɛrᵋ *pl nɛ̄m-nɛ́yà⁺ n.* someone who grinds

nɛ̄nⁿᵃᐟ *ger nɛ̄nnímᵐ iv.* envy

nɛ̄'ŋá⁺ this (pronoun) <u>15.2</u>

nɛ̀ogᵓ nɛ̀ɛrᵋ *pl nɛ̀ɛdᵋ nɛ̀ya⁺ cb nɛ̀- adj.* empty

nɛ̄sɪnnɛ̄ogᵓᐟ *pl nɛ̄sɪnnɛ̀ɛdᵋᐟ cb nɛ̄sɪnnɛ́- n.* envious person WK; others: centipede

ǹ fá! Well done! <u>28.2.4</u>

nī⁺ᐟ locative enclitic <u>20.3</u> see *nᵋ*

nì⁺ *vv.* rain

nīdᵃᐟ *pl nīdɪbᵃᐟ cb nīn- n.* person; **nīn-sáàlᵃ** *pl nīn-sáàlìbᵃ cb nīn-sáàl- n.* human being; **nīnpūnān**ⁿᵃᐟ *pl nīnpūnānníbᵃ cb nīnpūnán- n.* disrespectful person; **nīn-sábɪlìsᵋ** *n.* Africans

nìe⁺ *vv.* appear, reveal

nīfᵓᐟ *pl nīní⁺ cb nīn- nīf- n.* eye; **nīf-gbáṵŋᵓ** *n.* eyelid; **nīf-sɔ́bᵃ** *n.* miser; **nīf-ňyáṵkᵓ** *adj.* one-eyed <u>16.2.4</u> <u>19.8.1.4</u>; **nīn-dáa⁼** *pl nīn-dáàsᵋ cb nīn-dá- n.* face; **nīn-gɔ́tìŋᵃ** *n.* mirror *pl* **nīn-gɔ́tìsᵋ** *n.* spectacles, glasses; **nīn-kúgʊdìgᵃ** *pl nīn-kúgʊdìsᵋ n.* eyebrow; **nīn-tá'àmᵐ** *n.* tear(s); **nīn-múa⁺** *n.* concentration ("eye-redness")

níiŋᵃ *pl nīimísᵋ níisᵋ cb nīiŋ- n.* bird

***nīm*ⁿᵉ/ *nī'm*ⁿᵉ/** *pl nīmá⁺ cb nīm- n.* meat

***nin-báalìg*ᵃ** *n.* pity; ***nin-báàl-zɔ̄ɔr*ᵋ** *n.* pity; *Ò zɔ̀t·ō nīn-báalìg.* "He has pity on him."

***nīŋ*ᵃ** *pl nīis*ᵋ *cb nìŋ- nìn- n.* body (uncommon); ***nìn-tūllím*ᵐ** *n.* fever; ***nìn-tāa*⁼** *pl nìn-tāas*ᵋ *cb nìn-tà- n.* co-wife; husband's sister's wife (Ghanaian English: "rival"); ***nìn-gbīŋ*ᵓ/** *pl nìn-gbīná⁺ cb nìn-gbīŋ- n.* body (plural often used as singular); ***nìn-gɔ̀ɔr*ᵋ** *n.* neck

***nīn-púòd*ᵋ** *n. pl as sg* pus

***nīntāŋ*ᵃ/** *pl nīntāaňs*ᵋ/ *cb nīntáŋ- n.* heat of the day, early afternoon

***nìŋ*ᵋ** *vv.* do

ǹ lā that is ... 25

ǹnāas *q.* four, in counting 16.2.3

ǹníi *q.* eight, in counting 16.2.3

ǹnū *q.* five, in counting 16.2.3

n ňwá this is ... 25

n ňwá nā this here is ... 25

***nɔ̄*⁺** *vv.* tread

***nɔ̄b*ᵋ** *vv.* get fat

***nɔ̄bɪg*ᵋ/** *vv.* grow (e.g. child, plant)

***nɔ́bìr*ᵋ** *pl nɔ̄bá⁺ cb nɔ̄b- n.* leg, foot; ***nɔ̄b-bíl*ᵃ** *n.* toe; ***nɔ̄b-yíụŋ*ᵓ** *adj.* one-legged 16.2.4 19.8.1.4; ***nɔ̄b-íň'a*⁺** *n.* toenail; ***nɔ̄b-púmpàụŋ*ᵓ** *n.* foot

***nɔ̄k*ᵋ/** *vv.* pick up, take up

***nɔ̀ŋ*ᵋ** *agt nɔ̀ŋɪd*ᵃ (irregularly Pattern L) *vv.* love (family, spiritual); irr aspect 11.1.1

***nɔ̄ŋ*ᵓ/** *cb nɔ̄ŋ- n.* poverty; ***nɔ̄ŋ-dáàn*ᵃ** *n.* poor person

***nɔ̀ŋɪlím*ᵐ** *n.* love (noun)

***nɔ̄ɔr*ᵋ/** *pl nɔ̄yá⁺ cb nɔ̄- n.* mouth; command, message, opinion; ***nɔ̄-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 nɔ́-dí'ès*ᵃ** ("God's linguist") prophet NT/KB; ***nɔ̄-lɔ́ɔr*ᵋ** *n.* fasting ("mouth-tying", as throughout W Africa); ***nɔ̄-náàr*ᵋ** *n.* covenant; ***nɔ̄-pɔ́ɔr*ᵋ** *n.* oath; ***nɔ̄-gbáụŋ*ᵓ** *pl nɔ̄-gbánà⁺ n.* lip

***nɔ̄ɔr*ᵋ/** times 16.2.5

***nɔ̄ɔrím*ᵐ** times 16.2.5

ǹpɔ̀e̯ *q.* seven, in counting 16.2.3

ǹtáň' *q.* three, in counting 16.2.3

***nū*⁺** *vv.* drink

nūa*⁺/** *pl nɔ̄ɔs*ᵋ/ *cb nɔ̄- n.* hen; ***nɔ̄-dáùg*ᵓ** *n.* cock; ***nɔ̄-ňyá'àŋ*ᵃ** *n.* (specifically female) hen; ***Nɔ̄-ňyá'àŋ-nɛ́-ò-Bīis the Pleiades

***nūlɪg*ᵋ/** *vv.* make drink

***nūlɪs*ᵋ/** *vv.* make drink

nú'ùgɔ *pl nú'ùs*ᵋ *cb nū'- n.* hand, arm; ***nū'-bíl*ᵃ** *pl nū'-bíbìs*ᵋ *n.* finger; ***nū'-dáùgɔ***
  n. thumb; ***nū'-yíụŋɔ*** *adj.* one-armed 16.2.4 19.8.1.4; ***nū'-íň'a*⁺** *pl nū'-ɛ́ň'ɛ̀s*ᵋ
  cb nū'-ɛ́ň'- n. fingernail; ***nū'-wɛ́ň'ɛ̀d*ᵃ** *n.* mediator

***ňwà*⁺** this 19.3

***ňwā'*⁺** *vv.* smash, break up

***ňwāaŋ*ᵃ** *pl ňwāamıs*ᵋ *cb ňwàaŋ- n.* monkey

***ňwādıg*ᵃ/** *pl ňwādıs*ᵋ/ *cb ňwād- n.* moon, month; ***ňwād-bíl*ᵃ** *pl ňwād-bíbìs*ᵋ *n.* star;
  ***Ňwād-dár*ᵋ** *n.* Venus

***ňwà'e*⁺** *vv.* cut wood

ǹwāę *q.* nine, in counting 16.2.3

***ňwām*ᵐᵋ** ***ňwān*ⁿᵋ** *pl ňwāma*⁺ *ňwāna*⁺ *cb ňwàm- ňwàn- n.* calabash

***Ňwāmpūrıg*ᵃ/** *pl Ňwāmpūrıs*ᵋ/ *cb Ňwāmpúr- n.* Mamprussi person 35.5

***Ňwāmpūrıl*ᵋ/** *n.* Mampruli language 35.5

***Ňwāmpūrʊg*ɔ/** *n.* Mamprussi country

***ňwè'*⁺** *vv.* beat; *ňwè'* X *nú'ùg* "make an agreement with X"; *ňwè' ňyɔ̄'ɔg* "boast"

***ňwiig*ᵃ/** *pl ňwiis*ᵋ/ *cb ňwī- n.* rope; ***ňwī-tɛ́k*ᵃ** *pl ňwī-tɛ́kìdıb*ᵃ *cb ňwī-tɛ́k- n.* rope-puller;
  ***ňwī-tɛ́kìr*ᵋ** *pl ňwī-tɛ́kà*⁺ *n.* rope for pulling

***ňwiig*ᵋ/** *vv.* make a rope

***ňyā'al*ᵋ/** *vv.* leave behind

ňyāan next, afterwards; Post-Subject Particle 27.1.4

***ňyá'aŋ*ᵃ** *pl ňyá'as*ᵋ *ňyā'amís*ᵋ *cb ňyā'aŋ- adj.* female (animal)

***ňyá'aŋ*ᵃ** behind, postposition 20.6; East 35.3; ***ňyà'an-dɔ̀l*ˡᵃ** ***ňyà'an-dɔ̀l*ˡᵋ** *pl ňyà'an-*
  dɔ̀lla⁺ *ňyà'an-dɔ̀llıb*ᵃ *cb ňyà'an-dɔ̀l- n.* disciple NT; tones unexpected, Pattern L

***ňyā'ar*ᵋ** *pl ňyā'a*⁺ *cb ňyà'- n.* root

***ňyāe*ⁿᵋ/** *adv.* in the light, brightly, clearly 20.3

ňyālúŋɔ *pl ňyālımá*⁺ *cb ňyālʊŋ- adj.* wonderful

***ňyàn*ⁿᵋ** *n.* shame; *Ò dì ňyán.* "He's ashamed."

***ňyāŋ*ᵋ/** *vv.* overcome 26.3

***ňyàụk*ɔ** *pl ňyà'ad*ᵋ *adj.* only (eye) 16.2.4 19.8.1.4

***ňyɛ̄*⁺** *dipf ňyɛ̄t*ᵃ/ *imp ňyɛ̀m*ᵐᵃ *vv.* see, find; *ňyɛ̄ láafıya* "get well"

ňyɛ̄ɛ*, ***ňyɛ̄ɛ tí habitually, Particle-Verb 22.7.2

***ňyɛ̄'ɛr*ᵋ/** *pl ňyɛ̄dá*⁺ *cb ňyɛ̄'- n.* next-younger sibling

***ňyɛ̀ɛs*ᵃ** *iv.* be self-confident

***ňyɛ̀ɛsım*ᵐ** *n.* self-confidence

***ňyɛ̀ɛsíŋ*ᵃ** *pl ňyɛ̀ɛsís*ᵋ *cb ňyɛ̀ɛsíŋ- adj.* self-confident

***ňyɛ̀ɛsíŋā*⁺/** *adv.* self-confidently 20.4

ǹyí *q.* two, in counting 16.2.3

***ňyīn*ⁿᵋ/** *pl ňyīná*⁺ *cb ňyīn- n.* tooth

ňyīríɔ *pl ňyīrí*⁺ *n.* a kind of edible seed, egusi: *Colocynthis citrullus* (Haaf)

***ňyɔ̄ɔd*ᵋ** *n.* intestines

***ňyɔ̄'ɔg*ɔ/** *n.* chest

ňyɔ̄ɔrᵉ *pl* ňyɔ̄ya⁺ *cb* ňyɔ̀- *n.* nose; breath; **ňyɔ̀-vūr**ᵉ/ *pl* ňyɔ̀-vūyá⁺ *cb* ňyɔ̀-vūr- *n.* life;
    ňyɔ̀-vūr-páàlⁱᵉ *n.* new life NT
ňyɔ̄'ɔsᵉ/ *n.* smoke
ǹyúèb *q.* six, in counting 16.2.3
ňyūurᵉ/ *pl* ňyūyá⁺ *cb* ňyū- *n.* yam

O

ò [ʊ] he, she, his, her (Proclitic) 15.1
ᵒ LF [ʊ] him, her (Enclitic object) 15.1 8.2.1.1
ɔ́n he, she (subject of ǹ-Clause) 15.1
ɔ̄nᵉ he, she (Contrastive) 15.1
ɔ̀nᵉ this, that (animate sg Demonstrative) 15.2
ɔ̀ňbᵉ *ger* ɔ̄ňbɩr**ᵉ *vv.* chew
ɔ̀ŋā⁺/ this, that (animate sg Demonstrative) 15.2
ɔ̄ɔsᵉ/ *vv.* warm oneself; *Ò ɔ̀ɔsɩd nɛ̄ búgʊ́m lā.* "She's warming herself at the fire."

P

pà' earlier today, Tense Particle 22.3.1
pà'alᵉ *vv.* teach, inform; *agt* **pā'an**ⁿᵃ *pl* pā'annɩb**ᵃ *cb* pà'an- *n.* teacher
pà'alᵉ *vv.* put on top of something
pāalígᵃ **páal**ⁱᵉ *pl* pāalís**ᵉ pāalá⁺ *cb* pāal- *adj.* new
pāalímᵐ *adv.* recently 20.4
pāalʊ́⁺ *adv.* openly 20.4
pàaňlʊ́ŋᵓ *pl* pàaňlímìs**ᵉ *n.* spider's web
pàamᵐ *vv.* receive a gift
pàasᵉ *vv.* add up to, amount to
pāe⁺/ *vv.* reach
pàkᵉ *vv.* surprise
pàkᵉ *vv.* take off from the top
pāmm SF **pāmnɛ́** LF *q.* much, a lot 16.1 6.4
pàň'alɩmᵐ *vv.* dedicate
pàňsɩgᵉ *vv.* lack
pàŋᵃ *pl* pàaňs**ᵉ *cb* pàŋ- *n.* power
pà' tì perhaps; Post-Subject Particle 27.1.4
pèbɩsᵉ *vv.* blow (of wind)
pèbɩsɩmᵐ **pèbɩsʊg**ᵓ *n.* wind
pɛ̀'ɛlᵉ *vv.* fill; *res adj* **pɛ̀'ɛlʊ́ŋ**ᵓ full
pɛ̀'ɛsᵉ *vv.* add up to, amount to
pèlɩgᵉ *vv.* whiten, go white

pὲlɪsᵋ *vv.* sharpen

pὲnⁿᵋ *n.* vagina

pɛ̄'ŋᵋ/ *vv.* borrow; knock over WK

pὲogᵓ *pl* *pὲɛdᵋ* *cb* *pὲ-* *n.* basket

pɛ̄'ogᵓ/ *pl* *pɛ̄'ɛsᵋ/* *cb* *pɛ̄'-* *n.* sheep; ***pɛ̄'-sá'a⁼*** *n.* ewe lamb

pɛ̄sɪgᵋ/ *vv.* sacrifice

pi̯ā⁺ *vv.* dig up

pi̯āň'ᵃ *vv.* speak, praise; *ger* ***pi̯àu̯ňkᵓ*** *n.* word *pl* ***pi̯àň'adᵋ*** language *cb* *pi̯àň'-*;
 pi̯àň'-zùna⁺ *n.* foreign language

pìbɪgᵋ *vv.* uncover

pìbɪlᵋ *vv.* cover up

pībɪnⁿᵋ *pl* *pībɪna⁺* *cb* *pìbɪn-* *n.* covering 12.1.2

pìdᵋ *vv.* put on (hat, shoes, rings)

pīdᵋ *vv.* get bloated

pìdɪgᵋ *vv.* take off (hat, shoes, rings)

pīe⁺/ *vv.* wash (part of one's own body)

pìəbᵋ *vv.* blow (e.g. flute)

pìəlɪgᵃ ***pìəl|ᵋ*** *pl* *pìəla⁺* *pìəlɪsᵋ* *cb* *pìəl-* *adj.* white; ***pὲɛlʋgᵓ*** in *zū-pέɛlʋ̀gᵓ* "bald; grey
 haired" 19.8.1.4

pìəlɪmᵐ *n.* whiteness

pìəsᵋ *vv.* fool someone

pīəsᵋ/ *vv.* wash

pīiga⁺ *q.* ten 16.2.2

pīimᵐ/ *pl* *pīmá⁺* *cb* *pīm-* *n.* arrow

pɩ́ɩňfᵓ *pl* *pīɩní⁺* *cb* *pīɩn-* *n.* genet

pīinɩ⁺ *cb* *pìin-* *pl as sg (?)* *n.* gift

pìlᵋ *vv.* put (hat, shoes, rings) on someone

pìlɪgᵋ *vv.* take (hat, shoes, rings) off someone

pīň'ilᵋ/ *vv.* begin

pīpīrɪgᵃ/ *pl* *pīpīrɪsᵋ/* *cb* *pīpír-* *n.* desert

pīsí⁺ *q.* twenty 16.2.2

pītʋ́⁺ *pl* *pītíbᵃ* *cb* *pīt-* *n.* younger sibling of the same sex 35.1

pɔ̄⁺ *vv.* swear

pɔ̀ňdᵋ *vv.* crouch down

pɔ̄ň'ɔlᵋ/ *vv.* cause to rot

pɔ̀ň'ɔlɪmᵐ *vv.* cripple, get crippled

pɔ̀ň'ɔrᵋ *pl* *pɔ̀ňda⁺* *cb* *pɔ̀ň'-* *n.* cripple

pɔ̀ňrᵃ *ger* *pɔ̄ňrʋbᵓ* *iv.* be near

pɔ̀ɔdᵃ *iv.* be few, small

pɔ̀ɔdɪgᵃ ***pɔ̀ɔdɪrᵋ*** *pl* *pɔ̀ɔda⁺* *cb* *pɔ̀ɔd-* *adj.* few, small

pɔ̀ɔdɪmᵐ *n.* fewness

pɔ̄ɔg^{ɔ/} *pl pɔ̄ɔd*^{ɛ/} *pɔ̄t*^{ɛ/} *cb pɔ̄- n.* field, farm

pɔ̀'ɔg^ɛ *vv.* diminish, denigrate

pɔ̄ɔr^{ɛ/} *n.* "slogan" of a clan, part of its traditional genealogy WK; ← *pɔ̄*⁺ "swear", cf
     Farefare *pɔtɛ, pɔrɛ* "*nom de famille, nom par lequel on jure*" and also "*serment*"

pū not: negates Indicative Mood 22.5

pū⁺ *vv.* divide

pṵ'ā^a *pl pū'ab*^a *cb pṵ'à- n.* woman, wife; *Ò dì pṵ'ā.* "He's married a wife"; **pṵ'à-dīɩr**^ɛ
     n. marriage; **pṵ'à-ēlíŋ**^a *n.* fiancée; **pṵ'à-gīnníg**^a, **pṵ'à-gɔ̄ɔňdɩr**^ɛ *n.* prostitute;
     pṵ'à-ňyá'aŋ^a *pl pṵ'à-ňyá'as*^ɛ *n.* old woman; **pṵ'à-pāal**^{a/} *n.* bride; **pṵ'à-sādɩr**^{ɛ/}
     n. young woman; **pṵ'à-sāň'am**^{na} *n.* adulterer; **pṵ'à-yùa**⁺ *n.* daughter

pṵāk^a *pl pū'as*^ɛ *adj.* female (human only)

pʊ̀'alɩm^m *vv.* cook

pʊ̀'alɩm^m *vv.* harm, damage; *res adj* **pʊ̀'alʊ́ŋ**^ɔ damaged

pʊ̀'alɩm^m *n.* femininity

pʊ̀'alím^m *pl pʊ̀'alímìs*^ɛ *cb pʊ̀'alím- n.* female sex organs

pʊ̀d^ɛ *vv.* name

pūdɩg^{ɛ/} *vv.* divide, share out

pʊ̀gʊdɩb^a *pl pʊ̀gʊd-nàm*^a *cb pʊ̀gʊd- n.* father's sister 35.1

pʊ̀kɔ̀ɔňr^ɛ *pl pʊ̀kɔ̀ňya*⁺ *cb pʊ̀kɔ̀ň- n.* widow

pūkpāad^{a/} *pl pūkpāadíb*^a *cb pūkpá- (irreg:* contrast *kpāad*^{a/}) *n.* farmer

pùlɩma⁺ *n.* a species of grass, *Imperata cylindrica* (Haaf)

pʊ̀mpɔ̄ɔg^ɔ *n.* housefly

pʊ̀n previously, already Particle-Verb 22.7.2

pūň'e^{+/} *vv.* rot

pūsɩg^{a/} *pl pūsɩs*^{ɛ/} *cb pūs- n.* tamarind 35.6

pūsɩr^{ɛ/} *pl pūsá*⁺ *n.* tamarind fruit 35.6

pū-súk^a *pl pū-súgʊ̀s*^ɛ *n.* half 16.2.2

pūt^{ɛ/} *n. pl as sg* contents of stomach WK

pūum^{m/} *cb pūum- n.* flowers

pūʊg^a *cb pʊ̀- n.* inside, belly; *Pṵ'ā lā mɔ́r pūʊg* "The woman is pregnant";
     pūʊgʊ-n^{ɛ/} inside, postposition 20.6; **pʊ̀-pìəlɩm**^m *n.* holiness; **pʊ̀-tèň'ɛr**^ɛ
     pl pʊ̀-tèňda⁺ *cb pʊ̀-tèň'- n.* mind

pūʊr^{ɛ/} *n.* stomach

pʊ̀'ʊs^ɛ *vv.* greet, worship, thank; *ger* **pʊ̀'ʊsɩm**^m *n.* worship; *ger* **pʊ̀'ʊsʊg**^ɔ *n.* thanks;
     pʊ̀'ʊsʊg dɔ́ɔ̀g^ɔ NT "temple"

S

sà yesterday, Tense Particle 22.3.1

sà hence, ago, VP-final particle 23.7

sā'⁺ *vv.* be in distress

sàa tomorrow, Tense Particle 22.3.1

sāa= *pl sāas*ᵋ *cb sà-* *n.* rain; sky; as subject of *i̠āňk*ᵋ/ "leap": "lightning"; **sāa díndɛog**ᵓ/ "rainbow" ("rain chameleon"); **sāa zúg**ᵓ *pl sāa zút*ᵋ *n.* sky

sā'abᵓ *cb sà'-* *n.* millet porridge, "TZ", the staple food of the Kusaasi

sāafɩ⁺ (?tones) *n.* lock, key ← Twi *safẽ*

sàalᵃ *pl sàalɩb*ᵃ *cb sàal-* *n.* human (perhaps ← "hairless" cf *būn-kɔ́ňbùg*ᵓ); **sàal-bīig**ᵃ *pl sàal-bīis*ᵋ *n.* human being

sàalíŋā⁺/ *adv.* smoothly 20.4

sàamᵐᵃ *pl sàam-nàm*ᵃ *cb sàam-* *n.* father; **sàam-kpɛ̄ɛňm**ᵐ *n.* father's elder brother; **sàam-pīt**ᵃ/ *pl sàam-pītíb*ᵃ *cb sàam-pīt-* *n.* father's younger brother

sāamᵐ/ *vv.* mash, crumble

sā'anᵋ/ in the presence of, in the opinion of; postposition 20.6

sāanᵃ/ *pl sáam*ᵐᵃ *cb sāan-* *n.* guest, stranger

sáannìmᵐ *n.* strangerhood

sàbɛogᵓ *pl sàbɛ̄ɛd*ᵋ *cb sàbè-* *n.* wind, storm

sābɩlígᵃ **sābíl**ᴵᵋ *pl sābɩlís*ᵋ *sābɩlá*⁺ *cb sābɩl-* *adj.* black

sàbùa⁺ *pl sàbùəs*ᵋ *cb sàbu̠à-* *n.* lover, girlfriend

Sà'dàbɔɔgᵓ *n.* place of the clan Sarabose 35.5

Sà'dàbùa⁺ *pl Sà'dàbùəs*ᵋ *Sà'dàbùəb*ᵃ *n.* clan name: 35.5

sādɩgím since, because 27.1.4 31.1.1

sāe̠ň⁺ or **sāe̠ň**ᵃ *pl sāaňb*ᵃ *cb sàň-* *n.* blacksmith

sākárùgᵓ *pl sākárìd*ᵋ *cb sākár-* *n.* fox

sàlɩbɩrᵋ *n.* bridle

sālɩma⁺ *cb sàlɩm-* *n. pl as sg* gold; **sàlɩm-kùəs**ᵃ *n.* gold merchant

sāmⁿᵋ/ *pl sāmá*⁺ *cb sām-* *n.* debt; **sām-kpá'às**ᵃ *n.* household servant

sāmánⁿᵋ *pl sāmánà*⁺ *cb sāmán-* *n.* open space in front of a *zàk*ᵃ compound; **Sāmán-pīə́r**ᵋ *n.* traditional New Year ceremony

sàň'amᵐ *vv.* spoil, get spoiled, get broken; destroy

sāngúnnìrᵋ *pl sāngúnnà*⁺ *cb sāngún-* *n.* millipede

sāŋá⁺ *pl sānsá*⁺ *cb sān-* *n.* time 35.9 9.3.2; **sān-kán**ᵋ *adv.* then; when? **sān-sí'ən lā** *adv.* at one time, once ... 27.1.3

sàŋ-gbàu̠ŋᵓ *n.* sky, heaven; cf *sāa*=

sāpálᴵᵋ *n.* Harmattan part of the dry season *úun*ⁿᵋ

sārɩgá⁺ *n.* prison ← Hausa *sarkàa* "chain"

sàríyà⁺ or **sèríyà**⁺ *n.* law ← Arabic شريعة *ʃari:ʕa(tun)*; **sàríyà-kāt**ᵃ *n.* judge NT

sāʋgᵓ *pl sāad*ᵋ/ *cb sā-* *n.* broom, brush

sàʋkᵓ *pl sà'ad*ᵋ *n.* mote of dust

sāʋ́ŋᵓ *n.* hospitality

sὲ⁺ *dipf sὲɛd*ᵃ *vv.* transplant

sɛ̄oň̌gᵓ *n.* rainy season

sì⁺ *vv.* skin, flay

sɪ'a⁺ some, any (sg) 15.3

sɪa⁺ *pl sīəs*ᵋ *cb sḭà- n.* waist; **sḭà-lɔɔdíŋ**ᵃ *n.* belt ("waist-tying-thing"); **sḭà-nīɪ**ᴾ⁷ *n.* kidney

sḭā'alᵋ⁷ *vv.* get to be enough

sḭà'arᵋ *pl sḭà'a⁺ cb sḭà'- n.* forest (WK), wilderness

sḭàkᵋ *vv.* agree (cf Mooré *sàke* id)

sḭākᵋ⁷ *vv.* suffice (cf Mooré *sékè* id)

sībɪgᵃ⁷ *pl sībí⁺ cb sīb- n.* a kind of termite

sìd truly, Post-Subject Particle 27.1.4

sìda⁺ *pl sìd- n. pl as sg* truth

sìdᵃ *pl sīdɪb*ᵃ *cb sìd- n.* husband 35.1; **sìd-bīl**ᵃ *n.* husband's younger brother; **sìd-kpɛ̄ɛ̌m**ᵐ *n.* husband's elder brother; **sìd-pṵāk**ᵃ *n.* husband's sister

sīe⁺⁷ *vv.* descend, be humbled

sīəba⁺ some(ones), any (ones) 15.3

sɪ'əlᵃ something, anything 15.3

sɪ'əmᵐ somehow, anyhow 15.3 17.1

sīgᵋ *vv.* descend

sīgɪrᵋ⁷ *n.* guardian spirit, typically but not invariably the *wīn*ⁿᵋ⁷ of an ancestor 35.2

sīgɪsᵋ⁷ *vv.* lower

sīgɪsírᵋ *pl sīgɪsá⁺ n.* stopping-place

sīɪgᵃ *pl sīɪs*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 *kìkīrɪs*ᵋ⁷ (qv); **Sì-sòŋ**ᴐ *n.* Holy Spirit NT

sìilɪmᵐ *vv.* cite proverbs

sìilíŋᵃ **sìilúŋ**ᴐ *pl sìilís*ᵋ *sìilímìs*ᵋ *sìilímà⁺ cb sìilíŋ- n.* proverb

sīiňdᵋ⁷ *n.* honey

sīiňɪᴾ⁷ **sīiňg**ᵃ⁷ *pl sīiňs*ᵋ⁷ *cb sīň- n.* bee

sɪ'ɪsᵋ⁷ *vv.* touch

sīlɪnsíùgᴐ *pl sīlɪnsîìs*ᵋ *n.* ghost

sīlɪnsíùňgᴐ *pl sīlɪnsîîňd*ᵋ *n.* spider

sìlʊgᴐ *pl sìn*ⁿᵋ *sìlɪs*ᵋ *cb sìl- n.* hawk

sìmᵐ *vv.* sink in a liquid

Sìmīigᵃ *pl Sìmīis*ᵋ *cb Sìmì- n.* Fulɓe person, Fulani 35.5

Sìmīilᵋ *n.* Fulfulde language

Sìmīugᴐ *n.* place of the Fulɓe

sīnⁿᵃ⁷ *ger sīnním*ᵐ *iv.* be silent

sīnsáaň⁼ *n.* a kind of tiny ant

sīŋᵃ *pl sīɪňs*ᵋ *cb sìŋ- n.* a kind of very big pot

sɪ'ŋᵋ⁷ *vv.* begin

sīsíbìgᵃ *pl sīsíbìs*ᵋ *cb sīsíb- n.* neem tree 35.6 *Azadirachta indica* (Haaf)

sīsíbìrᵋ *pl sīsíbà⁺ n.* fruit of neem tree 35.6

sìsì'əm^m *n.* wind, storm

sìsʊ̀ʊgū-n^{ɛ/} between, postposition <u>20.6</u> KB *sʊʊgʊn*

sī'úŋ^ɔ *pl sī'imís*^ɛ *cb sī'uŋ- n.* a kind of large dish

sɔ̄'⁺ some(one), any(one), animate sg <u>15.3</u>

sɔ̄b^a dummy head pronoun, animate sg <u>19.9.3</u>

sɔ̄b^ɛ *vv.* go/make dark; usually "write"; **sɔ̄bɪr**^{ɛ/} *n.* piece of writing <u>12.1.2</u>

sɔ̄bɪg^{ɛ/} *vv.* blacken

sɔ̄e̯ň⁺ or **sɔ̄e̯ň**^a *pl sɔ̄ɔňb*^a *cb sɔ̀ň- n.* witch

sɔ́gi̯à^a *n.* soldier ← English

sɔ̄lʊŋ^{ɔ/} *pl sɔ̄lɪmá*⁺ *n.* story

sɔ̄ň⁺ *vv.* rub

sɔ̄ň'e^{ya/} *iv.* be better than; *agt sɔ̄ň'ɔd*^{a/} *pl sɔ̄ň'ɔb*^{a/} *cb sɔ̄ň'ɔd-*

sɔ̄nnɪr^ɛ *pl sɔ̄nna*⁺ *cb sɔ̀n- n.* courtyard dividing wall

sɔ̄ňs^ɛ *ger sɔ́ňsìg*^a *vv.* converse, talk with

sɔ̄ɔňg^ɔ *n.* witchcraft

sɔ̄ɔňr^ɛ *pl sɔ̄ňya*⁺ *cb sɔ̀ň- n.* liver

sɔ̀s^ɛ *ger sɔ̄sɪg*^a *vv.* ask; *agt* **sɔ̀s**^a *n.* beggar

sʊ̀⁺ *vv.* take a bath

sʊ̯'ā^a *vv.* do secretly, hide

sʊ̯āk^{a/} *n.* hiding place

sūeň^{+/} *vv.* anoint

sū'e^{ya/} *iv.* own; *ger* **sū'ʊlím**^m *n.* property

sūgʊr^{ɛ/} *vv.* show forbearance, be patient with; **sūgʊrʊ́**⁺ *n.* forbearance

sʊ̀m^m *n.* goodness; well <u>20.4</u> <u>24.2</u>

sʊ̀m^{ma} *iv.* be good

sùmbūgʊsím^m *n.* peace

sūmmɪr^ɛ *pl sūmma*⁺ *cb sùm- n.* groundnuts; **sūm-dúgʊdà**⁺ *n.* cooked groundnuts

sùn^{nɛ} *ger sùnnɪr*^ɛ or *sùnnʊg*^ɔ *vv.* bow one's head <u>6.2.1</u>; *agt* **sūn**^{na} *n.* ("someone who goes about with bowed head") deep thinker, close observer WK

sūň'e^{+/} *vv.* become better than

sūňf^{ɔ/} **sūuňr**^{ɛ/} *pl sūňyá*⁺ *cb sūň- n.* heart; **sūň-kpí'òŋ**^ɔ *n.* boldness <u>19.7.1</u>; **sūň-má'asìm**^m *n.* joy (*M̀ sūňf má'e yā.* "My heart has cooled"= "I'm joyful"); **sūň-málɪsìm**^m *cb sūň-málìs- n.* joy; **sūň-pɛ́ɛn**^{nɛ} *n.* anger (*M̀ sūňf pɛ́lìg nɛ̄.* "My heart is whitened"= "I'm angry"); **sūň-sáň'òŋ**^ɔ *n.* sorrow (*M̀ sūňf sáň'àm nɛ̄.* "My heart is spoilt" = "I'm sad")

sòŋ^ɛ *vv.* help

sòŋ^ɔ **sùm**^{mɛ} *pl sùma*⁺ *cb sòŋ- adj.* good

sòŋā^{+/} *adv.* well <u>20.4</u> <u>24.2</u>

sú'ɵŋ^a *pl sū'ɵmís*^ɛ *cb sū'ɵŋ- n.* rabbit

sūɵr^{ɛ/} *pl sʊ̯ēyá*⁺ *cb sʊ̯ā- n.* road; "permission" in *sūɵr bɛ́, mɔ̄r sūɵr* <u>29.1</u>

sù'ɵs^a *n.* yesterday <u>35.9</u>

sù'ɵs^ɛ *vv.* trick

sùr^a *iv.* have one's head bowed

sòsɔm^{mɛ} *n.* grasshopper

Sūtáanà⁺ *n.* Satan

sūʋg^{ɛ/} *vv.* wither (leaves) WK

sʋ̀'ʋg^a **sʋ̀'ʋg^ɔ** *pl* *sʋ̀'ʋs^ɛ* *cb* *sʋ̀'-* *n.* knife

T

tāa⁼ **tāas^ɛ** fellow- as second part of compound <u>13.1.1.4</u>

tāaba⁺ **tāab** each other <u>15.5</u>

tā'adɩr^ɛ *pl* *tā'ada⁺* *cb* *tà'ad-* *n.* sandal

tàal^{lɛ} *pl* *tàala⁺* *cb* *tàal-* *n.* fault, sin

tá'am^{mɛ} *pl* *tā'amá⁺* *n.* shea tree fruit <u>35.6</u>

tá'aŋ^a *pl* *tā'amís^ɛ* *cb* *tā'aŋ-* *n.* shea butter tree <u>35.6</u> *Butyrospermum Parkii* (Haaf)

tā'as^{ɛ/} *vv.* help someone to walk; in greetings <u>34</u>

tàb^ɛ *vv.* get stuck to

tàbɩ^{ya} *iv.* be stuck to

tàbɩg^ɛ *vv.* get unstuck from

tàbɩl^ɛ *vv.* stick to (transitive)

tàdɩg^ɛ *n.* become weak

tādɩm^{m/} *pl* *tàdɩm-nàm^a* *cb* *tàdɩm-* *n.* weak person

tàdɩmís^ɛ *n.* weakness

Tàlɩn^{nɛ} *n.* Talni language

Tàlɩŋ^a *pl* *Tàlɩs^ɛ* *cb* *Tàlɩŋ-* *n.* Tallensi person <u>35.5</u>

tàm^m *dipf* *tàmmɩd^a* *vv.* forget

tàmpūa⁺ *pl* *tàmpɔɔs^ɛ* *cb* *tàmpɔ̀-* *n.* housefly <u>9.3.2</u>

tàmpūʋr^ɛ *cb* *tàmpʋ̀-* *n.* ashpit, rubbish tip

tān^{nɛ} *pl* *tāna⁺* *cb* *tàn-* *n.* earth; **tàn-mɛ̄ɛd^a** *n.* builder

tān̆p^ɔ *n.* war; **tàn̆p-sɔ̄b^a** *n.* warrior

tàn̆s^ɛ *ger* *tàn̆sʋg^ɔ* *vv.* shout; *Wìnnɩg tán̆sìd nɛ̄.* "The sun is shining."

tār^{a/} *ger* *tārím^m* *iv.* have; more typical of *Toende* Kusaal; NT always has the Agolle word *mɔ̄r^{a/}* instead

tàsɩntàl^{lɛ} *n.* palm of hand

tàtàl^{lɛ} *n.* palm of hand

tāu̯n̆^{+/} *pl* *tān̆p^{a/}* *cb* *tāu̯n̆-* *tān̆p-* *n.* sibling of opposite sex <u>35.1</u>

tɛ̀b^ɛ *ger* *tɛ̄bɩg^a* *vv.* carry in both hands

tɛ̄bɩg^{ɛ/} *vv.* get heavy

tɛ̄bɩs^{a/} *iv.* be heavy

tɛ̄bɩsíg^a **tɛ̄bɩsír^ɛ** *pl* *tɛ̄bɩsá⁺* *cb* *tɛ̄bɩs-* *adj.* heavy

tɛ̄bɩsím^m *n.* heaviness

***téɛbʊ̀l*ᴱ** *pl téɛbʊ̀l-nàm*ᵃ *n.* table ← English

***tɛ̄ɛg*ᴱ/** *vv.* drag (ILK)

***tɛ̀'ɛg*ᵃ** *pl tɛ̀'ɛs*ᴱ *cb tɛ̀-* *n.* baobab 35.6 *Adansonia digitata* (Haaf)

***tɛ̄k*ᴱ/** *vv.* pull

***tɛ̀ňb*ᴱ** *ger tɛ̀ňbʊg*� *vv.* tremble, struggle

***tɛ̀ň'ɛs*ᴱ** *vv.* remind

***tɛ̄ň'ɛs*ᴱ/** *vv.* think; *ger tɛ̄ň'ɛsá*⁺ *n.* thought

***tɛ̀ňr*ᵃ** *ger tɛ̄ňrɪb*ᵓ or *tɛ̌ňrím*ᵐ (tone sic; ??misheard for *tɛ̀ňrím*ᵐ) *iv.* remember

***tɛ̀ŋ*ᵃ** *pl tɛ̄ɛňs*ᴱ *cb tɛ̀ŋ-* *n.* land; ***tɛ̀ŋ-bīig*ᵃ** *n.* native; ***tɛ̀ŋ-dāan*ᵃ** *n.* traditional earth-priest; ***tɛ̀ŋ-dū'adɪg*ᵃ** *n.* native land; ***tɛ̀ŋ-gbàʊŋ*ᵓ** *n.* earth, land; ***tɛ̀ŋ-pūʊgʊ-n*ᴱ/** *pl tɛ̀ŋ-pūʊdɪ-n*ᴱ/ *n.* village 20.3; ***tɛ̀ŋ-zʊ̀ŋ*ᵓ** *pl tɛ̀ŋ-zʊ̀ʊňs*ᴱ *n.* foreign country

***tɛ̄ŋɪ-n*ᴱ/** downward; "under" as postposition 20.6

***tɛ̄ŋír*ᴱ** downward; "under" as postposition 20.6

***tɛ̀og*ᵓ** *pl tɛ̀ɛd*ᴱ *n.* nest

***tɛ̀'og*ᵓ** *pl tɛ̀'ɛd*ᴱ *n.* baobab fruit 35.6

tì we, our (Proclitic) 15.1

***tɪ*⁺** us (Enclitic object) 15.1

tì Particle-Verb conveying completion 22.7.2

***tɪ̯à'al*ᴱ** *vv.* come next

***tɪ̯àk*ᴱ** *vv.* change

***tī'əb*ᵃ** *n.* healer

***tì'əb*ᴱ** *vv.* heal; ultimately ← Arabic طب *tˤibb(un)* "medicinal art"

***tìeň*⁺** *vv.* inform WK ("remember " KED)

***tìeň*⁺** *vv.* stretch out

***tìəŋ*ᵃ** *pl tìəmɪs*ᴱ *cb tìəŋ-* *n.* beard; ***tìəŋ-gūʊr*ᴱ** *n.* chin

***tìg*ᴱ** *vv.* become sated; *ger tīgɪr*ᴱ *n.* glut

***tī'i*ʸᵃ/** *ger tī'ib*ᵓ/ *iv.* be leaning (object)

***tìɪg*ᵃ** *pl tìɪs*ᴱ *cb tì-* *n.* tree

***tī'il*ᴱ/** *vv.* lean something

***tìɪm*ᵐ** *cb tì-* *n.* medicine; ***tì-kūʊdím*ᵐ** *n.* poison (killing-medicine); ***tì-sābɪlím*ᵐ** *n.* "black medicine" (a particular traditional remedy) ***tì-vūnním*ᵐ** *n.* oral medication

***tì'in*ᴱ** *vv.* begin to lean

***tīlás*ᴱ** *n.* necessity ← Hausa *tiilàs* 29.1

***tìlɪg*ᴱ** *vv.* survive, be saved

tīnámì we (Subject of *ǹ*-Clause) 15.1

***tīnám*ᵃ** we, us (Contrastive) 15.1

***tīntɔ̌ňríg*ᵃ** *pl tīntɔ̌ňrís*ᴱ *cb tīntɔ́ňr-* *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

***tīráànnɪm*ᵐ** *n.* neighbourliness

tírɩgà ideophone for *gīŋ*[a] short 19.8.1.3

***tìs*ᵉ** *dipf* *tìsɩd*[a] *tìt*[a] *agt* *tìs*[a] *vv.* give; also *tì* before enclitic pronouns: *tì f* "gave you"

***tītā'al*ˡᵉ** *n.* proud person

***tītā'alɩm*ᵐ** *n.* pride

***tītā'am*ᵐ** *n.* multitude

***tītā'ʋg*ᵓ** ***tītā'ar*ᵉ** *pl* *tītāda*⁺ *cb* *tītá'-* *adj.* big, great

tɔ̀ OK 28.2.4 (= Hausa *tôo*)

***tɔ̀d*ᵉ** *vv.* give to the poor, share

***tɔ̃ẹ*ᵃ/** *iv.* be bitter, difficult

***tɔ́klàe*⁺** *n.* torch ← English "torchlight"

tɔ́lɩlìlɩ ideophone for *wɔ̄k*ᵓ/ tall 19.8.1.3

tɔ́lìb onomatopoeic word 19.8.1.3

***tɔ̀ñ*⁺** *vv.* shoot

***tɔ̀ñ'ɔs*ᵉ** *vv.* hunt

***tɔ̄ɔg*ᵓ** *pl* *tɔ̄ɔd*ᵉ *cb* *tɔ̀-* *adj.* bitter, difficult

***tɔ̄ɔm*ᵐ/** *vv.* depart, disappear

***tɔ̀'ɔtɔ̄*⁺/** *adv.* straight away 20.4

***tṵà*⁺** *vv.* grind in a mortar; ***tṵà-bīl*ᵃ** *n.* pestle

***tṵ'à*ᵃ** *vv.* speak, plead in court

***tʋ̀'al*ᵉ** *vv.* condemn in court

***tʋ̀'as*ᵉ** *vv.* talk

***tʋ̀bʋr*ᵉ** *pl* *tʋ̀ba*⁺ *cb* *tʋ̀b-* *n.* ear; ***tʋ̀b-kpìr*ᵉ** *n.* half of jaw; ***tʋ̀b-yīṵŋ*ᵓ/** *adj.* one-eared
       16.2.4 19.8.1.4

***tūl*ˡᵃ/** *iv.* be hot

***tùlɩg*ᵉ** *vv.* invert

***tūlɩg*ᵉ/** *vv.* heat up

***tòm*ᵐ** *vv.* work; *ger* *tōʋm*ᵐᵉ *n.* deed *pl* ***tōʋma*⁺** *n.* deeds; work *cb* *tòʋm-*; ***tòʋm-bē̄'ɛd*ᵉ**
       n. bad deeds; ***tòʋm-bē̄'ɛd-dím*ᵃ** *n.* sinners NT; *agt* ***tòm-tūm*ⁿᵃ** *n.* worker

***tòm*ᵐ** *ger* *tìtōmɩs*ᵉ *vv.* send; for the polysemy with "work", compare Hausa *àikaa*
       "send", *aikàtaa* "work"

tūñ'e *iv.* be able 26.3

***tūedɩr*ᵉ** *pl* *tūeda*⁺ *cb* *tùed-* *n.* mortar

***tùen*ⁿᵉ** in front; as postposition 20.6; West (KB *yà tùena*) 35.3; ***tùen-gāt*ᵃ** *n.* leader

***Tùen*ⁿᵉ** *n.* Toende, Western part of Kusaasiland

***Tùennɩr*ᵉ** *n.* Toende dialect of Kusaal

***tūsɩr*ᵉ/** *n.* thousand 16.2.2

***tòtūl*ˡᵉ** *n.* upside-down thing *cf* *tùlɩg*ᵉ

***tōʋlígā*⁺/** *adv.* hotly 20.4

***tōʋlúg*ᵓ** *pl* *tōʋlá*⁺ *cb* *tōʋl-* *adj.* hot

U

ùdʋgɔ *pl ùtᵋ cb ùd-* *n.* (piece of) chaff
ūgʋsᵋ/ *vv.* bring up a child
òkᵋ *vv.* vomit
ūkᵋ *vv.* bloat
òmᵐ *vv.* close eyes
úunⁿᵋ *n.* dry season 35.9

V

vābɪʸᵃ/ *ger vāpɔ/* KT *vābɪrᵋ/* WK *iv.* be lying prone
vābɪlᵋ/ *vv.* make lie prone
vàbɪnᵋ *vv.* lie prone
vāʋňgɔ/ *pl vāaňdᵋ/ cb vāň-* *n.* leaf
vɛ̄'⁺ *vv.* lead
vɛ̄'ɛgᵋ/ *vv.* drag
vènⁿᵃ *iv.* be beautiful
vèňlˡᵃ *iv.* be beautiful
vèňllɪgᵃ *pl vèňllɪsᵋ vèňlla⁺ cb vèňl-* *adj.* beautiful
vèňllíŋᵃ *pl vèňllísᵋ cb vèňllíŋ-* *adj.* beautiful
vènnɪgᵃ vènnɪrᵋ *pl vènnɪsᵋ vènna⁺ cb vèn-* *adj.* beautiful
vènnɪmᵐ *n.* beauty
vī'⁺ *vv.* uproot
vīkᵋ/ *vv.* uproot
vīugɔ/ *pl vīidᵋ/ cb vī-* *n.* owl
vū⁺ *ger vūugɔ/* *vv.* make a noise; **vūudᵋ/** *n.* noise
vūe̯ᵃ/ *iv.* be alive
vūlᵋ *vv.* swallow
vòlɪnvùuňlˡᵋ *n.* mason wasp
vūmᵐ/ *cb vūm-* *n.* life; **vūm-páàlˡᵋ** *n.* new life
vúeŋᵃ *pl vūemísᵋ* *n.* red kapok 35.6 *Bombax buonopozense* (Haaf)
vúerᵋ *pl vūáa= cb vūe-* *n.* fruit of red kapok 35.6
vūrᵋ/ *pl vūyá⁺ cb vūr-* *adj.* alive
vū'ʋgᵋ/ *vv.* come, make alive
vū'ʋsᵋ/ *vv.* breathe, rest
vū'ʋsímᵐ *n.* resting

W

wā'⁺ *vv.* dance

wāad^(ε/) *n.* cold weather

wáaf^ɔ *pl wīigí⁺ cb wā'- n.* snake

wāal^(ε/) *vv.* sow, scatter seed

wā'alím^m *n.* length

wā'am^(ma/) *iv.* be long, tall

wàbɩg^a wàbɩr^ε *pl wàbɩs^ε wàba⁺ cb wàb- n.* lame person

wàbɩlɩm^m *vv.* make, go lame

wābʊg^(ɔ/) *pl wābɩd^(ε/) cb wāb- n.* elephant

wādɩr^(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

wālɩg^a *pl wālɩs^ε wālí⁺ (tone sic) cb wàl- n.* a kind of gazelle

wàŋɩm^m *vv.* waste away

wàsɩnwàl^(lε) *n.* a parasitic gall on trees, called "mistletoe" in local English

wàu̯ŋ^ɔ *pl wàna⁺ cb wàu̯ŋ- adj.* wasted, thin

wὲɛd^a see *wìɩd^a*

wɛ̄ɛl^(ε/) *vv.* be left unsold (KED) but see *wɛ̄og^(ɔ/)*

wɛ̄l^ε *vv.* bear fruit

wɛ̄l^(lε/) *pl wɛ̄lá⁺ cb wɛ̄l- n.* fruit

wɛ̄lá⁺ or **wālá⁺** how? <u>17.1</u>

wɛ̄n^(na/) *iv.* resemble; in KB *wɛ̄n nɛ̄* appears as *nwɛnɛ*; *ger wɛ̄nním^m* ??misheard for
　　wὲnním^m; cf the Pattern O adjective *wɛ̄nnɩr^ε*

wɛ̄nnɩr^ε *adj.* resembling (Pattern O, specifically confirmed with WK)

wὲog^ɔ *n.* deep bush

wɛ̄og^(ɔ/) *pl wɛ̄ɛd^(ε/) n.* cheap thing sold in abundance WK

wìdɩg^ε *vv.* scatter

wìəf^ɔ *pl wìdɩ⁺ cb wìd- n.* horse; **wìd-lɔ̄r^(ε/)** *n.* place for tying up horses in a compound;
　　wìd-dāʊg^ɔ *n.* stallion; **wìd-ňyá'aŋ^a** *n.* mare; **wìd-zʊ̄ʊr^ε** *n.* horsetail

wìɩd^a or **wὲɛd^a** *pl wìɩb^a cb wìɩd- n.* hunter

Wìid^a *pl Wìid-nàm^a cb Wìid- n.* member of the clan Wiid <u>35.5</u>

Wìidʊg^ɔ *n.* place of the clan Wiid

wīig^(a/) *n.* whistle

wìɩm^m *n.* sickness, disease ("worse than *bāň'as^ε*" WK)

wìk^ε *dipf wìid^a vv.* fetch water <u>11.1.1</u>

wìl^(lε) *pl wìla⁺ cb wìl- n.* branch

wīlɩsúŋ^ɔ *pl wīlɩmís^ε cb wīlɩsúŋ- n.* a kind of snail <u>9.3.2.1</u>

wím ideophone for *zìň'a⁺* red <u>19.8.1.3</u>

wīnⁿᵉ/ *pl wīná*⁺ *cb wīn- n.* God; god; spiritual double, *genius*; destiny; *wīn-tɔ́ɔ̀g*ɔ
　　n. misfortune

Wínà'amᵐ *n.* God 18.1 (usually Christian)

wìnnɪgᵃ *cb wìn- n.* sun; talent; **wìn-līir**ᵉ *n.* sunset; **wìn-kɔ̀ɔň̌r**ᵉ *n.* sunset

wìugɔ **wìir**ᵉ *pl wìya*⁺ *wìid*ᵉ *cb wì- adj.* red

wɔkɔ/ **wā'ar**ᵉ/ *pl wā'á*⁺ *wā'ad*ᵉ/ *cb wɔk- wā'- adj.* long, tall

wùmᵐ *vv.* hear; understand (a language)

wūsa⁺ *q.* all 16.1

wūʋ⁺ *q.* all 16.1

wūʋ like, resembling 21.1

wū'ʋgᵉ/ *vv.* get wet

wū'ʋlᵉ/ *vv.* make wet

Y

yà you, your *pl* (Proclitic) 15.1

ya⁺ you *pl* (Enclitic object) 15.1

ʸᵃ you *pl*, Enclitic Subject after imperative 15.1 28.2.3

yā⁺ Independent Perfective particle 22.6.2.1

yà' if, when 30

yáa *adv.* whither? 17.1

yā'a as for … 28.1.1

yáabᵃ *pl yāa-nám*ᵃ *cb yāa- n.* grandparent, ancestor 35.1; **yāa-dáṳ**⁺ *n.* grandfather;
　　yāa-pṳ'áᵃ *n.* grandmother

yà'alᵉ *vv.* hang up; make perch (bird)

yà'anᵉ *vv.* perch (of a bird)

Yàanⁿᵉ *n.* Yansi language (apparently Mooré now)

yáa ní⁺ *adv.* where? 17.1

yáaŋᵃ *pl irr yáas*ᵉ (consistently without nasalisation) *cb yāaŋ- n.* grandchild,
　　descendant 35.1

Yàaŋᵃ *pl Yàam*ᵐᵃ *Yàamɪs*ᵉ *Yàas*ᵉ *cb Yàaŋ- n.* Yansi person 35.5

yāarᵉ/ *vv.* scatter

yàarɪmᵐ *cb yàar- n.* salt

yà'asᵃ **yà'as**ᵉ again 26.3

yā'asᵉ/ *vv.* open repeatedly

yàddā or **yàdā** *n.* faith, trust ← Hausa *yàrda*; probably ← Arabic يرضى *yardˤa:* 18.1
　　23.1; **yàddā-níŋìr**ᵉ *n.* belief

yādɪgᵉ/ *vv.* scatter; *agt* **yāt**ᵃ/ *irreg.* agent noun: technical term for a participant in a
　　housebuilding ritual

yā'e⁺/ *vv.* widen, open (mouth)

yàkᵉ *vv.* unhang, unhook

yàlɪmᵐᵃ *iv.* be wide

yālɪsʊ́ŋ³ *pl yālɪmís*ᵋ *cb yālɪsʊ́ŋ-* *n.* quail 9.3.2.1

yàlʊŋ³ *pl yàlɪma⁺ cb yàlʊŋ-* *adj.* wide

yāmᵐᵋ *pl yàma⁺ cb yàm-* *n.* hay WK

yāmᵐ/ *cb yām-* *n.* gall; gall bladder; common sense WK *yā'm*ᵐ/.

yàmmɪgᵃ yàmmʊgᵃ yàmmʊg³ *pl yàmmɪs*ᵋ *cb yàm-* *n.* slave

yānámì you *pl* (Subject of *ǹ*-Clause) 15.1

yānámᵃ you *pl* (Contrastive) 15.1

Yārɪgᵃ/ *pl Yārɪs*ᵋ/ *cb Yār-* *n.* Yarsi 35.5; also called Kantonsi; said to have been
        originally of Manding/Dyula origin

Yātᵋ/ *n.* Yarsi language (no longer Dyula/Bambara, but a Western Oti-Volta language)

yàʊg³ *pl yàad*ᵋ *n.* grave, tomb

yɛ̄ that 29.1 29.3 29.3.3

yɛ̄ be about to ... 22.3.2

yɛ̀⁺ *vv.* dress oneself; *res adj* **yɛ̀ɛlʊ́ŋ³** worn (e.g. of a shirt)

yɛ̀ɛgᵋ *vv.* undress oneself

yɛ̀ɛlᵋ *vv.* dress someone

yɛ̄ɛsᵋ/ *vv.* betray a secret

yɛ̀lᵋ *dipf yɛ̀t*ᵃ *ger yɛ̀lʊg³* *vv.* say, tell

yɛ̄lˡᵋ/ *pl* **yɛ̄lá⁺** (as postposition: "about" 20.6) *cb yɛ̄l-* *n.* matter, affair; **yɛ̄l-mɛ́ŋìr**ᵋ
        n. truth; **yɛ̄l-nárʊ̀ŋ³** *n.* necessity; **yɛ̄l-pákìr**ᵋ *n.* disaster; **yɛ̄l-sʊ́'adìr**ᵋ
        n. confidential matter

yɛ̄ŋímᵐ *vv.* oscillate (like waves)

yɛ̀og³ *pl yɛ̀ɛd*ᵋ *n.* bird's crop; person displaced from family (KED)

yɛ̄óŋ *q.* one, in counting 16.2.3

yɪ̄⁺ *dipf yīt*ᵃ/ *imp yìm*ᵐᵃ *vv.* go, come out

yìdɪgᵋ *vv.* go astray

yīdɪgᵋ/ *vv.* untie

yìərᵋ *n.* jaw

yīigá⁺ *q.* firstly 16.2.4 20.4; **yīig-sɔ́bᵃ** *n.* first person 19.9.3

yīisᵋ/ *ger yīisíb³* *vv.* make go/come out, extract

yīmmírᵋ *pl yīmmá⁺ cb yīm-* *adj.* solitary, lone 16.2.4

yīmmʊ́⁺ *adv.* straight away, at once 16.2.5

yīnní⁺ *q.* one 16.2.2

yìŋᵃ *adv.* outside

yīrᵋ/ *pl yā⁺/ cb yī-* *n.* house; **yī-dáànᵃ** *n.* householder; **yī-sɔ́bᵃ** *pl yī-sɔ́b-nàm*ᵃ *n.*
        householder; **yī-dímᵃ** *n.* members of the household; **yī-pɔ́ňrʊ̀g³** *pl yī-pɔ́ňrà⁺*
        n. neighbouring house; **yī-sígɪdìr**ᵋ *n.* lodging-house; **yínⁿᵋ** at home *pl yáan*ᵋ

yīsᵋ *vv.* make go/come out, extract

yɪ̄u̯ŋ³/ *pl yīná⁺* *adj.* single- 16.2.4 19.8.1.4

yɔ̀⁺ *vv.* close; *res adj* **yɔ̀ɔlʊ́ŋ³** closed

yɔ̄⁺ⁿ *vv.* pay; *ger* **yɔ̄ɔdɛ/** *n.* pay

yɔ̄lɪsᵉ/ *vv.* untie

yɔ̄lɪsímᵐ *n.* freedom

yɔ̄lʋgᵒ/ *pl* yɔ̄nⁿᵉ/ *cb* yɔ̄l- *n.* sack, moneybag, £100, ¢200 (200 cedis)

yɔ̀'ɔgᵉ *vv.* open

yɔ̀ɔrᵉ *pl* yɔ̀ya⁺ *cb* yɔ̀- *n.* soldier ant

yṵà⁺ *vv.* bleed; also "fornicate" WK

yùbɪgᵃ *pl* yùbɪsᵉ *cb* yùb- *n.* small bottle-like pot

yūgʋdɪrᵉ *pl* yūgʋda⁺ *cb* yùgʋd- *n.* hedgehog

yūgúmᵐᵉ **yūgúm**ⁿᵉ *pl* yūgʋmá⁺ *cb* yūgʋm- *n.* camel

yùlɪgᵉ *vv.* swing (transitive)

yūň'e⁺/ *vv.* set alight

yū'ɵrᵉ *pl* yṵāda⁺ *cb* yù'ɵr- *n.* penis

yùugᵉ *vv.* get to be a long time, delay; *Tì yúùg nɛ̄ tāaba.* "It's a long time since we last met."

yùulᵉ *vv.* swing (intransitive)

yū'ʋmᵐ/ *vv.* sing; *agt* **yūʋm-yú'ʋm**ⁿᵃ *pl* yūʋm-yú'ʋmnɪbᵃ *n.* singer

yú'ʋmⁿᵉ *pl* yū'ʋmá⁺ *cb* yū'ʋm- *or* yūʋm- *n.* song

yòʋmᵐᵉ *pl* yòʋma⁺ *cb* yòʋm- *n.* year; **yòʋm-pāalíg**ᵃ *n.* new year

yū'ʋn then, next 27.1.4

yú'ʋŋᵒ *pl* yū'ʋmísᵉ *cb* yū'ʋŋ- *n.* night

yū'ʋrᵉ/ *pl* yūdá⁺ *cb* yū'- *n.* name

yūʋrᵉ *pl* yūya⁺ *cb* yò- *n.* water pot

Z

zā⁺/ *cb* zā- *n.* millet

zāalígᵃ **záal**ᶥᵉ *pl* zāalísᵉ zāalá⁺ *cb* zāal- *adj.* empty

zāalímᵐ *adv.* emptily

zàamᵐ *cb* zà- *n.* evening; **zà-sìsɔ̄bɪr**ᵉ/ *n.* evening

zàaňsɪmᵐ *vv.* dream

zāaňsímᵐ *cb* zāaňs- *n.* soup; not "fish soup", unlike (according to Tony Naden) the Mampruli cognate; cf Toende *zãasím* "*soupe à viande*" (Niggli)

zàaňsúŋᵒ *pl* zàaňsímà⁺ *cb* zàaňsúŋ- *n.* dream

zàbᵉ *ger* zàbɪrᵉ *vv.* fight; hurt (of body part); *agt* **zàb-zàb**ᵃ *n.* warrior; *agt* **gbān-záb**ᵃ *n.* leather-beater, leather-worker

zàbɪlᵉ *vv.* cause to fight

zàkᵃ *pl* zà'asᵉ *cb* zà'- *n.* compound; **zà'-nɔ̄ɔr**ᵉ/ *n.* gate; **zà'-nɔ̄-gúr**ᵃ *n.* gatekeeper

zàkɪmᵐ *vv.* itch

zàlɪŋᵃ *pl* zàlɪmɪsᵉ *cb* zàlɪŋ- *n.* electric eel

zàmᵐ *dipf* zàmmɪdᵃ *vv.* cheat; *agt* **zàm-zām**ⁿᵃ *n.* cheat

***zàˈmɩs*ᵋ** *vv*. learn, teach

***zāň'a*⁼** *q.* every 16.1

***zàň'as*ᵋ** *vv*. refuse

***zàňbɩl*ᵋ** *vv*. tattoo, mark skin

***zāňbɩn*ⁿᵋ** *pl zāňbɩna*⁺ *cb zàňbɩn-* *n*. tattoo; NT "sign" 12.1.2

***Zàngbὲɛl*ᵋ** *n*. Hausa language 35.5

***Zàngbὲog*ᵓ** *pl Zàngbὲɛd*ᵋ *n*. Hausa person 35.5

***zàngùəm*ᵐᵋ** *pl zàngùəma*⁺ *cb zàngùəm-* *n*. wall

***zànkʋ̀'ar*ᵋ** *pl zànkṵ'àa*⁺ *zànkʋ̀'ada*⁺ *cb zànkṵ'à-* *n*. jackal

***zāňl*ˡᵃ⁄** *ger zāňllím*ᵐ *iv*. be holding, carrying in hands

***zàňl*ˡᵋ** *n*. umbilicus

***zàŋ*ᵋ** *vv*. pick up, take up

***zɛ̄m*ᵐᵃ⁄** *ger zɛ̄mmúg*ᵓ *iv*. be equal

***zɛ̄ˈmɩs*ᵋ⁄** *vv*. make equal

***zɛ̄mmúg*ᵓ** *pl zɛ̄mmá*⁺ *cb zɛ̄m-* *adj*. equal

***zī*⁺** *ger zīid*ᵋ⁄ *vv*. carry on one's head; *agt **zī-zîid**ᵃ n*. carrier on the head

***zī'*⁺** *ger zī'ɩlím*ᵐ *iv*. not know 32.1.1; *agt **zī'ɩd**ᵃ⁄ n*. ignorant person

***zì'e*ʸᵃ** *ger zī'a*⁺ KED; DK KT *zī'əg*ᵃ (exceptional phonology 18 12.1.1.2) *iv*. be standing

***zì'əl*ᵋ** *vv*. make to stand

***zì'ən*ᵋ** *vv*. stand still; *Ò zì'ən nɛ̄.* "She's pregnant."

***zīɩm*ᵐ⁄** *cb zī-* *n*. blood

***zíiŋ*ᵃ** *pl zīmí*⁺ *cb zīm-* *n*. fish; ***zīm-gbáň'àd*ᵃ** *n*. fisherman

***zìlɩm*ᵐᵋ** *pl zìlɩma*⁺ *cb zìlɩm-* *n*. tongue

***zīlɩnzíʋg*ᵓ** *adj*. unknown

zím ideophone for *sābɩlíg*ᵃ black 19.8.1.3

***zīná*⁺** today 35.9

***zìň'a*⁺ **zὲň'ʋg*ᵓ** *pl zὲň'ɛd*ᵋ *zὲň'ɛs*ᵋ *zὲňda*⁺ *cb zὲň'-* *adj*. red

***zìň'i*ʸᵃ** *iv*. be sitting; *ger **zīň'ig*ᵃ** *pl zīň'is*ᵋ *cb zìň-* (also "place")

***zìň'il*ᵋ** *vv*. make sit, seat

***zìň'in*ᵋ** *vv*. sit down

***zīnzāṵŋ*ᵓ⁄** *pl zīnzāná*⁺ *cb zīnzáṵŋ-* *n*. bat

***zīrí*⁺** *n*. lie, untruth

***zò*⁺** *dipf zòt*ᵃ *imp zòm*ᵐᵃ *vv*. run; fear; experience emotion; *ger zūa*⁺ *zɔ̄ɔg*ᵓ "run"; *imperfective ger **zòtɩm*ᵐ** "fear" 13.1.1.4 *Ò zòt·ō nīn-báalɩ̀g.* "He has pity on him"

***zɔ̄l*ᵋ** *vv*. castrate

***zɔ̄lɩmís*ᵋ** *n*. foolishness

***zɔ̄lʋg*ᵓ⁄** *pl zɔ̄n*ⁿᵋ⁄ *cb zɔ̄l-* *n*. fool

***zɔ̄m*ᵐ⁄** *cb zɔ̄m-* *n*. flour

***zɔ̄ɔm*ᵐᵋ **zɔ̄ɔm*ⁿᵋ** *pl zɔ̄ɔma*⁺ *cb zɔ̀ɔm-* *n*. refugee, fugitive

***zɔ̄rɩg*ᵃ⁄** *n*. small child WK

zɔ̄rʋgᵓ/ *pl zɔ̄rá*⁺ *n.* piece

zū⁺ *vv.* steal

zu̯à⁺ *pl zu̯à-nàm*ᵃ *cb zu̯à- n.* friend

Zùa⁺ *pl Zùes*ᵋ *n.* member of clan Zoose 35.5; *pl Zu̯à-wìis*ᵋ *Zu̯à-wìib*ᵃ, *pl Zu̯à-sābɩlís*ᵋ subclans of Zoose

zù'e⁺ *vv.* get higher, more

zùe⁺ *vv.* perch, get on top (? variant of *zù'e*⁺)

zūgᵓ/ *pl zūt*ᵋ/ *cb zūg- zū-* 9.2.2 *n.* head; as postposition 20.6; **zūgú-n**ᵋ is also used as a postposition; **zūg-dáàn**ᵃ *n.* boss, master (replaces *zūg-sɔ́b*ᵃ in KB for meanings other than "the Lord"); **zūg-kūgʋr**ᵋ *pl zūg-kūga*⁺ *cb zūg-kúg- n.* pillow; **zūg-máu̯k**ᵓ *pl zūg-má'àd*ᵋ *adj.* crushed-headed 19.8.1.4; **zūg-sɔ́b**ᵃ *n.* boss; NT Lord (often read as *zū-sɔ́b* in the audio NT); **zū-pɛ́ɛlʋ̀g**ᵓ *pl zū-pɛ́ɛlà*⁺ *adj.* bald, grey-haired 19.8.1.4; **zū-píbìg**ᵃ *n.* hat

zùlɩgᵋ *vv.* deepen

zùlɩmᵐᵃ *iv.* be deep

zùlʋŋᵓ *pl zùlɩma*⁺ *cb zùlʋŋ- adj.* deep

zùlʋŋᵓ *n.* depth

zùnzɔ̀ŋᵃ **zùnzɔ̀ŋ**ᵓ *pl zùnzɔ̀ɔňs*ᵋ *cb zùnzɔ̀ŋ- n.* blind person

zūθbúgᵓ *pl zūθbíd*ᵋ *cb zūθb- n.* hair (of human head); see *kɔ̄ňbʋg*ᵓ

zùθdᵋ *n.* friendship

zùθlᵋ *vv.* make to perch

zū'θmᵐ/ *pl zū'θmís*ᵋ *cb zū'θm- n.* blind person

zū'θmᵐ/ *vv.* go blind, make blind

zùθnᵋ *vv.* begin to perch

zūθrᵋ *pl zu̯ēya*⁺ *cb zu̯à- n.* hill

zùθsᵋ *vv.* befriend

zūrífᵓ *pl zūrí*⁺ *cb zūr- n.* dawadawa seed

zúʋňfᵓ *pl zūʋní*⁺ *n.* dawadawa seed

zùuňgᵓ *pl zùuňs*ᵋ *zùuňd*ᵋ *cb zùň- n.* vulture

zūʋrᵋ *pl zūya*⁺ *cb zù- n.* tail; **zù-wɔ̄k**ᵓ/ *adj.* long-tailed 19.8.1.4