A Grammar of Kusaal

Agolle Dialect

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Preface

In December 2016 I published "A Grammar of Agolle Kusaal" online. Since that time I have been revising the grammar continually, and although the general outline is unchanged, the cumulative changes are significant. To mark this, I have changed the name of the work slightly for the second anniversary of the initial publication.

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 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 underlie 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.

When I lived in Ghana, there were very few linguistic works available on Kusaal. Happily, the situation has changed; in the References and Bibliography I list numerous works by Urs Niggli on the Toende Kusaal of Burkina Faso, and more encouragingly still, accounts of aspects of Toende Kusaal by Hasiyatu Abubakari, herself a speaker: see "Other studies of Kusaal" below.

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

My very brief account of the Kusaasi people themselves in my Introduction is merely a short list of points I found especially interesting, and is in no way even the beginning of an adequate account of a deep and intricate culture. It is much to be hoped that Kusaasi culture finds worthy students and investigators 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 and to the Ghana Institute of Linguistics, Literacy and Bible Translation for permission to cite verses from the Kusaal Bible versions.

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.

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

> David Eddyshaw Swansea, December 2018 david.eddyshaw@btinternet.com

Abbreviations

AdvP	adverbial phrase		
agt	agent noun		
BNY	Bunkonbid ne Niis ne ba yεla (see Sources)		
С	consonant		
cb	combining form		
CGEL	Cambridge Grammar of the English Language (see Bibliography)		
DK	informant (see Sources)		
dp	discontinuous past		
ger	gerund		
Н	High toneme		
ILK	"An Introduction to Learning Kusaal" (David Spratt)		
imp	imperative		
ipfv	imperfective		
irreg	irregular		
KB	Kusaal Bible of 2016 (see Sources)		
KED	"A Short Kusaal-English Dictionary" (David Spratt)		
KKY	Kusaas Kuob nε Yir yela Gbauŋ (see Sources)		
KSS	Kusaal Solima ne Siilima (see Sources)		
KT	informant (see Sources)		
L	Low toneme		
LF	Long Form		
Μ	Mid toneme		
NP	noun phrase		
NT	Kusaal New Testament Versions of 1976 and 1996 (see Sources)		
pfv	perfective		
pl	plural		
SB	informant (see Sources)		
SF	Short Form		
sg	singular		
V	vowel		
VP	verb phrase		
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

ABSTR	abstract	<u>8.1</u>
ADV	adverbial	<u>11.2</u>
AN	animate gender	<u>15.2.2</u>
CAT	clause catenator (underlyingly <i>n</i>)	<u>22.1</u>
CNTR	contrastive (personal pronouns)	<u>27.5</u>
СОР	copula àeňa	<u>19.11.2</u>
CQ	content question prosodic clitic	<u>7.1</u>
DEM	demonstrative pronoun (discourse)	<u>15.3.2</u>
DEMST	demonstrative pronoun (spatio-temporal)	
DP	discontinuous-past marker n ^ɛ	<u>23.1.1</u>
EMPTY	semantically empty NP head <i>sɔ̄b</i> ª	<u>15.3.7</u>
EXIST	existence/location verb $b\dot{\epsilon}^+$	<u>19.11.1</u>
FOC	focus particle $n\bar{\epsilon}^{+/}$	<u>27.1.2</u>
GER	gerund	<u>11.1.1</u>
IDEO	ideophone	<u>17</u>
IMP	independent imperative verb form	<u>10.1</u>
INAN	inanimate gender	<u>15.2.2</u>
INDF	indefinite pronoun	<u>15.3.3</u>
IPFV	imperfective verb form	<u>10.1</u>
IRR	positive irrealis mood marker	<u>19.4</u>
LOC	locative postposition $(n\bar{\iota}^{+/} \sim n^{\epsilon})$	<u>16.3</u>
NEG	negative prosodic clitic	<u>7.1</u>
NEG.BE	negative verb to and COP and EXIST	<u>19.5.1</u>
NEG.HAVE	(another use of the same verb)	
NEG.IMP	negative imperative marker	<u>19.4</u>
NEG.IND	negative indicative marker	
NEG.IRR	negative irrealis marker	
NEG.KNOW	negative verb $z\bar{\iota}^{+}$	<u>19.5.1</u>
NEG.LET	negative verb <i>mìt</i>	<u>19.5.1</u>
NUM	number prefix à- bà- <i>ì- bù-</i>	<u>13.3</u>
NZ	nominaliser (underlyingly 'n)	<u>24</u>
PERS	personifier particle (à- or 'n-)	<u>15.5</u>
PFV	independent-perfective marker yā ⁺	<u>19.6.2.1</u>
PL	plural	<u>15.2.1</u>
PQ	polar question prosodic clitic	<u>7.1</u>
REL	relative pronoun	<u>24.3.2</u>
SG	singular	<u>15.2.1</u>
TNS	tense marker	<u>19.3.1</u>
VOC	vocative prosodic clitic	<u>7.1</u>

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<u>15.3.1</u>

Personal pronouns:1SG 1PL1st sg/pl2SG 2PL2nd sg/pl3AN 3INAN3rd sg animate/inanimate3PL3rd pl2PL.SUBpostposed 2nd pl Subject.OBobject (pronouns)

The linker particle $k\dot{a}$ is conventionally glossed "and" throughout, though this very often does not reflect the true meaning in context 20.2; similarly $y\dot{a}$ ' 23.1 is glossed "if" in all cases. The empty particle $n\bar{\epsilon}$ which follows objects of comparison which lack the article 18 is glossed "like."

Mass nouns are not specified as sG or PL in the glossing; similarly, single-aspect verbs 10.2 are not labelled for aspect. The perfective of dual-aspect verbs is also unlabelled.

In glossing, \emptyset represents words with no surface segmental representation at all, which are detectable only from tonal and segmental effects on preceding words. Prosodic clitics <u>7.1</u> are represented by $+\emptyset$, and liaison <u>7.2</u> is marked by __.

Bound words 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: these comprise the combining forms of nouns and adjectives, the personifier particle \dot{A} -/ \dot{N} -, and the liaison words n^{ϵ} LOC n^{ϵ} DP ^{ya} 2PL.SUB along with the LF of ^o 3AN.OB <u>2.4</u>.

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: $p\bar{v}vgv-n$ "inside", not $p\bar{v}vgv-n$.

Transcription conventions

For Agolle Kusaal orthography see $\underline{3}$.

Phonetic transcriptions are written in square brackets; they are generally broad, ignoring all allophony which is not immediately under discussion.

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 as in Jaggar 2001, except that long vowels are written with double letters rather than macrons. High tone is unmarked, low tone is marked with a grave, and a circumflex represents falling tone. 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.

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Mooré words are cited as in Niggli 2016, along with his tone marking: acute accents represent high tone, grave low; tone marks apply to all following unmarked morae, and a second acute after a first within a single word represents a downstepped H tone.

For Moba, I follow Kantchoa 2005; note that *j* represents [j].

For Nawdm, I use the orthography of Babakima 2013.

Arabic transcriptions use IPA symbols, except that y is used for [j]; classical forms are cited, but without case endings and omitting the t of ta? marbu: $t^{r}a$.

Words from other languages are cited as given in the sources. Where these give tones separately, I have instead written them on the words themselves, using acute for H, grave for L, and macron for mid tone.

Francophone sources use ιv for IPA ιv , as do Urs Niggli's works in English and the working orthography of this grammar.

Words cited in foreign languages are written in *sans-serif italics*. *This* colour is reserved for words and word fragments in the working orthography of this grammar; it is not used for Kusaal in the orthography of written sources.

Internal and external hyperlinks appear like this.

Sources

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

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

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

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

At that time, I had little understanding of syntactic issues at clause or higher level. I compensated as far as I could by private study of written materials, above all the 1976 New Testament version, storing up problems to discuss later with my teachers. In revising the work twenty years later I have had the advantage of access to digitised versions of the 1996 New Testament and the complete Bible version of 2016, which has enabled me to improve my analyses of Kusaal syntax substantially in several areas. I have also drawn on the collection of stories and proverbs *Kusaal Solima ne Siilima*, and to a small extent on other literacy materials. I owe a great debt to the many dedicated individuals involved in Bible translation and literacy work under the auspices of the Ghana Institute of Linguistics, Literacy and Bible Translation (GILLBT), without whom these materials would not exist.

The Bible versions are generally regarded by Kusaal speakers as good and idiomatic Kusaal. The 1996 revision adapted most foreign names to accord more closely with ordinary Kusaal spelling. Many changes were made to improve accuracy and clarity; strikingly, all instances of the previously very common indirect speech construction were replaced by direct speech. The 2016 Kusaal Bible makes significant orthographic changes. There is evidence of some minor changes in the language itself over this forty-year period, but most divergences between the spelling of older sources and the speech of my informants in the 1990's are attributable simply to orthographic convention; the audio version of the 1996 NT consistently agrees with my informants in such cases.

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

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

The following texts are cited; where not otherwise specified, they were published by the Tamale offices of GILLBT (the Ghana Institute of Linguistics, Literacy and Bible Translation):

Wina'am Gbauŋ	Kusaal Bible
Wínà'am Gbáuֻŋ	1976 NT © World Home Bible League
	1996 NT © The Bible League/GILLBT
	available as <u>Audio and searchable text</u>
	2016 Complete Bible © GILLBT
	available as an Android application
Bunkonbid ne Niis ne ba yɛla	"Animals and birds and their affairs"
Būn-kóňbìd nẽ Níis né bà yẽlá	Matthew M. Abokiba
Kusaal Solima ne Siilima	"Kusaal Stories and Proverbs"
Kūsáàl Sólımà nẽ Síilímà	Samuel Akon, Joe Anabah
Kusaas Kuob nε Yir yela Gbauŋ	"A book on Kusaasi farming and housing"
Kūsáàs Kúèb nē Yīr yélà Gbàỵŋ	William A. Sandow, Joseph A.H.Anaba

Other studies of Kusaal

The pioneers of Kusaal grammatical study were **David and Nancy Spratt**. David Spratt's forty-two page "Introduction to Learning Kusaal" contains a useful sketch of the basic tone system. His short dictionary has also been helpful.

More recently, grammatical and lexical studies of the Toende Kusaal of Burkina Faso have been produced by **Urs Niggli**, who has also done considerable work with Kasem and Farefare, and edited a useful dictionary of Mooré. The language differs significantly from the Agolle dialect described here, and I have not borrowed from his grammatical analyses, but his Toende dictionary has been an excellent resource for comparative material. The most recent version marks tone in many headwords.

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

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

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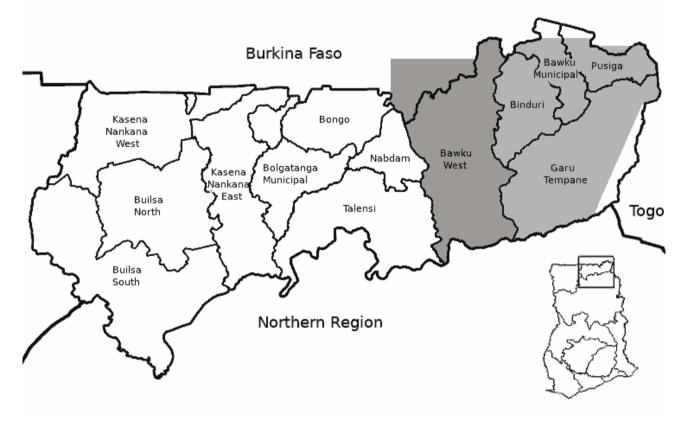
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1 Kusaal and the Kusaasi

1.1 The Kusaasi people

Upper East Region of Ghana (adapted from Macab5387):



Kusaal is the language of the Kusaasi, the majority ethnic group of the far northeast of Ghana, east of the Red Volta river and north of the Gambaga Escarpment; the local major town is Bawku. There are also many Kusaasi settlements in the neighbouring part of Burkina Faso south of Zabré, and a few in Togo. The White Volta separates this predominantly Kusaasi territory into **Toende** (French *Tondé*, Kusaal *Tùen* "West", shaded dark grey above) and **Agolle** (Kusaal *Àgòl* "Upper", light grey.)

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

The land is mostly open savanna with scattered trees. The population density is fairly high for northern Ghana, and much former woodland has been turned over to cultivation; tracts survive especially along the White Volta where settlements are few because of the river blindness (onchocerciasis) endemic there until recent times. Most Kusaasi are cultivators, living in widely scattered compounds, each one the domain of a single family head with his wives, sons, daughters-in-law and grandchildren. Cattle-raising is common but is mostly the preserve of Fulbe and Mossi. There is one rainy season, lasting unpredictably from May to October. The main crop is millet of various kinds, along with rice to a lesser extent. Millet is used to make the Kusaasi staple millet porridge *sā'ab*, called "TZ" /ti:'zɛd/ in local English (from Hausa *tuwon zaafii*, literally "hot porridge"), and the traditional millet beer, *dāam*, called "pito" (Hausa *fitoo*) in English.

The Kusaasi are divided into numerous patrilineal exogamous clans $(d)_{2,q}$, "hut") 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 p5pr "slogan", part of its traditional lineage, but unlike the Mossi, the Kusaasi do not use clan names as surnames. Clans have their own distinctive customs (such as prohibitions against eating particular animals) but no administrative function; the Kusaasi originally had no chiefs. In religious matters the leading man of the area is the $t \epsilon \eta$ -dāan "earth-priest", taken to be the descendant and heir of the original first settler. In precolonial times the dominant political structures in this region were the so-called Mossi-Dagomba states, the remarkably durable continuations and offshoots of polities founded, probably around the fourteenth century, by incoming conquerors traditionally held to be from the region of Lake Chad. The invaders created hereditary chiefdoms among previously acephalous peoples, who continued to provide the *tɛŋ-dàan-nàm*. The founder of these kingdoms is called Naa [King] Gbewaa in Mampruli. His seat was at Pusiga (Kusaal Pūsig) 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 militaryaristocratic Mamprussi state (Iliasu 1971.) Unlike their Mamprussi neighbours, the Kusaasi were not absorbed into the system, and intermittent conflict has continued to this day, particularly over the chieftaincy of Bawku. Both in colonial times and since independence, wider political issues have complicated the situation (Lund 2003.)

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

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

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

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

 $D\iota m$ $n\bar{\epsilon}$ $W\bar{\iota}n$, $d\bar{a}$ $t\dot{\upsilon}$ 'às $n\bar{\epsilon}$ $W\bar{\iota}nn\dot{\epsilon}$ + ϕ . Eat:IMP with God:sg, Neg.IMP talk with God:sg Neg. "Eat with God, don't talk with God."

Wīn ňyć kà sīn.God:sg see and be.silent."God sees and is silent."

Everyday religious practice is concerned with local non-anthropomorphic spirits, also called $w\bar{i}n$. A $w\bar{i}n$ resides in a $b\bar{v}gvr$, an object such as a stone or horn, but it is the $w\bar{i}n$ that is spiritually significant, not its place of attachment. A central figure is the $b\bar{a}'a$ "diviner", who seeks guidance for a client by casting lots.

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

The key term $w\bar{i}n$ has yet further senses, overlapping with the European concepts of fate or destiny: $w\bar{i}n$ -t $\dot{j}\dot{j}g$, literally "bitterness of $w\bar{i}n$ " is "misfortune." Most people have a particular $s\bar{i}gir$ "guardian spirit" which is often the $w\bar{i}n$ of an ancestor; the word $b\bar{v}gvr$ may also mean "a $w\bar{i}n$ inherited from one's mother's family." Many Kusaasi personal names refer to an individual's $s\bar{i}gir$.

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

When speaking English or French, Kusaasi normally cite Kusaal personal and place names without apocope <u>5.1</u>: À-Wīn from Wìdı-ňyá'aŋ will introduce himself as "Awini" from "Woriyanga." Similarly "Kusaasi" for Kūsáàs, "Bawku" for Bòk etc.

"Woriyanga" also shows a Mampruli rather than Kusaal form for the initial combining form of "horse": Mampruli *wuri-* versus Kusaal *wid-*. This reflects the origin of the convention in the use of Mamprussi guides and interpreters by the British in their initial explorations of the area. A parallel development took place earlier in Mamprussi country when the British arrived with Dagomba guides: thus "Gambaga" (Dagbani *Gambaya*) for the Mampruli place name *Gambaa* (Naden.)

Not all such forms can be explained as Mampruli. The place name "Widana", for example, resembles Kusaal *Widāan* rather than Mampruli *Wuddaana*, and the personal name "Awimpoaka" À-*Wīn-puák* even shows Agolle vowel breaking (Toende *Awinpoka*.) The personal name "Akudugu" À-*Kūdvg* shows the postvocalic -*d*-characteristic of Agolle Kusaal rather than Mampruli. The place name *Tīl* "Tilli" corresponds to Toende Kusaal *tíl* and Farefare *tíllé* "tree trunk", but no cognate word appears in Naden's extensive dictionary of Mampruli. A convention which originated in transposition from Kusaal into Mampruli has thus been generalised by analogy.

Straightforward reproduction of Kusaal forms is occasionally seen, e.g. "Aruk" for the personal name *À-Dōk*, and the language name "Kusaal" *Kōsáàl* itself.

1.2 The Kusaal language

1.2.1 Status

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

Written materials are few, apart from the Bible translation, which is far and away the most extensive written work in Kusaal. Few people were proficient in reading or writing the language in the 1990's. Though Kusaal is thus not used in the domain of Western-style education and technical activity, it is nevertheless the language of all everyday interaction among Kusaasi of all ages, most of whom are monolingual, and is also an areal lingua franca, used in particular by the many Bisa people who are found in the villages and in Bawku.

Of the major lingua francas of Ghana, Hausa is the most important locally. It is the main source of identifiable loanwords in Kusaal. In the 1990's few people outside Bawku knew Twi/Fante or English. 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.

Kusaal and the Kusaasi

1.2.2 Dialects

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

The major dialect division is between Agolle and Toende. The differences are striking: Agolle vowel breaking <u>3.2.2</u> 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. The Mande Bisa language, spoken to the immediate north of Kusaal, is similarly divided into Lebri, to the west of the White Volta, and Barka, to the east.

My informants reported little difficulty communicating with Toende speakers, but they are sophisticated multilinguals who may not be altogether typical, and it is also possible that Agolle speakers find Toende Kusaal easier than vice versa. Berthelette 2001 studied the comprehension of Agolle Kusaal by Burkina Faso Toende speakers: of thirteen respondents, ten reported that they understood the Ghanaian Toende of Zebilla "very well", one "somewhat well" and two "a little", whereas with Agolle, eight said that they understood it "a little", two "somewhat well" and only three "well." Recorded text tests administered to Burkina Faso Toende speakers showed scores of 93% for Ghanaian Toende versus 80.5% for Agolle, but Ghanaian Toende speakers achieved 94.5% with Agolle, presumably reflecting their greater exposure to the dialect. The paper also reports that Toende speakers feel their own dialect is "purer", which may affect judgments of comprehensibility.

Berthelette reports a rate of apparent lexical cognates between Toende and Agolle of 84%.

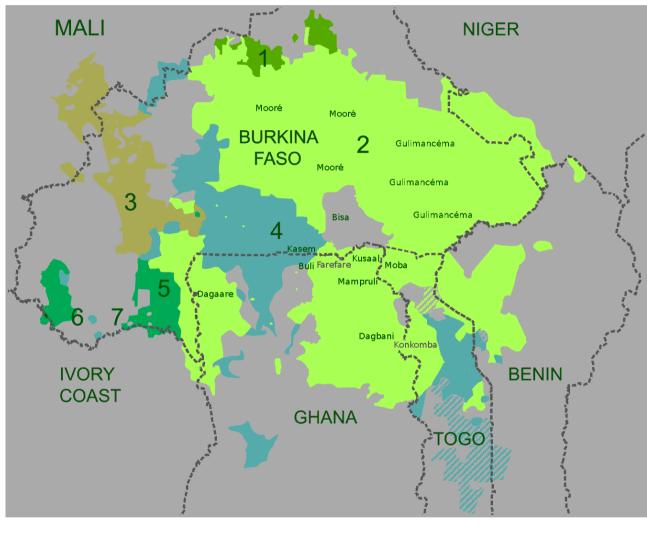
Agolle and Toende Kusaasi agree that they constitute a single ethnic group, and that they speak dialects of a single language; this is perhaps reinforced by a strong local tendency to equate language and ethnicity (note the language names formed from ethnonyms in <u>29.4</u>.) Nevertheless, the differences are great enough to justify separate grammatical treatment for the two major dialects.

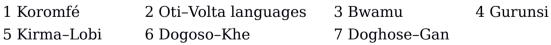
By "Kusaal" I will mean "Agolle Kusaal" by default below; I do not intend by this to imply that Agolle speech is the standard form of the language to the exclusion of Toende.

1.2.3 Related languages

Kusaal belongs to the **Gur** or **Voltaic** language family within the huge and diverse **Niger-Congo** phylum.

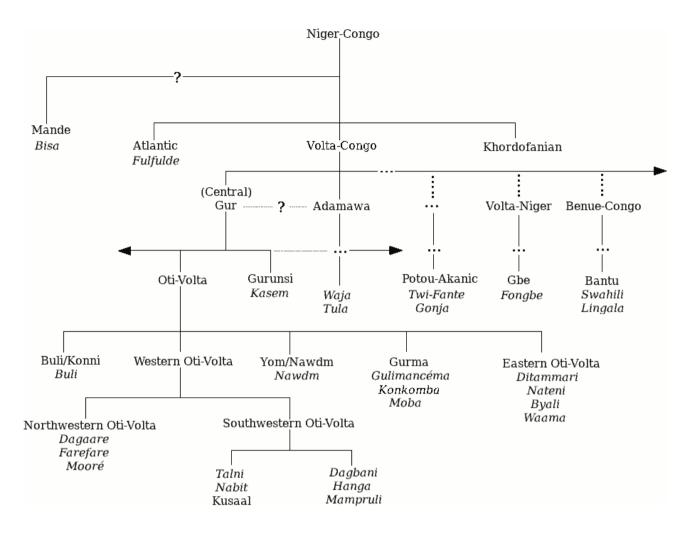
The Gur Languages (adapted from <u>Davius</u>):





The chart below shows relationships between some of the languages mentioned below. Subclassifications are very often uncertain; in particular, the relationship between Gur and Adamawa is unclear.

Mande is very divergent, and may well not belong with Niger-Congo at all. Even the inclusion of Kordofanian and Atlantic in Niger-Congo is a long-range hypothesis, rather than a well-established linguistic grouping like Indo-European. Striking typological similarities with core Niger-Congo do not prove genetic unity: for West Africa (and beyond) as a *Sprachbund* see especially Güldemann 2007.



However, there is unequivocal evidence for Volta-Congo as a genetic grouping. Basic lexical items recur frequently: compare Kusaal $b\bar{i}ig$ "child", $d\hat{i}$ "eat", $n\bar{u}$ "drink", $kp\hat{i}$ "die", $t\hat{i}ig$ "tree", $\dot{a}t\dot{a}n$ "three", $t\dot{v}bvr$ "ear" with their Fongbe equivalents vi, $d\hat{u}$, $n\hat{u}$, $k\hat{u}$, $\dot{a}t\dot{n}$, $\dot{a}t\dot{z}n$, $t\hat{o}$. Guthrie's Proto-Bantu reconstructions parallel all except "child": $d\hat{i}$ - "eat", $-n\hat{u}$ - "drink", $k\hat{u}$ - "die", $-t\hat{i}$ "tree", $-t\dot{a}t\dot{v}$ "three", $-t\dot{v}$ "ear", and his Proto-Bantu $-t\dot{v}m$ - "send" corresponds to Kusaal $t\dot{v}m$. The Potou-Akanic language group, which includes Twi/Fante and Gonja, here shows a regular sound correspondence $t \sim s$: Twi $\varepsilon s\tilde{a}$ "three", $as\tilde{o}$ "ear", soma "send", Gonja \dot{a} -sá "three", $k\dot{o}$ -sówé "ear."

The most salient morphological feature of Niger-Congo is the presence of noun class systems, with frequent congruences in both form and meaning among the Volta-Congo branches. Thus the Kusaal human-plural noun *suffix* -*b*^a seen in *nīdıb* "people", plural of *nīd*, matches the Gonja human-plural *prefix* in *bá-sà* "people", plural of *é-sà*, and the *ba* of Lingala *bato* "people", plural of *moto*. Particular sg/pl *pairings* of noun class affixes recur throughout Volta-Congo; for example, the suffixes $r^{\varepsilon}|a^{+}$ seen in Kusaal *tòbor* "ear", *tòba* "ears" are cognate to the Bantu prefix pair labelled 5/6 in the Bleek-Meinhof system (Nurse and Phillippson 2003, p104.) Lingala has the cognate of Kusaal *tòbor* in this very class: *litói* "ear", plural *matói*. It is the Bantu pronominal and

verbal concord prefixes which correspond to the affixes of other Volta-Congo languages, rather than the noun class prefixes themselves; the Proto-Bantu subject prefixes for 5/6 are sg I_I , pl $g\acute{a}$ (*ibid.* p149.)

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

With some lower-level groupings detailed comparative work has achieved much already, notably with Bantu; among languages closer to Kusaal, see Sambiéni 2005 on Eastern Oti-Volta. High-level comparative work is generally at an early stage; see, however, Gabriel Manessy on Gur, and especially the publications of John Stewart on Potou-Akanic and its relationships with Bantu and Atlantic.

At the lowest level Kusaal belongs to a family called **Western Oti-Volta** by Manessy, and **Mabia** (cf Kusaal $m\dot{a}$ - $b\bar{i}ig$ "sibling") by Adams Bodomo. The group is well demarcated by common innovations. Proto-Oti-Volta **c* **j* have become *s z*; there is a strikingly simple system of verbal inflection, with almost all inflecting verbs using the bare stem for perfective aspect and adding a suffix *-*da* for imperfective; some noun classes have been lost, and words referring to trees have been transferred wholesale to the $g^a|_{S^{\epsilon}}$ class (Buli *t\vertible* "tree", Kusaal *t\vertible*, Mooré *t\vertible*(*a*); there is much distinctive vocabulary, e.g. Kusaal $k\dot{u}$ '*om* "water", Mooré $k\dot{o}\acute{o}m$, versus Moba $p\acute{u}\dot{m}$, Buli $ny\acute{a}m$, Nawdm $ny\acute{a}l\acute{m}$, Nateni $n\acute{\epsilon}ma$ (cf Kusaal n) "rain.") The Bulba/Nõõtre language of Benin is classified by Manessy as Western Oti-Volta, but his data suggest otherwise: **c* **j* fall together as *c*, for example, and "tree" is *tiibo*.

Western Oti-Volta is roughly as diverse as Romance. Claims of mutual intelligibility are often overstated: they reflect underappreciation of the fact that many local people are competent users of more than one distinct language. Kusaal and Mampruli, for example, are not mutually intelligible (as I had abundant opportunity to observe in our outpatient clinics.)

The group is subdivided into Northwestern and Southwestern branches. Northwestern Oti-Volta includes Mooré, 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.) Mooré and Farefare share several innovations not seen in Dagaare. Southwestern Oti-Volta includes Kusaal, Nabit, Talni, Mampruli, Dagbani, Hanga, Kamara and some smaller languages. A distinctive Southwestern feature is the inflection *-*ma* used for positive imperatives.

Mampruli, Dagbani, Hanga and the similar smaller languages form a clear subgroup. Among other shared innovations, they show a great simplification of the vowel system, along with lowering of short *e to a, and the secondary development of a series of contrastively palatalised velars.

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

Nabit, Talni, and Kusaal have lost inherited final short vowels in citation forms. Naden's materials suggest that Nabit and Talni, like Kusaal <u>5.1</u>, retain the final vowel at the end of questions and negated clauses:

Nabit Toende Agolle	La bi'imɛ. La bı'ı me. Lì bì'ig nɛ̄. BINAN ripen FOC.	"It is ripe"
Nabit Toende Agolle	La na bu biigɛ. La nan bu bı'ıgɛ. Lì nàm pū bí'igɛ̄ +ɕ BINAN still NEG.IND ripen NEG	
Talni Toende Agolle	Woman:sg kindred NEG.IND	

Where many people are multilingual in closely related languages, it can be difficult to distinguish historical common innovations from the effects of diffusion. For example, while most of the numerous isoglosses which cross the Northwest/ Southwest division clearly involve shared retentions, original *gg *dd *bb are devoiced to kk tt pp everywhere except in the two most peripheral languages, Dagaare and Dagbani.

Other groups within the **Oti-Volta** family can readily be seen to be related.

Buli is closely related to Western Oti-Volta: Kröger 1992 shows numerous obvious cognates in vocabulary and parallels in nominal morphology. Buli verbs do not inflect for aspect. Proto-Oti-Volta $*s *z *c *_{f}$ are preserved unchanged.

The Gurma languages Gulimancéma, Konkonba, Moba etc are much less close. Gulimancéma and Konkonba typically show nouns with both class prefixes and class suffixes, and the languages have complex and unpredictable verb aspect flexion, making the imperfective by changing the stem tones, and/or dropping a derivational suffix from the perfective or adding one of several different imperfective suffixes. Kusaal and the Kusaasi

Both Buli and Gurma have three-tone systems, and the three basic Western Oti-Volta Tone Patterns <u>6.1</u> can be systematically matched with them. However, Pattern H corresponds to Buli *high* tone, but (e.g) Moba *low*; Pattern O to Buli mid and Moba high, and Pattern L to Buli low and Moba mid:

Kusaal	Buli	Moba	
wáaf	wáab	wààùg	"snake"
тวิวg	mūub	móóùg	"grass"
tìıg	tìib	tīīģ	"tree"

It is the languages with H tone corresponding to Pattern H which have innovated: cf Proto-Bantu - $n\dot{u}\dot{a}$ "mouth", Fongbe $\dot{o}n\dot{u}$ = Kusaal $n\bar{}_{}\bar{}_{}\bar{}_{}$ (Pattern H) versus Proto-Bantu - $t\dot{\sigma}$ "ear", Fongbe $t\dot{o}$ = Kusaal $t\dot{v}bvr$ (Pattern L).

Nawdm aligns tonally with Western Oti-Volta and Buli: $w\dot{a}\dot{a}\ddot{g}\dot{b}$ "snake", $m\dot{o}\dot{o}g\dot{u}$ "grass", $t\dot{i}\dot{i}\dot{b}$ "tree." Nawdm has shifted $*p \rightarrow f$, $*s \rightarrow h$, $*c \rightarrow s$, and $*z \rightarrow f$. It preserves Proto-Oti-Volta *l as r in all word positions 5.3.1, and often has \hbar [?] where Western Oti-Volta shows vowel glottalisation. Most verbs use a stem form as perfective and add -a for imperfective, but there are several other patterns, such as perfective -raversus imperfective -l. Nawdm shows much less lexical similarity to Western Oti-Volta than Buli does, but there are some notable parallels in verb flexion and derivation.

Sambiéni 2005 provides considerable detail on the Eastern Oti-Volta languages Ditammari, Nateni, Byali and Waama. His analysis takes it as given that Manessy's Eastern Oti-Volta is a valid subgroup.

The verbal systems of Ditammari and Nateni are fairly similar, with some verbs opposing a perfective ending *-a* to imperfective *-u* (*-i* after alveolars), and other verbs making the imperfective by changing the stem tones or dropping a derivational suffix from the perfective, as in Gurma. Both languages also align with Gurma in showing L tones corresponding to Pattern H. Ditammari resembles Gulimancéma and Konkomba in that nouns usually appear with noun class prefixes and suffixes together.

By ali verbs mostly oppose perfective $-s\partial$ to imperfective -u. By ali usually shows mid tones in cognates of Kusaal Pattern H words.

Waama shows high tones in words corresponding to Western Oti-Volta Pattern H. A group of verbs with stems ending in vowels or alveolars opposes perfective *-i* to imperfective *-u*, but most verbs use the bare stem as perfective and add *-ri -di* or *-ti* for the imperfective. Of roughly 400 vocabulary items compared by Sambiéni, 55 Waama words are not cognate to those of the other languages; the figures for the other languages are all under 20. Some of these words have cognates in Western Oti-Volta and Buli, e.g. Waama *wōmmā* "*entendre*", Kusaal *wòm*, Buli *wom*; Waama *cáárō* "*forgeron*", Kusaal *sāeň*; Waama *yété* "*maison*", Kusaal *yīr*, Buli *yérí*. There is much less similarity between Oti-Volta as a whole and the other major branch of Gur, the **Gurunsi** languages, which include Kasem and Kabiyè among many others. Oti-Volta and Gurunsi may be coordinate members of a continuum including at least some Adamawa subgroups: Kleinewillinghöfer 1996 references studies suggesting that the Adamawa languages Waja and Tula are closer to Gurunsi than to Oti-Volta. Further progress on this issue will probably only come about after more descriptive work on Adamawa languages. Manessy takes Koromfe as a third branch of "Central Gur" alongside Oti-Volta and Gurunsi. He classified a number of languages as Gur on the basis of very scanty documentation; when adequate descriptions appear, such classifications may need to be revisited. The Senufo languages were previously regarded as a branch of Gur, largely on the basis of their having noun class suffixes rather than prefixes; they are now usually held to constitute a distinct branch of Volta-Congo.

1.2.4 Grammatical sketch

Symbols have approximately their IPA values, except that long vowels are written with double symbols; $e \iota$ both represent [1]; $o \upsilon$ both represent [υ]; \check{n} and ' mark nasalisation and glottalisation of adjacent vowels, respectively; y stands for [j]; and $kp \ gb$ stand for [kp] [gb].

Kusaal is in most respects a typical Western Oti-Volta language. It is chiefly distinctive in having undergone **apocope** of word-final short vowels even in citation forms, 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 normally appears in the **Short Form** (SF) $b\bar{i}ig$. This is not a simple historical matter, however: the Kusaal final vowel is still present in certain contexts. It reappears clause-finally when the clause contains a negation, ends a question, or is used as a vocative: the final word then appears as a **Long Form** (LF):

<i>Ò à nĒ bīig.</i> 3AN COP FOC child:sg.	"He/she's a child."
<i>Ò kā' bīiga ⁺ø.</i> 3AN NEG.BE child:sg NEG.	"He/she is not a child."
\dot{O} à $n\bar{\varepsilon}$ $b'ig$ àa $+ a?$ BAN COP FOC child:SG PQ?	"Is he/she a child?"
<i>À bīiga +ø!</i> 1sg child:sg voc!	"My child!"

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

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

Lì à nĒ gbīgim. "It's a lion." 3INAN COP FOC lion:SG.

This appearance of surface untruncated forms rather than truncated is regarded as being triggered by following **prosodic clitics**, which have no segmental form of their own but show their presence by this effect on the preceding word form. There are four prosodic clitics: negative NEG, vocative voc, polar-question PQ and content-question cQ, with different effects on preceding vowel length and tone. In interlinear glossing they are represented by $+ \emptyset$, as above.

In citing word forms, superscripts will be used to write the parts of words which are dropped everywhere except before prosodic clitics and liaison: $b\bar{i}ig^{a}$ "child", $gb\bar{i}gim^{n\epsilon}$ "lion", $k\bar{o}k^{a}$ "chair", $d\bar{o}k^{2/}$ "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 diphthongs, along with emic contrasts among epenthetic vowels. Thus the Long Form $v\bar{i}ug5$ "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 $v\bar{i}ug$ "owl": the diphthong *iu* itself now contrasts with the vowel of $v\bar{i}id$ "owls", shortened from $v\bar{i}id\epsilon$. Similarly, $\bar{a}andiga$ "black plum tree" has the default epenthetic vowel ι before the flexion, and appears as $\bar{a}andig$ after apocope, whereas the gerund gadvg2 "passing" has rounding of the vowel to v before the flexion -g2, and after apocope this rounding itself becomes contrastive in the usual Short Form gadvg.

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

Ѝ pū bɔ́ɔdā +ø.	"I don't want to."
1SG NEG.IND want NEG.	Long Form <i>bɔ̀ɔdā</i> preceding negative clitic.
Ѝ bɔ́ɔdī_bá.	"I love them."
1SG want 3PL.OB.	Modified Long Form <i>bɔ̀ɔdī</i> before liaison.

<i>À pū zábē</i> + <i>ø.</i>	"I haven't fought."
1SG NEG.IND fight NEG.	Long Form <i>zàbē</i> preceding negative clitic.
<i>À zábī_bá.</i>	"I've fought them."
1SG fight 3PL.OB.	Modified Long Form <i>zàbī</i> before liaison.

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

Apocope reduces several liaison words of the underlying form CV to a single consonant. Thus with $b \hat{D} \hat{D} d^a$ "wants, loves" and f^2 "you (sg)":

Ň	рū	bɔ́ɔdī	ſź	+ø.	"I don't love you."
1SG	NEG.IND	want	2SG.OB	NEG.	Long Form f of the pronoun "you (sg)"
Ň	bɔ́ɔdī	_f.			"I love you."
					Short Form <i>f</i> of the pronoun "you (sg)"

The locative postposition n^{ϵ} is another such word. It is conventionally written solid with the preceding host word, but hyphenated to it in this grammar:

Lì kā' kūka +ø. "It's not a chair." 3INAN NEG.BE chair:SG NEG. Lì kā' kūki-né +ø. "It's not in a chair." 3INAN NEG.BE chair:SG-LOC NEG. "in a chair" kūki-n chair:sg-Loc Lì kā' dūkó +ø. "It's not a pot." **3INAN NEG.BE pot:SG NEG.** "It's not in a pot." Lì kā' dūkí-nē +ø. 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 [v] 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 [I] to [v], which is always written with a preceding raised point as $\cdot o$.

Ѝ pū bɔ́ɔdī_fɔ́ +ø.	"I don't love you."	
1SG NEG.IND want 2SG.OB NEG.		
Ѝ bɔ́ɔdī_f.	"I love you"	
1SG want 2SG.OB.		
Ѝ pū bɔ́ɔd∙ó-o ⁺ø.	"I don't love him/her."	[mpʊbɔ:dʊ:]
1SG NEG.IND want-3AN.OB NEG.	Long Form <i>o</i> of the pronoun "	'him/her"
Ѝ bɔ́ɔd∙ō_ø.	"I love him/her."	[mbɔ:dʊ]
1SG want 3AN.OB.	Short Form	"him/her"

A liaison word form y^a 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 by apocope is completely deleted unless preceded by a back vowel:

Gòsım!	"Look!"
Look:IMP!	
Gòsımī_ø!	"Look ye!" by apocope from gɔ̀sımī-yá
Look:IMP 2PL.SUB!	

Liaison words are not all bound to the left. Personal pronoun subjects and predependents also cause inhibition of apocope in the *preceding* word, as does the personifier particle \dot{a} - and all words beginning with certain derivational prefixes.

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

 \dot{m} $z\bar{u}g\dot{\upsilon}$ ø $z\dot{a}bid$ $l\bar{a}$ $z\dot{u}g$ "because my head hurts" (nominaliser- \dot{n}) 1SG head:SG NZ fight:IPFV ART upon

M̀ zūgv 𝔅 zábìd. "My head hurts." (catenator-*n*) 1SG head:SG CAT fight:IPFV.

Liaison has caused considerable confusion in word division in the traditional orthography, and is largely responsible for the many cases where clause-medial words acquire a mysterious short-vowel "ending."

Kusaal shows contrastive vowel glottalisation.

Vowel **breaking** has caused earlier $\varepsilon \supset \varepsilon \varepsilon \supset 0$ (preserved as such in the Toende dialect) to become *ja ua iə ue*, realised as written but patterning throughout as phonemic *monophthongs*. Kusaal has also developed many phonemic diphthongs from fusion of vowels after deletion of intervocalic **g* and from final fronting and rounding effects left contrastive by apocope, as mentioned above.

The **tone system** resembles the locally common terracing two-tone type in structure, but the original H toneme has become mid (M), displaced by a new H derived from original HL on a single mora. Acute, macron and grave mark H, M and L respectively. 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. However, an unmarked mora after an acute is toneless, with the preceding H toneme realised over both morae.

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

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

dr̄əsídìb "receivers" bāŋıdıb "wise men" gbīgιmnε "lion" (Long Form)

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. Clusters cannot occur word-initially or finally, except for final *mm*, where there has been loss of earlier syllabicity in the second *m*.

Many nominal stems have a **prefix** before the root, taking the forms *CV*- or *CVn*-, less often *CVlun*- or *CVsun*-, e.g. $p\bar{i}p\bar{i}r_{i}g$ "desert." Nominals with prefixes may thus contain -*nC*- clusters at the junction between the prefix and the rest of the stem: $d\hat{i}nd\bar{e}og$ "chameleon."

Other word-internal clusters are confined to loanwords.

Flexional **suffixes**, like prefixes, have only a three-way vowel contrast $a/\iota/v$. Suffix vowels are lost by apocope in the surface Short Forms; when they are retained before prosodic clitics, ιv appear lowered to ε **>**. Clusters of two consonants cccur freely across word division (including within compounds) due to apocope of wordfinal short vowels:

Gbīgım lā dāa kūvd búŋ lā. Lion:sg ART TNS kill:IPFV donkey:sg ART. "The lion (*gbīgım*^{nε}) was killing (*kūvd*^{a/}) the donkey (*bùŋ*^a) ." Most common **particles** are short bound words, like the postposed article $l\bar{a}$ and the preverbal tense marker $d\bar{a}a$ in this example.

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

Kusaal flexional morphology is underlyingly fairly straightforward, but with some morphophonemic complications. These words all belong to the same $g^a|_{s^{\epsilon}}$ noun class, and are all regular:

būvg	"goat"	būบร	"goats"
sàbùa	"lover"	sàbùøs	"lovers"
nūa	"hen"	ทวิวร	"hens"
kūk	"chair"	kūgus	"chairs"
zàk	"compound"	zà'as	"compounds"
dà'a	"market"	dà'as	"markets"
bùŋ	"donkey"	bùmıs	"donkeys"
tēŋ	"land"	tēɛňs	"lands"

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

būvg	"goat"	+ pìəlıg	"white"	→ bù-pìəlıg	"white goat"
būvg	"goat"	+ sī'a	"another"	→ bù-sī'a	"another goat"
kūk	"chair"	+ pìəlıg	"white"	→ kùg-pìəlıg	"white chair"
kūk	"chair"	+ kàŋā	"this"	→ kùg-kàŋā	"this chair"

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

Like virtually all the local languages (including *Gaanancii* Hausa, and, disconcertingly for a British native speaker, even some local English) Kusaal makes no grammatical distinction between male and female. In the English translations I have used "he" or "she" randomly where the antecedent is unspecified. A characteristic feature of Western Oti-Volta is a striking simplification of **verb flexion**, with just one "conjugation" of prototypical dual-aspect verbs, using the bare stem for **perfective** aspect and marking the **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:

kū	pfv	kūvd	ipfv	"kill"
ňyε	pfv	ňyēt	ipfv	"see"
vūl	pfv	งบิท	ipfv	"swallow"

Dual-aspect verbs also have an imperative flexion $-m^a$, appearing only in positive polarity when the verb has independency-marking tone overlay (see below.)

Single-aspect verbs typically express body positions, relationships, or predicative adjectival senses. They have only a single finite form, which always has imperfective aspect; as a lexical matter, they can be dynamic or stative:

Ò dìgı	nē.	"She's lying down."
зам be.lying.	down foc.	
Ò mòr búŋ).	"She has a donkey."
зам have don	key:sg.	
Ò gìm.		"She's short."
зам be.short.		

There are two **verbs** "to be": $b\dot{\epsilon}$ "exist, be in a place" and $\dot{a}\underline{e}n$ "be something/somehow." $\dot{A}\underline{e}n$ is usually followed by the focus particle $n\bar{\epsilon}$ whenever syntactically permitted, and then loses both the final \underline{e} and the nasalisation:

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

The two "be" verbs share a common negative-verb counterpart $k\bar{a}$ 'e "not be", which usually appears as $k\bar{a}$ ' 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: *kvob* "killing", *kvod* "killer", *kvod(ŋ* "killing implement."

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Compound formation, besides being the regular way of adding adjectives to nouns, is common in NP formation generally; there are many set expressions, but compounds of all kinds can be created freely: e.g. *gbigim-kovd* "lion-killer."

Syntactically, Kusaal is strictly $\boldsymbol{SVO},$ with indirect objects preceding direct:

M tís dụ'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**, $n\bar{\epsilon}$ "with" and $w\bar{\upsilon}\upsilon$ "like" ($n\bar{\epsilon}$ also links NPs and some AdvPs in the sense "and", but $k\dot{a}$ is "and" when linking VPs and clauses.)

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

m̀ bīig	"my child"
dāu lā biìg	"the man's child"

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

The liaison word n^{ϵ} mentioned above is a very general locative postposition. It is hyphenated to the preceding word, and in its Short Form is reduced to n:

mù'arī-n	"in a lake" (<i>mù'arɛ̃</i> "lake", Long Form)
lake:sg-loc	

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

Gbīgım lā sá kò bómìs lā. Lion:sg art tns kill donkey:pL art. "The lion killed the donkeys yesterday."

Gbīgıma lā dāa pī kī búŋ láa +ø. Lion:PL ART TNS NEG.IND kill donkey:SG ART NEG. "The lions didn't kill the donkey."

The **focus** particle $n\bar{\epsilon}$ may focus VPs or VP constituents (as after a e n "be something" above), but if no unbound words intervene between the verb and $n\bar{\epsilon}$ and

the verb meaning permits, it instead has an *aspectual* sense, limiting the reference of the VP to "at the time referred to in particular":

Nīdıb	kpîìd.		"People die."
Person:	L die:IPF	<i>.</i>	
Nīdıb	kpîìd	nē.	"People are dying."
Person:pl die:IPFV FOC.			

The Kusaal VP is specifically marked for the *absence* of subordination. Main and content clauses have **independency marking** of the first VP, marked by a **tone overlay** affecting the first word and by the tone sandhi of subject pronouns. The tone overlay is absent in negative polarity or irrealis mood and with various preverbal particles; independency marking itself is altogether absent after the clause-linker particle $k\dot{a}$ even in *coordinating* function, as in narrative:

Ò zàb dự'átà.	"He's fought the doctor."		
3AN fight doctor:sg.			
Ò gòs dỵ'átà.	"He's looked at the doctor."		
3AN look.at doctor:sg.			

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

Kà	ò	záb	du̯ˈátà.	"And he fought the doctor."
And	3AN	fight	doctor:sg.	
Kà	ò	gīs	dự'átà.	"And he looked at the doctor."
And	3AN	look.	at doctor:sg.	

When the verb itself has the tone overlay, clause-final perfectives are followed by the particle $y\bar{a}$, and imperatives of inflecting verbs take the ending $-m^a$:

	Dā	gīs	du̯'átāa	+ø!	"Don't look at the doctor!"
	NEG.IMP	look.at	t doctor:so	G NEG!	
but	Gòsım	du	'átà!		"Look at the doctor!"
	Look.a	t:IMP do	octor:sg!		

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

Fù yá' bòod, m ná tīsi f búŋ.
2sg if want, 1sg IRR give 2sg.oB donkey:sg.
"If you want, I'll give you a donkey."

Kusaal does not have canonical serial verbs, but clause subordination by **catenation** creates very similar structures with the same-subject catenator particle *n*; in this example *t*is "give" is used simply as means of adding an indirect object:

M dāa kúès bùŋu ø tís dự'átà.
1SG TNS sell donkey:SG CAT give doctor:SG.
"I sold a donkey to Doctor."

Clause catenation can introduce a different subject by using ka instead of n; one use is adnominal, with a meaning like a non-restrictive relative clause:

Lì à nē gbīgım lá kà ṁ ňyēt. 3INAN COP FOC lion:SG ART and 1SG see:IPFV. "It's the lion I see."

A second type of subordination is **nominalisation** by insertion of the nominaliser particle \dot{n} (frequently realised as segmental \emptyset) after the subject:

gbīgιm lá_ ø kū búŋ "the lion having killed the donkey" lion:sg ART NZ kill donkey:sg ART

One type of relative clause is internally-headed:

[*Paul* ǹ sɔ̄b gbáu̯ŋ-sī a n tís Efesus dím lā] ø ňwá. Paul Nz write letter-INDF.INAN CAT give Ephesus one.PL ART CAT this. "This is [the letter Paul wrote to the Ephesians]." (NT heading)

Here $gbaun-si^a$ is gbaun "book" compounded with the dependent pronoun si^a which marks it as antecedent, and the bracketed sequence is the relative clause. The subordinator is not the pronoun but the nominaliser particle \dot{n} .

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

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dàu-kànı pu'ā kpí lā "the man whose wife has died" man-rel.sg wife:sg die ART

A third type of subordinate clause uses the initial linker particles $y\bar{\varepsilon}$ or $k\dot{a}$ in **complementisation**. Purpose clauses are of this type:

 \dot{M} ná tī f tíìm yế fờ nĩf dā zábē +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."

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

Dau da be mori o po'a yimmir, ka po'a la ye **on** pu lem bood ye o sid la di po'a ya'ase. Dāu dá bè ø mōrí ò pu'à-yīmmír, kà pu'ā lā yē Man:SG TNS EXIST CAT have 3AN wife-single:SG and wife:SG ART that ōn pō lém bòod yé ò sīd lā dí pu'ā yá'asē ⁺ø. 3AN.CNTR NEG.IND again want that 3AN husband:SG ART take wife:SG again NEG. "There was a man who had only one wife. [And] the wife said that **she** did not want her husband to take another wife." KSS p26

Clefting constructions are based on catenation. By ellipsis they produce structures using *n* for focussing subjects and ka for foregrounding other elements:

Ň zūgv_ø zábìd.	"My head is hurting."
1SG head CAT fight:IPFV.	(Reply to "Where is the pain?")
Gbīgím kà ṁ dāa ňyē.	"It was a lion that I saw."
Lion:sg and 1sg TNs see.	

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

Fù bóòd bó +ø?	"What do you want?"
2sg want what cq?	

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Bj kà fù ňyĒtá +*ø*? "What can you see?" What and 2sg see: IPFV cq?

Ànɔ´'ɔnì ø kū búŋ lā +ø?
Who cat kill donkey:sg art cq?
"Who has killed the donkey?"

Place and manner adjuncts may only precede the subject if preposed with $k\dot{a}$:

M̄ɔ̄ɔgú-n kà mām bɛ́. "I'm in the bush." BNY p10 (*kà required*) Grass:sg-Loc and 1sg.CNTR EXIST.

Kusaal **narrative** links clause after clause with *kà*, regularly omitting tense marking so long as the action is preceding in sequence, but including it when there are descriptive passages or "flashbacks":

Apuzotvel 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-zót-yēl dá à né ò sàam bîa mà'aa. PERS-NEG.IND-fear: IPFV-thing:SG TNS COP FOC 3AN father:SG child:SG only. zíň'i ø Kà dāar yīnní kà bīig lā né ò sàam รวิทีรเd. And day:sg one and child:sg ART with 3AN father:sg sit CAT CONVERSE: IPFV. Kà bīig lā tí vèl ò sàam νē ... And child:sg ART after 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

The past-tense marker $d\dot{a}$ occurs only in the first clause. The second $k\dot{a}$ is preposing the time expression $d\bar{a}ar y\bar{i}nni$ in a foregrounding construction, while the first and third are carrying on the narrative.

Morphophonemics

2 Preliminaries

2.1 Rule order

Segmental rules apply in the order: consonant assimilation/epenthetic vowel insertion <u>5.4</u>, vowel fronting/rounding <u>5.5</u>, *g-deletion/vowel fusion <u>5.6</u>, apocope <u>5.1</u>.

Tone Patterns <u>6.1</u> allocate tonemes prior to all segmental changes which delete morae, including apocope. The tone overlay of independency marking <u>19.6.1.1</u> precedes external tone sandhi, which follows apocope. The only necessary ordering among external tone sandhi rules is that M spreading <u>7.3</u> comes last. Toneme delinking <u>4.2</u> follows M spreading.

2.2 Morae, syllables and stress

All segments constitute **morae**, except for consonants immediately followed by vowels within the same word; other consonants represent non-vocalic morae. Written $k p t \eta$ between vowels represent $kk pp tt \eta\eta$, so that e.g. $s\acute{u}$ ' $e\eta$ SF "rabbit" has three morae, while the LF $s\acute{u}$ ' $e\eta\bar{a}$ has four. Vocalic morae are the domain of tone, but not all vocalic morae bear a toneme <u>4.2</u>.

All vocalic morae form **syllables**, except for the final morae of 2- and 3-mora vowels/diphthongs. **Three-mora vowel sequences are disyllabic**, with syllable division following the first mora: LF $n\bar{u}$ -áa "hen."

Stress falls on the root syllables of free words, but it is subject to complex sandhi phenomena which are yet to be properly investigated. It is probably never contrastive; $s\bar{a}b(l)$ "black" and $S\bar{a}-b(l)$ "Zebilla", for example, seem to be homophones, and some roots have been reinterpreted as prefixes:

	dìtúŋ	[dɪt:ʊŋ]	"right hand" ← dì ⁺ "eat"
	dàtìựŋ	[datıʊ̯ŋ]	"right hand"
	būtıŋ	[bʊt:ɪŋ]	"cup" (originally the instrument noun from
			<i>bùd</i> ^ε "plant seeds"; now "cup" in general)
pl	būtus	[boti:s]	showing reanalysis as prefix <i>b</i> \$\vec{\nu}\$ + <i>t</i> \$\$\vec{\nu}\$

Stress affects the realisation of the H toneme, but for descriptive purposes it is only necessarily to single out *CVVC* syllables as "superheavy", and the details of stress can otherwise be abstracted away 4.1.

2.3 Free and bound words

Open word classes comprise verbs and nominals, the latter subdivided into nouns and adjectives, along with closed subclasses of quantifiers, adverbs, and pronominals. Ideophones are treated in <u>17</u>. All other words are "particles."

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 analysed into parts that may (all of them) be uttered alone (with meaning.)" However, most nouns and adjectives possess regular "combining forms", found exclusively with following words as parts of compounds. Combining forms appear as dependents, but more often as NP heads before adjectives and even dependent demonstratives: $ti \cdot ka\eta \bar{a}$ "this tree"; compounding of lexical heads and demonstratives is cross-linguistically very uncommon, and has been claimed to be impossible, but it is regular in Kusaal and its close relatives, demonstrating at least that compounding has an atypical syntactic status in these languages. Compounds may incorporate unbound words: [$\bar{a}nz'urifa n\bar{\epsilon} s\bar{a}lima l\dot{a}'$ -]māan "[silver and gold goods]-maker"; moreover, there is no consistent segmental phonological difference between combining forms and free words. Accordingly, combining forms will be regarded as bound *words*. Traditional orthography normally writes them as word fragments, but in this grammar they are hyphenated to the following element.

Many pronouns and particles are not only bound, but show limited phonological possibilities, resembling free word affixes. Again, some nominal combining forms in set expressions show phonological simplifications presumably connected with a consistent absence of stress, as do some preverbs. It is tempting to describe all such words as **clitics**, but Kusaal stress allocation probably does not distinguish between bound and free words as such. The best candidates for clitic status are a group of words which are bound to the left and preceded by liaison <u>7.2</u>: they have tonemes determined by the preceding host, and in turn may have particularly complex segmental and tonal effects on their hosts; some have even been traditionally regarded as suffixes. However, even this group shows no distinctive stress behaviour, and liaison itself also occurs before free words. Accordingly, I will use the non-committal terms "left-bound" rather than "enclitic" and "right-bound" rather than "proclitic" below, reserving the term "clitic" for prosodic clitics <u>7.1</u>.

The bound morphemes preceding the verb in the VP have clear syntactic functions, and occur in a fixed order where absence of any morpheme may itself be meaningful, but I follow the orthographic tradition in writing them as separate words. However, any initial bound morphemes in nominal stems which are not themselves nominal combining forms are straightforward derivational **prefixes** synchronically, though historically some have arisen from combining forms or fossilised flexions.

See further Spencer and Luís 2012 (Ch 7) on the question of distinguishing bound words and clitics from affixes.

Preliminaries

Boundness is quite distinct from syntactic *dependency*, which is a feature not only of words but of phrases and clauses. Most open-class words are neither bound nor intrinsically dependent, and most particles are bound and always dependent. However, nominal combining forms, which are always bound, may be dependents or heads, and bound personal pronouns are *never* dependent. In a case like \dot{m} *bīig* "my child", the 1sg pronoun \dot{m} by itself constitutes a NP, and it is this *whole NP* which is the predependent of *bīig* "child", exactly parallel in syntax to *nà'ab lā bîig* "the chief's child", where the free NP *nà'ab lā* "the chief" is the predependent. In Kusaal, pronouns as dependents always behave like adjectives, invariably following the head, which is normally a combining form, as with *tì-kàŋā* "this tree" above.

2.4 Word division

Nominals with prefixes, loanwords, and unanalysable stems are written solid, but nominal combining forms are hyphenated the the following word:

bùrkìn	"honest person"	kpùkpàrıg	"palm tree"
zīm-gbáň'àd	"fisherman"	bù-pìəlıg	"white goat"
bù-kàŋā	"this goat"	bù-pìəl-kàŋā	"this white goat"

In the traditional orthography compounds are written as single words, except when a cb happens to have the same segmental form as the sg: *bvkaŋa bù-kàŋā* "this goat", but *yamug bipuŋ* (Acts 16:16, 1976) for *yàmmvg-bī-púŋ* "slave girl."

Pronouns reduced to single consonants by apocope 5.1 are still written as independent words in the orthography of this grammar:

M bʻsdī	f.	"I love you."	[mbɔ:dɪf]
1sg want	2SG.OB.		

Traditional orthography writes pronouns as separate words when they have vowels of their own, as also with the object pronoun m "me" prior to 2016:

Fu bəədi ti.	"You love us."	[fʊbɔ:dɪtɪ]
Fù bʻodī tí.		
2SG want 1PL.OB.		

Before 2016, the final mora before 2sg f was separated from the verb and joined to the pronoun, creating spurious pronouns *if uf*; thus *M bood if* and

```
1996 M nye uf. "I've seen you." [mj̃ε̃õf]
M̀ ňyέo_f.
15G see 25G.0B.
```

KB writes both object pronouns m f solid with the preceding word:

Fv bɔɔdim. Fv bɔ́ɔdī, m.	"You love me."	[fʊbɔ:dɪm]
2SG want 1SG.OB.		
M bɔɔdif.	"I love you."	[m̥bɔ:dɪf]
Ѝ bɔ́ɔdī_f.		
1SG want 2SG.OB.		

The liaison word <u>7.2</u> pronoun ^o [v] "him/her" loses its entire segmental form by apocope, after causing the final vowel mora of the preceding word to become [v]. This vowel mora has traditionally been mistaken for the pronoun itself and written separately; as a concession to tradition, it is separated from the rest of the host by a raised point $\cdot o$; the form without apocope is written as ending in $\cdot o$ -o.

Fv bəəd o.	"You love her."	[fʊbɔ:dʊ]
Fù bʻ́ɔd∙ō_ø.		
2SG want 3AN.OB.		
Fu pu bood oo.	"You don't love her."	[fʊpʊbɔ:dʊ:]
Fù pū bʻsd∙ó-o +ø.		
2SG NEG.IND want-3AN.OB NEG.		
Fυ nyε o.	"You've seen her."	[fʊj̃ɛ̃ʊ̃]
Γύ ňyέ·ο, ø.		[10]00]
2SG See 3AN.OB.		
<i>Fυ ρυ ηγε οο</i> .	"You've not seen her."	[fʊpʊj̃ɛ̃ʊ̃:]
Fù pū ňyē∙ó-o +ø.		
2SG NEG.IND SEE-3AN.OB NEG.		

Locative $n\varepsilon$ and discontinuous-past $n\varepsilon$ are reduced to n by apocope, and the postposed 2pl subject pronoun ya is reduced to zero. They are preceded by liaison changes just like the object pronouns; postposed ya is in complementary distribution with subject ya, and locative $n\varepsilon$ has an allomorph $n\overline{i}$ with a vowel. All are best regarded as words and not flexions; for supporting tonal evidence see <u>4.2</u>. They are

therefore hyphenated to the preceding word in the working orthography: *pvvgv-n* "inside", *b>odi-n* "might wish"; traditionally they are written solid with the preceding word: *pvvgvn*, *b>odin*.

The personifier particle \dot{a}/\dot{n} , traditionally written solid with the following word, will also be hyphenated to its host, as it can be attached to entire phrases <u>15.5</u>.

Traditional orthography always writes focus- $n\bar{\epsilon}$ solid with preceding \dot{a} "be", and usually with other preceding verbs too:

O anε biig. "He/she's a child." Ò à nε bīig. 3AN COP FOC child:sg.

Bipuŋ la pv kpii, o gbisidnɛ. Bī-púŋ lā pū kpíi +ø, ò gbìsıd nē. Child-girl:sg ART NEG.IND die NEG, 3AN sleep:IPFV FOC. "The girl is not dead, she is sleeping." (Mt 9:24)

 $N\bar{\epsilon}$ "with" is traditionally written solid with preceding $w\bar{\epsilon}n$ "resemble":

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

In KB wēn nē appears as nwene: Ka o nindaa nwene winnig ne.

A word-final syllable before a prosodic clitic is often mistaken for a segmentally homophonous particle in older materials, and occasionally even in KB:

Amaa fυ anε ninsaal ka ka' win nε. Àmáa fὺ á nɛ̄ nīn-sáàl kà kā' wīnnέ ⁺ø. But 2sg cop Foc person-smooth:sg and NEG.BE god:sg NEG. "But you are a human being and not a god." (Ezekiel 28:2)

Arezana nɛ dunia gaadug pu tɔi yaa Àrazánà nɛ̄ dūnıya gáadùg pū̄ tɔ̄yá ⁺ø. Heaven with world passing NEG.IND be.difficult NEG. "The passing of heaven and earth is not difficult" (Lk 16:17)

3.1 Consonants

The following symbols are used, corresponding to the consonant phonemes of the language (with kp gb as digraphs):

k	t	p	kp			
g	d	b	gb			
ŋ	n	т				
	S			f		h
	Ζ			V		
	1					
	r					
			W		У	

Values resemble the corresponding IPA symbols, except as noted below. t d n s z l r represent alveolars in general, but s z are often dental, or even interdental. Before the vowel u, s and z are sometimes heard as [ʃ] [ʒ].

s is often realised as [h] word-internally. It can represent h in loanwords:

Àláasìd (dáar)	"Sunday"	← Hausa <i>Lahàdì</i> (← Arabic)
Dàsmáanì	عبد الرحمن	ናAbdu-r-Raħma:n(i)
or Dàhamáanì		(personal name)

h itself is marginal as a phoneme, occurring only syllable-initially in loanwords; however, these include the very common $h\bar{a}li$ "as far as."

r represents [r], except after an epenthetic vowel, where it is [L]. It does not occur as a separate phoneme word- or root-initially.

d represents [d]. However, word-initial *d* is frequently realised as [r] phrase-internally after a word ending in a vowel, and invariably so within compounds:

nɔ̄-dáùg [nɔraʊg] "cock" nā'-dáàd [na̠ra:d] "oxen" vs wìd-dāʋg [wɪd:aʊg] "stallion"

Word-initially, *d* will be written throughout. Some words are written with rootinitial *r* after a prefix vowel, following traditional orthography: $t\bar{t}r\dot{a}an^a$ "neighbour", $\dot{a}raz\dot{a}k^a$ "riches", $\dot{a}raz\dot{a}n\dot{a}^+$ "heaven", $\dot{a}r\dot{a}k\dot{o}n$ ' "one." It is not clear whether *r* contrasts with *d* in this position.

In rapid speech non-initial d may also resemble [r], but d and r clearly contrast after root and epenthetic vowels in Agolle Kusaal:

<i>È</i> ňdıg	"unplug"	ĒŇrIg	"shift along"
mɔ̄d	"swell"	mōr	"have"
yàad	"graves"	yāar	"scatter"
zàbıd	"fight" (ipfv)	zàbır	"fight" (gerund)

n is syllabic when representing various particles, and as the number prefix; when syllabic, it assimilates to the position of a following consonant.

I is never velarised.

z is only found word-initially and after prefixes.

 $k \ t \ p$ represent [k^h] [t^h] [p^h] word-initially and after prefixes, and [k] [t] [p] elsewhere. The aspiration is comparable to that of English initial voiceless stops; it will be ignored in transcription elsewhere. After root vowels, $k \ t \ p$ represent /kk/ /tt/ /pp/ except when word-final, but are only *realised* as geminates in very slow speech. Word-final $g \ d \ b$ are partly devoiced, but contrast with the unaspirated single $k \ t \ p$.¹

 η is realised [η] word-finally, but [η :] between vowels in slow speech. Original initial * η has disappeared, and existing Kusaal η is always the result of the assimilations * $mg *ng \rightarrow \eta\eta$.

 $k g \eta$ show considerable allophony, which will be ignored 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:

tóklàe "torch" ← English "torchlight" sógįà "soldier" (probably via Hausa soojà)

Before rounded vowels, velars are labialised. Before *a* and *c* velars are pronounced further back, or even as uvulars:

kòbıgā [q^wobıga] "hundred"

f v are labiodental fricatives, found only word initially, after prefixes, and in the noun class suffix $-f^{2}$:

fōfōm "envy" náaf "cow"

¹⁾ Toende Kusaal word-final *g d b* normally become *k t p*, but *g b* (not *d*) remain at the end of verb perfectives and cbs; there are minimal pairs like *ya*'*ab* "mould pots"/ *ya*'*ap* "potter." Apocope in Toende thus occurs in two steps, with the round for rightbound words and perfectives *following* word-final stop devoicing.

m is syllabic when standing alone as the 1st sg pronoun "I, my." Unlike syllabic n, syllabic m does not assimilate its position of articulation to a following consonant.

The sequence -*m*^{*i*} preceding liaison can absorb the vowel to become -*m*:

Gòsımī m!	"Look at me!"
Gòsīm.	"Look at me!" vs Gòsım! "Look!"
Gòsımí fù nú'ùg!	"Look at your hand!"
Gòsím fù nú'ùg!	id

m can form the unique word-final cluster mm [m:], as in $p\bar{a}mm$ "a lot." The second m was once syllabic, but is now consonantal, and cannot bear a toneme.

kp gb represent the labiovelar double closures [kp] [gb]; kp is not aspirated. They occur only word- and root-initially before unrounded vowels, and for some speakers in reduplication-prefixes like kp v kp ar ug "palm tree" where others have k v kp ar ug etc. Otherwise kp gb are in complementary distribution with labialised velars, which could be ascribed to these phonemes rather than the velars.

kūm	"death"	cf <i>kp</i> ì	"die"	
kōba	"bones"	cf Gulimancéma	kpábá	id
kpàkūr	"tortoise"	cf Dagbani	kpàkpílí	id

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

bákpàe	"week"	← Hausa	bakwài	"seven"
νακράς	WEEK	< Hausa	Darwai	367611

y w are [j] [w] respectively. They are strongly nasalised before nasalised vowels, and are then written ny nw with no nasalisation marking on the vowel:

ňyĒ	[<i>ĵ</i> ɛ̃]	"see"	ňwādıg	[ŵãdıg]	"moon"
ňw <i></i> ċ'	[ŵɛ̃]	"beat"			

ňy ňw reflect earlier initial n ηm respectively, cf Dagbani nyá "see", ŋmariga "moon", ηme "beat." Some Toende speakers retain initial [ŋ] [ŋm]. Kusaal initial nasalised vowels reflect earlier initial η: Dagbani ŋubi, Kusaal ɔ̀ňb "chew."

w occurs only root-initially, i.e. word-initially and after prefixes: *w* ∂ *f* "horse", *d* ∂ *w*a*n* "pigeon"; however *y* occurs not only root-initially, but also medially before *a*: *y*a*n* "grandchild", *d* ∂ *y* \bar{u} *ug* "rat", *n* \bar{j} *y*a "mouths." Syllable-final *y w* are replaced by the glides *i*/*e* and *u* respectively 5.5.

3.2 Vowels

Agolle Kusaal has a basic seven-vowel system /a/ /ɛ/ /ɔ/ /i/ /u/ /ɪ/ /ʊ/, written by default as $a \varepsilon \circ i u \iota v$ respectively. Long vowels contrast with short vowels in length, but not quality. They are written by doubling the vowel symbol: $b\bar{a}a$ [ba:] "dog."

The allophony $[I] \sim [i]$ and $[\upsilon] \sim [u]$ in epenthetic and prefix vowels <u>5.2</u> is ignored, only $\iota \upsilon$ being used. Written *e o also* represent $[I] [\upsilon]$; *e* is used for non-initial elements of diphthongs, except after ε , and *o* for non-initial elements of diphthongs, except after *a*. The symbol *o* also represents $[\upsilon]$ in the 3sg pronoun *o*, and in the mora preceding it in liaison, which is written $\cdot o$; any nasalisation mark \check{n} precedes $\cdot o$.

	dī'e	[dii]	"receive"	pāe	[paɪ]	"reach"
	bēog	[bɛʊɡ]	"tomorrow"	kpī'oŋ	[kpiຼʊŋ]	"strong"
	ò bīig	[ʊbi:g]	"her child"	zú∙o	[zuʊ]	"steal him"
	dà'∙o	[daʊ̯]	"bought for him"	āň∙o	[ãữ]	"be him/her"
but	bēι	[bɛɪ]	"be ye!"	dāvg	[daʊg]	"male"

The vowel ι is more central after velars and labials, and v is slightly more front after alveolars and y; u is noticeably fronted after alveolar consonants, which may then even be realised as palato-alveolars. This is particularly common with z: [3yg] for $z\bar{u}g$ "head."

The glide symbols $\underline{e} \underline{i}$ both represent \underline{i} , but in \underline{u} and in the monophthong $\underline{i}e$ the realisation of \underline{i} is as [\underline{i}]. The symbol \underline{u} always represents [\underline{v}].

sɔ̄e̯ň	[sõı]	"witch"	mùį	[mũị]	"rice"
gbàỵŋ	[g͡baʊ̯ŋ]	"book"			

pìəlıg	[piəlɪg]	"white"	bū' o s	[bu̯es]	"ask"
tjàk	[tı̯ak]	"change"	pyāk	[pʊ̯ak]	"female"
kpįà'	[kpiä]	"shape wood"	kįà	[kɪ̯a]	"cut"

All other sequences of dissimilar vowel symbols represent phonemic diphthongs.

The glides $\underline{e}/\underline{i} \underline{u}$ contrast with $\underline{y} \underline{w}$ in not forming syllable boundaries or consonant clusters, either as components of the digraphs $\underline{i}a \underline{u}a$ representing single short vowel phonemes, or as the final components of short diphthongs:

bįāųňk	[bıãʊk]	"shoulder"	buàk	[bʊ̯ak]	"split"
dāỵ	[daʊ̯]	"man"	gbàỵŋ	[g͡baʊ̯ŋ]	"book"
sīeň	[sõı]	"blacksmith"	mùį	[mũị]	"rice"
tōe	[tɔɪ]	"be bitter"			

Word-final $-V_{\underline{e}} -V_{\underline{i}} -V_{\underline{v}}$ behave exactly like word-final short root vowels in being followed by [?] before pause in statements <u>3.2.4</u>:

Ò à nĒ dāỵ. [ʊanɛdaʊ̯ʔ] "He is a man."

Word-initial ya [ja] contrasts with ia [ja] in the tenseness of the semivowel, and probably in timing features; the contrast is not [?ja] ~ [ja].

įā	[ɪa]	"seek"	уā	[ja]	"houses"
----	------	--------	----	------	----------

KB has *uak* "inundate", which would contrast segmentally with *wak* "be sleepless" (from Naden's dictionary.)

There are great differences in the range of vowel contrasts possible in different positions within a word. Correlation with stress is only partial, so the system is best regarded as involving positional prominence. Diphthongs, glottalisation, emic nasalisation and the sevenfold quality contrast appear only in root vowels <u>5.2</u>.

There are few minimal pairs for $i/\iota u/v$ in short vowels, except when shortened by apocope <u>5.1</u> from $ii/\iota uu/vv$. Examples are

lìdıg	"astonish, be amazed"	lìdıg	"turn a shirt" WK
sībıg	antelope species KED	sībıg	"termite"
bùl	"astonish"	bùl	"germinate"
ùk	"vomit"	ūk	"bloat"
būn	"thing"	bùn	"germinate" ipfv
kūdug	"old"	kūdvg	"piece of iron"
kūg-káŋā	"this mahogany tree"	kūg-káŋā	"this stone"
tūlıg	"heat up"	tùlıg	"invert"

3.2.1 Length

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

gàad	"pass" pfv	gàt	"pass" ipfv
tēɛg	"drag, draw"	tēk	"pull" (*tɛɛkkı)
Hausa	tèeku	àtìu̯k	"sea"
Hausa	<i>kootù</i> (← English)	kótù	"court"

On 3-mora diphthongs see <u>3.2.5</u>. A 3-mora monophthong appears in $m\dot{a}$ 'aa "only"; everywhere else, 3-mora monophthongs reduce to two morae <u>7.1</u>.

Non-glottalised long vowels are shortened before word-internal *y 5.3.1.

Short *i u* may appear where long vowels might be expected. $Z\bar{u}g$ "head" is the sole case where non-glottalised $CV \sim CVV$ roots show a short allomorph before *g (cf Farefare $z\acute{u}ug\acute{o} id$); $s\ddot{u}nf$ "heart" is the only instance of short un not attributable either to apocope or to shortening before *y*; $n\bar{l}f$ "eye" is the only case where $*nC \rightarrow C$ after a root vowel which remains short; $b\dot{u}g\acute{o}m$ "fire" has the tonemes that would be regular for $*b\dot{u}ug\acute{o}m$; $d\bar{u}niya$ "world" corresponds to Hausa duuniyaa and $t\bar{l}as$ "necessity" to Hausa tiilas. However, long *ii uu* occur in many words, and there seems to be no single regular shortening process involved.

3.2.2 Breaking

The sequences $i \partial u \partial$, realised with the corresponding IPA values, pattern throughout as long *monophthongs*, with *i a u a* as the corresponding short vowels. They may be nasalised or glottalised, and are subject to the fronting and rounding processes described below <u>5.5</u> just like other monophthongs. They will be described as monophthongs throughout this grammar. All other sequences beginning with written *i u* are *diphthongs* both phonetically and phonemically.

Toende Kusaal preserves these vowels as *phonetic* monophthongs, more open than the Toende *close* vowels corresponding to Agolle vowels which have expanded into the phonetic space vacated by breaking to become *open* ε $2 \varepsilon 22$:

Toende	Agolle	
sēēs	รเิอร	"waists"
pē'ēs	pē'es	"sheep" pl
b <i>á'</i> ɔs	bū' o s	"ask"
tōom	tōɔm	"depart, disappear"

Proto-Kusaal also preserved other contrasts, like Mooré; Kusaal ככ/ue pairings correspond to Mooré oo, but Mooré ao corresponds to ככ/ככ: Toende bòòt, Agolle bòɔd, Mooré bàoda "want, wish."

Long oral $\epsilon\epsilon$ c c probably arose historically either from *Vy *Vw or as the result of levelling within nominal paradigms <u>5.5</u>. Short ϵ c do not contrast underlyingly with $ja \, ya$ (see below.)

 $i \partial u \theta$ may only occur word-finally through loss of fronting in word-final *ie ue* by phrase-internal sandhi <u>7.5</u>:

píə tī	"wash us"	(pīe	"wash")
dúə tī	"raise us"	(dūe	"raise")

Word-final $i \partial u \partial u \partial u$ diphthongise to *ia ua* before prosodic clitics, but not liaison: thus the pfv Long Forms <u>5.1</u>:

kīa	[kia] "cut"	cf <i>kìəd</i>	ipfv
kūa	[kua] "hoe"	cf <i>kūød</i>	ipfv

Nasalised *iəň uəň* (including after *m n*) occur only before underlying **g*, and in the ipfv of fusion verbs by analogy <u>5.6</u>. In all other contexts original * $\tilde{\epsilon}\tilde{\epsilon}$ * $\tilde{2}\tilde{2}$ and * $\tilde{e}\tilde{e}$ * $\tilde{0}\tilde{0}$ have fallen together as $\epsilon\epsilon n 20$. They were distinct historically: cf $n\bar{2}r$ "times", Mooré náooré, $n\bar{2}r$ "mouth", Mooré nóorè.

The short vowels corresponding to *iə ue* are *ja ua* [<code>ja</code>] [<code>va</code>].

These, too, pattern as simple vowels throughout: siak "agree" and byak "split" do not violate the constraint that words begin with at most one consonant.

Short *ja ua* have just two origins. Apocope <u>5.1</u> shortens final *ia ua* to *ja ua*:

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

Elsewhere, *ja ua* replace ε \supset before *k* and before underlying **g*, which is deleted, with vowel glottalisation and fusion <u>5.6</u>. B \supset *k* "pit" contrasting with *buàk* "split" is due to the rounding change **uakkv* $\rightarrow \supset kkv$ <u>5.5</u>, while $t\bar{\varepsilon}k$ "pull", contrasting with *tjàk* "change" is due to shortening of a long vowel before an original plosive cluster **t* $\varepsilon\varepsilon kk\iota$ <u>3.2.1</u>. Presumably $n\bar{\jmath}k$ "pick up" is similarly derived by shortening of **n* $\supset kk\iota$; Toende Kusaal has $n\supset k$, with a variant form $n \supset \Box$ (for **n* $\supset \Box$).

Short *je ue* [j1] [y1] appear only in the context of $r^{\varepsilon}|a^+$ class plurals of nominals with stems in *i* ∂ and *uo*, where the stem vowel is shortened before -*ya* <u>5.3.1</u>:

bīər	"elder same-sex sib"	pl <i>bi̯ēyá</i>	
sūør	"road"	pl <i>sųēyá</i>	KB suoya

3.2.3 Nasalisation

Nasalisation is marked by \check{n} following an entire vowel or diphthong unless it is also glottalised, when the \check{n} precedes the ' mark; however, after initial y or w nasalisation is marked with \check{n} before the y or w:

tēɛňs	[tɛ̃:s]	"lands"	áňsìb [ãsɪb]	"mother's brother"
gēň	[gɛ̃]	"get tired"	<i>gĒŇ</i> ' [gɛ̃]	"get angry"
gēň'ɛd	[gɛ̃:d]	"get angry" ipfv	<i>ňwām</i> [ŵãm]	"calabash"

Contrastive nasalisation often represents originally automatic nasalisation after $n + \eta + \eta n$, or arises before underlying $n + \eta n + \eta n$.

Short *iň uň* are laxer than oral *i u*, but there are no contrasting short $*\iota n * \upsilon n$. In all but one case, short *iň uň* arise from apocope <u>5.1</u> of *iiň uuň*:

sīiňf	"bee"	cb <i>sīň-</i>
zùuňg	"vulture"	cb <i>zùň-</i>

The only remaining case is *sūňf* "heart" (pl *sūňyá* cb *sūň-*); KB writes *svnf*. Nasalisation is automatic on long vowels preceded by a nasal consonant:

*m*εεd "build" ipfv [mε̃:d]

Nasalised *iəň ueň* occur only in fusion verbs <u>5.6</u>. Long $\iota\iota \check{n} \, \upsilon \upsilon \check{n}$ contrasting with *iiň uuň* appear exclusively from the change of **nf* **ns* to *f s* with nasalisation of the preceding vowel <u>5.4</u>:

	níiŋ	"bird"	
but	píıňf	"genet"	pl <i>pīıní</i>
	zùuňd	"vultures"	
but	zú'uňf	"dawadawa seed"	pl <i>zū'טחנ</i>
	tèŋ-zùuňs	"foreign lands"	sg tèŋ-zùŋ

3.2.4 Glottalisation

Glottalisation is confined to root vowels of free words and cbs and the tense marker $p\dot{a}$ ' "earlier today." It does not affect vowel quality. It is marked by ' following the first/only vowel symbol (including \underline{u}) other than \underline{i} :

	dà'	[da̯]	"buy"	dà'a	[daː]	"market"
	kù'øm	[ku̯em]	"water"	pu̯'ā	[pʊ̯a]	"woman"
but	dįā'	[dīð]	"get dirty"			

Glottalisation may be realised as a creaky-voiced glottal approximant [?] after the first vocalic mora, or the creakiness may be more widely spread within the vowel; but in either case it behaves as a vowel feature, not a consonant. The flap realisation of initial d 3.1 occurs after V' as well as after V.

Tonal considerations confirm that ' is not a consonant. Thus

Lì kā' mólıfō.	"It's not a gazelle."
Lì kā' ↓nú'ugō.	"It's not a hand."

differ in whether the H toneme is realised with a preceding downstep, because the sequence $-l\iota$ - in $m5/l\iota f5$ is a syllable, preventing the application of the rule which inserts downsteps for intonational reasons, whereas the ' in $n\acute{u}'ug5$ is not a consonant and does not begin a syllable <u>4.1</u>.

Glottalisation which has arisen from deletion of *g after $a \downarrow a \downarrow a 5.6$ does not differ phonetically from other types.

An unwritten [?] follows short vowels and diphthongs ending statements and commands, but not questions. Phrase-final $d\bar{a}\mu$ "man", for example, is realised [daʊ̯?]. Before this [?], vowel glottalisation is lost:

	Kà bà gēň.	"and they got tired"	is homophonous with
	Kà bà gēň'.	"and they got angry"	
but	Bà gèň nē.	"they're tired"	differs in realisation from
	Bà gὲň' nē.	"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: $y\bar{v}'vr$ "name", Farefare $y\dot{v}'\dot{v}r\dot{\varepsilon}$; $k\dot{u}'em$ "water", Talni kwo?m; $kp\dot{a}'v\eta$ "guinea fowl", Nabit kpa'uŋ; nɔ̄-ňyá'àŋ "hen", Nabit nɔnya'aŋ.

Nawdm, too, has [?], written h, in many words with Kusaal cognates showing glottalised vowels, e.g. $mt\acute{a}h'$ "three" (in counting) = Kusaal $nt\acute{a}n'$; $n\acute{u}h\acute{u}$ "arm, hand" = $n\acute{u}'\grave{u}g$; $r\acute{a}h\acute{m}$ "bile" = Kusaal $y\ddot{a}'am$ (WK), Farefare $y\acute{a}'\acute{a}m$.

Glottalised short vowels are almost all the result of apocope <u>5.1</u>. Besides $k\bar{a}'e^+$ "not be" ($\leftarrow *kag\iota$) all other cases precede *m* or *ŋ* in closed syllables in some words for some informants. The vowels are written as if long in KB.

kpè'ŋ	"strengthen"	lā'ŋ	"set alight"
nī'm	"meat"	kō'm	"hunger"
sù'ŋā	"well"	sờ'm	"goodness"

Sòŋ pl sòma "good" never has glottalisation. Toende Kusaal, Farefare, Nabit and Talni lack this phenomenon. It probably arose from gemination of *m* ŋ; KB has 385 examples of *an svm* to 47 of *an sv'vm àň sóm* "is good", but 30 of *ka' svm* to 40 of *ka' sv'vm kā' sómm* "is not good" clause-finally.

Yām~yā'am probably represents a conflation of once-distinct yām "sense" (Buli yám, Nawdm rárm) and yā'am "gall bladder" (Buli yáam, Nawdm ráhm.)

3.2.5 Diphthongs

Kusaal has diphthongs of one, two or three morae. Three-mora diphthongs are realised as *disyllabic* with syllable division after the first mora; other sequences of dissimilar vowels are realised as falling diphthongs. Rounding diphthongs occur only word-finally and before velars, fronting diphthongs only word-finally and before y. The digraphs *ia ua ia ua* are phonemic *monophthongs* <u>3.2.2</u>.

Length contrasts among phonemic diphthongs in identical contexts occur only with word-final ae/ae and with avg/aug.

Primary diphthongs include word-final *av avň ui* from **Vw* **Vy* <u>5.3.1</u>, along with those created by fusion, fronting and rounding <u>5.6</u> <u>5.5</u>. All also occur nasalised, and if not 1-mora, glottalised; those written glottalised below *only* occur glottalised

		ia	[ia]	iaa	[ia:]
		įa'a	[ɪ̪aː]		
		ua	[ua]	uaa	[ua:]
		ט'a	[ʊ̪a̪]		
a <u>e</u>	[aɪ̯]	ae	[aɪ]	aee	[aɪ:]
эĕ	[ɔĭ]	o'e	[ũ]		
υ <u>ę</u>	[ŭĬ]	υ'e	[ŭī]		
uį	[ui̯]	ui	[ui]		
		ie	[iɪ]	iee	[i1:]
		ue	[uɪ]	uee	[uɪ:]
aų	[aʊ̯]	av	[aʊ]		
		iu	[iu]		
ι <u>μ</u>	[ŭ]				
εй	[ɣȝ]	80	[ʊ3]		
įaų	[ĭaŭ]	io	[iʊ]		

2-mora diphthongs may become 3-mora by prolongation of the second mora before the polar-question prosodic clitic <u>7.1</u>. The diphthongs v'a v n'a appear as u'aa u n'aa respectively when LF-final.

zū∙ó-o	[zuʊ:]	"steal him"	Long Form <u>5.1</u>
zú∙o	[zuʊ]	"steal him"	Short Form
bēīyá	[bɛɪja]	"be ye!"	Long Form
bε̄ι	[bɛɪ]	"be ye!"	Short Form

3.3 Traditional orthography

For word division see 2.4. Tone is unmarked.

II mm nn are often written single before 2016. KSS uses *ng* for *ŋ*.

Before 2016, *e o* were used for ε , *i* for *i* and ι , and *u* for *u* and *v*; *e o* were sometimes also used for ιv as root vowels. KB has the same basic conventions as this grammar except that *i* is used for both [i] and [I]: *tiig* = *ti* ιg "tree", *biig* = *bīig* "child."

Word-final short - ι after m n is usually written ε in KB; so always with the relative pronouns on ε kan ε lin ε ban ε , and with ano'on ε "who?" before liaison.

e o are used for [1] [v] as in this grammar. In addition, the pronouns $\frac{5n}{5n}$ $\frac{5n}{a}$ are written on oŋa, and KB writes ye "that", teŋ "land", keŋ "go" (pfv), ken "go" (ipfv) for yĒ tĒŋ kĒŋ kĒn. This may reflect actual variants with [1]: cf Toende tīŋ "land", Mampruli tiŋŋa "land", versus Toende meŋ, Mampruli maŋŋa = mĒŋ "self."

After a or o epenthetic i is often written e: sanrega for sārigá "prison."

 $i \partial u \partial$ are written respectively as *ie uo*; *ie uo* are also used to write *ie uo* [iɪ] [uʊ] but there is no significant ambiguity, because *ie uo* appear only word-finally and in -*i*'*ey*-, and *i\partial uo* only word-internally, and marginally in external sandhi <u>7.5</u>:

pielig	pìəlıg	"white"	[piəlɪg]
bu'os	bū' o s	"ask"	[bu̯es]
di'e	dī'e	"receive"	[diː]
zu o	zú∙o	"steal him"	[zuʊ]

2016 orthography writes -*ue* [uɪ] as -*uoe* and -*ve* [ʊɪ] as -*voe* (similarly when nasalised and/or glottalised): $duoe = d\bar{u}e$ "raise, rise", $sv'oe = s\bar{v}'e$ "own."

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

Traditional orthography uses e i u for e j u and consequently does not mark length consistently. Only two length contrasts are found in *phonemic* diphthongs; of these ae/ae is expressed by writing aae (or $aa\epsilon$) for ae versus ae for ae:

		beginents		
paae	pāe	"reach"	[paɪ]	

The contrast *av/au* is unmarked. KB uses *au* or *av* consistently for each word, but not as marking length: *yavg yàvg* "grave", but *na'araug nā'-dávg* "ox"; *dau dāu* "man" but *tavn tāuň* "sibling of opposite sex." Ambiguity appears before *ŋ*:

Sogmonte

gbauŋ	gbāỵŋ	"skin"	[g͡baʊ̯ŋ]
mangauŋ	màngávŋ	"crab"	[maŋgaʊŋ]

Word-final *ia ua* are used ambiguously for both *ia ua* and *ia ua*:

kia	kįà	"cut"	[kia]
kua	kųā	"hoe"	[kʊ̯a]
sia	รĩa	"waist"	[sia]
sabua	sàbùa	"lover"	[sabua]

' is not written after i when it represents \underline{i} , thereby disambiguating

kpi'a	kpì'a	"neighbour"	[kpi̯a]
kpia'	kpįà'	"shape wood"	[kpið]

Before 2016, $\underline{u}'a$ [$\underline{v}a$] was usually written o'a, but did not even then contrast consistently with u'a representing u'a [$\underline{u}a$]. All u'a $\underline{u}'a$ and v'a are now written u'a.

po'a or pu'a	pu̯'ā	"woman"	[pʊ̯a]
po'ab or pu'ab	pū'ab	"women"	[pʊ̯ab]

NT/KB write -ey- in Long Forms <u>5.1</u> corresponding to Short Forms where final -y has become -e: vveya = vvva Long Form of vve "be alive." Older NT versions also write bvn-vva "living things" as *bunvoeya*, but KB has the expected *bvnvvya*.

Traditional orthography has *dunia*, *laafia* for *dūnıya* "world", *láafiya* "health." KB orthography writes *bieya* for *bjēyá* "elder same-sex siblings", but *suoya* for *suēyá* "roads", *zuoya* for *zuēya* "hills" etc. Older sources write *sueya*, *zueya*.

For nasalisation, plain *n* is used for *ň*, e.g. *tɛɛns* for *tɛ̃ɛňs* "lands", *gɛn*' for *gɛ̃ň*' "get angry", *gɛn'ɛd* for *gɛ̃ň'ɛd* "get angry" (ipfv), *nwam* for *ňwām* "calabash."

Ending a prefix, *n* represents *n*: *dunduug* for *dùndùug* [dundu:g] "cobra."

When *n* would be word-final without even a following glottalisation mark, the orthography formerly wrote *nn* to mark nasalisation, but the 2016 system has unfortunately adopted an ambiguous single *n*: *gaan* (old: *gaann*) for *gāaň* [gã:] "ebony tree" versus *daan* (old: *daan*) for *dāan* [da:n] "owner."

4.1 Tonemes

There are three tonemes: High (H), marked with an acute: $g\ell l$ "egg"; Mid (M), marked with a macron: $b\bar{a}\eta$ "ring"; and Low (L), marked with a grave: $b\delta k$ "pit." Macrons and graves 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. $b\bar{\epsilon}og\upsilon$ -n for $b\bar{\epsilon}o\bar{g}\bar{\upsilon}$ -n "morning", $p\ell k\delta \delta n$ for $p\ell k\delta \delta n$ "widow." After an acute, however, an unmarked mora is *toneless*, and the H toneme extends over both morae: $b\bar{\upsilon}n$ $b\delta \sigma d\lambda r$ "desirable thing." After a prefix, a tone mark is written on the root even if the toneme is identical: $z\bar{\iota}nz\bar{a}y\eta$ "bat", $k\delta kparlg$ "palm tree."

Prior to delinking <u>4.2</u> every vocalic mora carries a toneme, but with great restrictions on possible combinations of tonemes within words <u>6.1</u>. Syllabic m n bear L toneme, except for catenator-n, which is toneless. Toneless morae are realised by extension of the toneme of the preceding mora to cover both morae.

Lexical minimal pairs are not uncommon, e.g. *būk* "weaken", *bùk* "cast lots"; *gāŋ* "choose", *gàŋ* "step over"; *kūk* "chair", *kùk* "ghost"; *pīd* "get bloated", *pìd* "put on a hat, shoes, ring."

Kusaal M toneme corresponds to H in the other Western Oti-Volta languages. Structurally, Kusaal H represents ML on a single mora. The sequence ML can only occur across a pause, otherwise always becoming either HL or MH <u>7.3</u>.

M toneme is always realised as a level tone; L and H are level except before pause, where they are realised as falling tones, beginning at their usual pitch. When H is attached to both morae of a long vowel before pause, the fall in pitch occurs on the second mora, as in *mān sáam* "*my* guests"; contrast *mān sáàm* "*my* father", where the pitch falls from the first to the second mora.

The H toneme is in certain circumstances realised with a preceding downstep, lowering it to M level; this does not affect the relationship of the H to following tonemes. Downstep insertion applies after all tone sandhi and delinking; after another H it is invariable, but after M it is determined by stress and intonation.

When there is no intervening pause, H becomes ↓H after
H: always
M: if the next syllable is superheavy CVVC
if the next syllable precedes pause and the next toneme is not L

Downstep lowers H to the level of the last preceding M: thus, in MHM the final M has the pitch of the first, but $M \downarrow HM$ is realised [MM $\downarrow M$]. Downsteps are not marked in the working orthography, but in this section will be written as \downarrow .

Downstep appears between any two H tonemes:

Kà m̀ **g**5s gέl lā bēogu-n. And 1SG look.at egg:SG ART morning-LOC. "And I looked at the egg in the morning." vs À gós **↓gέl** lā bēogυ-n. 1SG look.at egg:SG ART morning-LOC. "I looked at the egg in the morning." Kà m̀ qɔ̄s náaf lā bēogu-n. And 1sg look.at donkey:sg ART morning-LOC. "And I looked at the cow in the morning." À aós Jnáaf lā bēogu-n. vs 1SG look.at cow:SG ART morning-LOC. "I looked at the cow in the morning." $MH \rightarrow M \downarrow H$ before a superheavy *CVVC* syllable: "It's the widow." Lì à nē ↓púkòɔňr lā. 3INAN COP FOC widow:sg ART. "It's not a widow." kā' $p \phi k \partial p \tilde{r} \bar{r} \bar{r} + \phi$. vs Lì 3INAN NEG.BE widow:SG NEG. and Ànɔ´'ɔnì _ ø ňyε **púkòɔň**rε +ø? "Who saw a widow?" Who CAT see widow:sg co? lā ↓sá mèɛd lā. Bīig yīr Child:sg art tns build:IPFV house:sg art. "The child was building the house yesterday."

vs *Bīig lā* **sá m**ɛ̀ yīr lā. Child:sg art tns build house:sg art. "The child built the house yesterday."

Mān↓ bú-pìəlkā'e+ø.ISG.CNTRgoat-white:SG NEG.BE NEG."My white goat isn't there."

- vs $M\bar{a}n$ **bú-sùŋ** $k\bar{a}$ 'e ⁺ø. "My good goat isn't there." 1SG.CNTR goat-good:SG NEG.BE NEG.
- and *Mān* **kúkòm** kā'e ⁺ø. "My leper isn't there." 1SG.CNTR leper:SG NEG.BE NEG.
- and $M\bar{a}n$ $k \delta k \bar{\sigma} r k \bar{a} e^+ \phi$. "My voice isn't there." ISG.CNTR VOICE:SG NEG.BE NEG.

 $MH \rightarrow M \downarrow H$ when the next *syllable* is followed by pause, so long as the next *toneme* after the H is not L:

Kà m̀ gɔ̃s ↓ búŋ lā . And 1sg look.at donkey:sg art.	"And I looked at the donkey."
Y ū↓gúm kā'e +ø. Camel:sg neg.be neg.	"There's no camel."
Lì à nĒ ↓ náaf lā . 3INAN COP FOC COW:SG ART.	"It's the cow."
Ò pō yādı↓ gídā +ø. 3AN NEG.IND SCatter:IPFV NEG.	"He isn't scattering."
Lì kā' bī -↓púŋā +ø. 3inan neg.be child-girl:sg neg.	"It's not a girl."
Ò pū ňyē ↓ sú'ugā +ø. 3an neg.ind see knife:sg neg.	"She didn't find a knife."
Lì kā' ňyī ↓ríf5 ⁺ ø. 3INAN NEG.BE egusi:sg NEG.	"It's not an egusi seed."

but Kà m g5s búŋ lā bēogv-n. And 1sG look.at donkey:sG ART morning-LOC. "And I looked at the donkey in the morning." (lā not prepausal)

Yōgóm lā kā'e +ø. Camel:sg art neg.be neg.	"The camel's not there." (<i>lā</i> not prepausal)
Lì à nẽ dɔ́ɔ̀g lā. BINAN COP FOC hut:SG ART.	"It's the hut." (L after H)
Ànɔ´'ɔnì ø yādı gídà +ø? Who cat scatter:IPFV cq?	"Who is scattering?" (L after H)
Lì kā' dī -púŋàa +ø? 3inan neg.be child-girl:sg pq?	"Isn't it a girl?" (L after H)
Ànɔ´'ɔnì_ø ňyē̄ sú'ʊɡà +ø? Who cat see knife:sg cq.	"Who found a knife?" (L after H)
Ò pῦ dúgὲε ⁺ ø ⁺ ø? 3an neg.ind cook neg pq.	"Didn't she cook?" (L after H)

4.2 Delinking

Toneme delinking follows all tone sandhi, but precedes toneme realisation. Most delinking is **tautosyllabic**, and occurs as a result of the restriction that the only sequence of two different tonemes permitted in one syllable is HL.

A pitch rise is not permitted within a syllable: the first toneme is delinked and the second applies to both morae. This rule applies with long root vowels which would be expected to carry the tonemes MH in Tone Pattern H, with the allocation of word-final M and H tones in LFs, and with the discontinuous-past marker imposing M toneme on the second mora of a LL root vowel.

sáam	← *sāámmā	"guests" <u>6.2.1</u>
dáamm	<i>← *dāámm</i>	"beer", Long Form <u>5.1.1</u>
tīımm	← *tìīmm	"medicine" Long Form
mēɛ-n	← mÈĒ-n	"build" <u>7.2.2</u>

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

Dāỵ	lā	mέε-n (← mέē-n)	"The man built (earlier today.)"
Man:se	S ART	build-dp	

HL is only permitted in a superheavy syllable: in an open *CVV* syllable, the L is delinked and H applies to both morae. Words like $n\dot{u}\dot{u}g$ "hand" and $n\dot{a}af$ "cow" thus fall together tonally in the Long Form <u>5.1.1</u>:

Lì $k\bar{a}$ ' $n\dot{u}$ ' $ug\bar{j}$ + \emptyset . "It's not a hand." 3INAN NEG.BE hand:SG NEG. Lì $k\bar{a}$ ' $n\dot{a}af\bar{j}$ + \emptyset . "It's not a cow." 3INAN NEG.BE COW:SG NEG.

Three-mora diphthongs are disyllabic, with syllable division following the first mora <u>2.2</u>. Toneme delinking applies to the final two morae, e.g. Long Form $n\bar{u}$ -áa "hen" from $n\bar{u}a^{+/}$ and Long Form sabu-āa "girlfriend" from $sabua^+$.

Heterosyllabic toneme delinking occurs if a short vowel in an open syllable carries H, and is followed by a syllable with an *epenthetic* vowel in an open syllable. The toneme on the epenthetic vowel is delinked and H is realised across both morae.

Lì	kā'	mว์l เfวิ	+ø.	"It's not a gazelle."
3INAN	NEG.BE	gazelle:sg	NEG.	
Bà kả	ā' dī	ื่อ รídเ bā	+ø.	"They are not receivers."
3PL NEG.BE receiver:PL NEG.				

There is never a downstep in realisation before the H after M, because there is always a following syllable which does not precede pause 4.1; contrast

 $Li \quad k\bar{a}' \quad \downarrow n\dot{u}' ug\bar{\jmath} \quad + \emptyset.$ "It's not a hand." 3INAN NEG.BE hand:SG NEG.

The rule does not apply if either syllable is closed; written intervocalic $k p t \eta$ represent $kk tt pp \eta\eta$ and accordingly block delinking across the syllable boundary, even though they are generally realised as single except in very slow speech.

Lì à nẽ mólìf .	"It's a gazelle."
3INAN COP FOC gazelle:sg.	
Bà à nĒ dī ə sídìb .	"They are receivers."
3PL COP FOC receiver:PL.	

Lì $k\bar{a}$ ' $b\bar{v}n$ -**sábìl** $|\bar{\epsilon}$ + ϕ . "It's not a black thing." 3INAN NEG.BE thing-black:sg NEG.

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Ka ya pv siakida."But you did not agree." (Lk 13:34)Kà yà pvsiákidā +ø.And 2PL NEG.IND agree:IPFV NEG.
```

Delinking does not occur if the L mora falls on a root or an affix vowel, or if it precedes liaison, where the short vowel is *not* epenthetic:

Lì kā' dágò bıgā +ø. 3inan neg.be left.hand:sg neg.	"It's not a left hand." (Prefix <i>dà-,</i> root <i>gòb-</i> <u>13</u>)
Bà à nẽ dígà . 3PL COP FOC dwarf:PL.	"They are dwarfs." (Affix vowel - <i>à</i>)
Kà 5n zábì f. And san.cntr fight 2sg.ob.	"And he fought you."
Ò p ū zábì fɔ̃ +ø. 3an neg.ind fight 2sg.ob neg.	"He didn't fight you."
Lì kā' mɔ́lı fɔ́ +ø. 3inan neg.be gazelle:sg neg.	"It's not a gazelle."

For possible phonological differences between epenthetic vowels and wordfinal short vowels before liaison *apart* from tone see <u>5.2</u>; in any case word-division before liaison words is justifiable morphosyntactically <u>2.4</u>. Epenthetic vowels liable to delinking might instead be regarded as *intrinsically* toneless, becoming L if left in a closed syllable by apocope when preceded by H. However, the distribution of tonemes within words is so constrained that a contrast in *realisation* between such morae and those bearing tonemes would only ever occur after H, and from a purely descriptive standpoint the delinking rule across syllable boundaries given here covers all cases.

vs

5 Word segmental structure

This section treats the structure of free words, and those bound words which have the same segmental and tonal form as free words: all combining forms, some clause-level particles and most preverbs. Many bound words resemble the affixes of free words phonologically.

5.1 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" <u>7.2</u>:

Ò dāa ňyɛ̃ bīig.	"She saw a child."
SAN 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 Clauses used as **vocatives**

 \dot{O} $k\bar{a}'$ $b\bar{i}iga$ +ø. "He/she is not a child." 3AN NEG.BE child:SG NEG.

 \dot{O} dāa p \bar{v} $\check{n}y\bar{\varepsilon}$ b $\bar{i}iga$ +ø. "He/she did not see a child." 3AN TNS NEG.IND see child:sg NEG.

Ànɔ´'ɔnì ø dāa ňyē bíigà +ø? Who cat tns see child:sg cq? "Who saw a child?"

M bīiga +ø! "My child!" 1sg child:sg voc! The Long Form also appears as a **derivational** feature in the *citation* form of some words 5.1.3. Direct commands sometimes end in a LF 21.3.

The LF appears in a modified form before **liaison**, with LF final short vowels losing all contrasts of quality <u>7.2</u>.

The LF is not predictable in general from the shape of the SF alone; however, the SF is always derivable from the LF by **apocope**:

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

Subsequently

Word-final consonant clusters drop the second consonant $(kk \ tt \ pp \ \eta\eta)$ become $k \ t \ p \ \eta$ but are *written* single in any case 3.1) Word-final y becomes <u>e</u> after back vowels and zero elsewhere

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

The term "apocope" will be used exclusively for this phenomenon. Apocope is described as a single process, but comparative and internal evidence shows that loss of quality contrasts preceded the complete deletion of word-final vowels clause-medially, which was itself distinct from the clause-final apocope characteristic of Kusaal, Nabit and Talni. In Toende Kusaal, apocope still involves two steps <u>3.1</u> fn.

Examples:

Chair:sg ART get.lost PFV.

Lì à	nē	kūk.	"It's a chair."
3INAN C	OP FOC	chair:sg.	
Kūk	lā	bódìg yā.	"The chair has got lost."

Word segmental structure

Lì	kā'	kūka.	+ø.	"It's not a chair."
3INAN	I NEG.BE	chair:so	G NEG.	
Lì	à në	t kúkàa	+ø?	"Is it a chair?"
3INAN	I COP FO	c chair:s	5g pq?	
Àn <i>́</i> ว'	ວnìຼ໔	ø ňyē k	⟨úkà ⁺ø?	"Who saw a chair?"
Who) (CAT See C	hair:sg cq?	

Similarly, with the same frames (also using \dot{o} 3AN "he/she", $b\dot{a}$ 3PL "they"):

Lì à nē dūk.	"It's a cooking pot."
Dūk lā bódìg yā.	"The pot's got lost."
Lì kā' dūkó. /kk/	"It's not a pot."
Lì à nē dūkóɔ?	"Is it a pot?"
Ànɔ́'ɔnì ňyē dūkɔ́?	"Who saw a pot?"
Lì à nē gbīgım.	"It's a lion."
Lì kā' gbīgιmnε.	"It's not a lion."

Li ka' gbigimne. Lì à nē gbígìmnee? Ànó'onì ňyē gbígìmne?

Lì à nē yáarìm. Lì kā' yáarīmm. Lì à nē yáarìmm? Ànó'ɔnì ňyē yáarìmm?

Bà à nē gbīgıma. Bà kā' gbīgımaa. Bà à nē gbígımàa? Ànó'ɔnì ňyē gbígımà?

Ò à nẽ dāỵ. Ò kā' dāv. Ò à nẽ dáùv? Ànó'ɔnì ňyẽ dáv?

Ò à nē sāẹň. Ò kā' sāeň. Ò à nē sáèeň? Ànó'ɔnì ňyē sáeň? "It's salt." "It's not salt." "Is it salt?" "Who saw salt?"

"Who saw a lion?"

"Is it a lion?"

"They're lions." "They're not lions." "Are they lions?" "Who saw lions?"

"He's a man." "He's not a man." "Is he a man?" "Who saw a man?"

"He's a blacksmith." "He's not a blacksmith." "Is he a blacksmith?" "Who saw a blacksmith?"

<i>Kà ò si̯ák.</i> And зам agree.	"And he agreed."
<i>Ò pū si̯ákē</i> + <i>ø.</i> 3AN NEG.IND agree NEG.	"He didn't agree."
Kà ò dīgı.	"And she's lying down."
Ò pū dīgıyá.	"She isn't lying down."
Kà ò vūẹ.	"And she's alive."
Ò pū vūyá.	"She's not alive."
Kà ò kịá.	"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 $b\dot{c}dvg$ "big" and the adverb $b\dot{c}dvg\bar{v}$ "a lot":

Lì à nẽ bũn-bédùg. 3INAN COP FOC thing-big:sg.	"It's a big thing."
Lì kā' būn-bédugɔ̄ +ø. 3inan neg.be thing-big:sg neg.	"It's not a big thing."
<i>À pú'ùs yā bźdugū.</i> 1SG greet PFV much.	"Thank you very much."

5.1.1 Superscript notation

The exact shape of a Long Form differs in different contexts. Final vowel length may be neutralised, final short vowel qualities may be altered or completely neutralised, and final tonemes may be altered. Changes to LFs occur clause-medially before **liaison** <u>7.2</u>, and clause-finally before **prosodic clitics** <u>7.1</u>, which have no segmental form of their own but cause the preceding word to appear as a LF rather than the default SF. Derivational LF types are taken as showing **apocope-blocking** <u>5.1.3</u>. The Long Form as such is an abstraction, representing the underlying wordform which produces the surface SF through apocope, and the various surface LFs

through application of the rules for each environment. For convenience, the LF form preceding the *negative* prosodic clitic will be taken as basic. It shows underlying LF-final short - $\iota - \upsilon$ as - $\epsilon - 2$, *- $m\upsilon$ *- $m\iota$ as -mm -mm and - $i\partial - u\partial$ as -ia - ua 3.2.2, and its final toneme is always either M or H.

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

bīig ^a	"child"	kūk ^a	"chair"
dūk ^{ɔ/}	"pot"	sjàk ^ε	"agree"
<i>gbīg</i> កេ ^{nɛ}	"lion"	yàarım ^m	"salt"
dīgı ^{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 +:

gbīgıma+	"lions"	SF gbīgıma	LF gbīgımaa
màlı+	"gazelles"	SF mòlı	LF mòlīı
gòň+	"hunt"	SF gòň	LF gɔ̄ɔň
tìeň+	"inform"	SF tìeň	LF tìēeň
kįà+	"cut"	SF <i>kij</i> a	LF <i>kīa</i>
kųā+	"hoe"	SF kỵā	LF <i>kūa</i>
dāỵ+	"man"	SF <i>dā</i> ỵ	LF dāv
sāeň+	"blacksmith"	SF <i>sāeň</i>	LF <i>sāeň</i>

This use of a single symbol exploits the partial predictability of LFs <u>5.1.2</u>. In principle, ⁺ could also be used for ⁼ and ε , -*m*⁺ for -*m*^m and ^a for ^{ya}.

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

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

	kpįà'+	"shape wood"	SF <i>kpi̯à</i> '	LF <i>kpī a</i>
but	dįā'a	"get dirty"	SF dįā'	LF dįā'a
	kųā+	"hoe"	SF <i>kųā</i>	LF <i>kūa</i>
but	pự'āª	"woman"	SF pựˈā	LF pự'āa

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

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

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. $p\bar{a}mm$ SF $p\bar{a}mn\epsilon$ LF "a lot."

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

This final M or H tone is by default realised on the rightmost vocalic mora of the LF, but **toneme delinking** <u>4.2</u> may apply. If a pitch rise would otherwise result within a single syllable, the first mora is delinked and the second toneme links to both morae; this process is not marked in superscript notation itself:

fūug ^{ɔ/}	"shirt, clothes"	SF <i>fūug</i>	LF <i>fūugó</i>
pāe ^{+/}	"reach"	SF pāe	LF <i>pāée</i>
nūa ^{+/}	"hen"	SF nūa	LF nūáa
yā ^{+/}	"houses"	SF yā	LF yáa
lā+/	(article)	SF <i>lā</i>	LF <i>láa</i>
bèdugū+/	"a lot"	SF bèdugū	LF <i>bὲdυgύυ</i>
gāaň ^{=/}	"Nigerian ebony"	SF gāaň	LF gáaň
dāam ^{m/}	"millet beer"	SF dāam	LF dáamm
tāu̯ň+/	"opposite-sex sib"	SF tāuň	LF <i>táuň</i>
màlı+	"gazelles"	SF mòlı	LF mòlĩı
yàarım ^m	"salt"	SF yàarım	LF yàarīmm

Similarly, when the liaison word ^o "him/her" follows a perfective ending in a root vowel, the first mora in the SF is delinked when a pitch rise would otherwise have occurred within the syllable. LF-final three-mora diphthongs carry MH whenever superscript notation writes a SF ending in a two-mora diphthong with H.

 $ny \epsilon \cdot o^{-0}$ "see him/her" SF $ny \epsilon \cdot o$ LF $ny \epsilon \cdot \delta - o$

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

Lì ká' ò tīımm.	"It's not her medicine ($\leftarrow t i \bar{\iota} m m \leftarrow t i \iota m^m$)."
Lì kā' tíımm.	"It's not medicine (← <i>tíīmm</i>)."
Lì ká' bà dā'a.	"It's not their market ($\leftarrow d\dot{a}'\bar{a} \leftarrow d\dot{a}'a^=$)."
Lì kā' dá'a.	"It's not a market (← dá'ā)."

Toneme delinking causes words like $n \acute{a} a f^{2}$ and $n \acute{u}' \grave{u} g^{2}$ to coincide tonally in the LF only: such words are written in superscript notation with the SF tonemes.

Lì kā' nú'ugō.	"It's not a hand."
Lì kā' náafɔ̃.	"It's not a cow."

5.1.2 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 <u>8.1</u>. Historically expected LFs can be replaced by different LFs corresponding to the same SFs <u>8.3.1</u> <u>8.3.2</u>. Apocope frequently does *not* lead to loss of segmental contrasts despite deleting segments which condition preceding sound changes, and working in reverse, such features can often accurately predict LFs from SFs; even words completely deleted by apocope remain recognisable from their effects on preceding words. 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 only to late toneme delinking. However, Tone Patterns are suprasegmental features of stems rather than words <u>6.1</u>, 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 $a \varepsilon$ or \mathfrak{I} ; preceding SF-final m n or l may or may not be geminated; -m may become -mn- instead of -mm-. Even before liaison 7.2, where vowel quality is neutralised, the same issues arise with consonant clusters:

nwɛnɛ tinamɛ kɛt banɛ tummi ti taali [sic] basid si'em la.wɛnnɛ tīnámì ø kɛt bánì tùmmī tí tàallì øresemble with 1PLNZ let:IPFV REL.PL work:IPFV 1PL fault:SG CATbásìdsī əm lā.throw.out:IPFV INDF.ADV ART."like we forgive the sin of those who do it to us." (Lk 11:4)

ka ban ka kikirbe'ednam **daamne** ba daa nye laafiya kà bàn kà kìkīr-bɛ́'ɛ̀d-nàm dáàmnī bá dāa ňyɛ̃ láafiya and REL.PL and fairy-bad-PL trouble:IPFV 3PL.OB TNS see health "And people who were afflicted by evil spirits became well." (Lk 6:18, 1976; KB: ka banɛ ka kikiris **daamidi** ba daa nyɛ laafi)

However, given whether a noun has human reference, it is usually possible to identify its noun class and thus the correct LF <u>8.1</u>. Perfectives end in -*mm* if the the SF ends in -*m* and in - ϵ otherwise; imperfectives end in -*a* with gemination of

preceding *n l m*. (Dual-aspect verb imperfectives with SFs ending in -*m* formerly had LFs in *-mna*, though not for my informants or KB.)

The default LF ending corresponding to SFs ending in a consonant is - ϵ . Thus with loans like $t\bar{l}\dot{a}s^{\epsilon}$ "necessity", cf Hausa $tiil\dot{a}s$ id, and in e.g.

Pu'abi du'a sieba la wυsa, sɔ' kae gat Joon nɛ [sic 2.4].
Pū'abí ø du'à sīəba lā wūsa, sɔ̄' kā'e ø gát Joonɛ +ø.
Woman:PL NZ bear INDF.PL ART all, INDF.AN NEG.BE CAT pass:IPFV John NEG.
"Of all those born of women, none surpasses John." (Lk 7: 28)

All SFs ending in vowels other than front vowels or fronting diphthongs have LFs which can be obtained by lengthening the final vowel/diphthong; so too do many that do end in fronting diphthongs or in *short* (but not long) front vowels:

sīa+	"waist"	sàbùa+	"girlfriend"
bāa=	"dog" <u>7.1</u>	pāe ^{+/}	"reach"
nìe ⁺	"appear"	dūe ^{+/}	"raise/rise"
kūgá+	"stones"	wìdı+	"horses"
kū+	"kill"	mà+	"mother"
bèdugū ^{+/}	"a lot"		

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

dįā' ^a	"get dirty"	← *di̯agı	Farefare	dềgὲ
dỵ'à ^a	"bear, beget"	← *dµagι	Farefare	dògè
zò+	"run"		Farefare	zòè
dāų+ LF d	āυ "man"	← *dawa	Mooré	ráoa
tāuň+/ LF ta	á <i>vň</i> "opposite-sex si	ib" ← *tãwa	Mooré	tãoa

A marginal exception to predictability is the fact that words ending in $\underline{i}a'$ may have LFs in $\underline{i}a'a$ like $d\underline{i}\overline{a}'^a$ "get dirty" or in $\underline{i}'a$ like $k\underline{p}\underline{i}a''$ "shape wood with an axe."

SFs ending in a fronting diphthong or short ι may either prolong the vowel/diphthong in the LF or add -*ya*. Two nouns have variant sg LFs:

sā <u>e</u> ň	"blacksmith"	LF <i>sāeň</i> or <i>sāňya</i>
sɔ̄e̯ň	"witch"	LF <i>sɔ̄eň</i> or sɔ̄ňya

All other cases with added -*ya* occur in **single-aspect verbs** <u>10.2</u>, where LF -*ya* is the regular LF corresponding to such SFs except with a few bare root forms:

	Word segmen	ntal structure		5.1.2
dīgı ^{ya/}	"be lying down"	vūę ^{a/}	"be alive"	

Before liaison, single-aspect verbs follow the *general* rule, prolonging any final short diphthong and then applying phrase-medial loss of fronting <u>7.2</u>.

5.1.3 Apocope-blocking

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Some free words have citation forms without apocope. The form is like a LF, without the lowering of postconsonantal final $\iota \ \upsilon$ to $\varepsilon \ \imath$ seen before prosodic clitics. Words with apocope-blocking ending in SF M toneme have LF-final H <u>6.1</u>.

This is a derivational feature seen in many adverbs and quantifiers (including number words), and as a downtoning measure with adjectives <u>15.7.1.2</u>:

bèdugū	"a lot"	<mark>g</mark> ^ͻ d ^ε	class sg
sùŋā	"well"	<mark>g</mark> a s ^ε	class sg
yīnní	"one"	r ^ε a ⁺	class sg
ànāasí	"four"	g a s ε	class pl
pāmm	"a lot"	<mark>т</mark> т	class

A number of nouns ending in $-\iota^+$ or $-\upsilon^+ \underline{8.5}$ also display apocope-blocking.

Words of one underlying mora also do not show apocope, e.g $y\bar{a}^{+/}$ "houses", (SF $y\bar{a}$ LF $y\bar{a}$) and numerous bound particles and pronouns.

Words with apocope-blocking may display final extra-long simple vowels: *mà'aa* "only." They change final -*mv* to -*mm*: *pāmm* "a lot."

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

	Lì à nĒ dɔ́ɔ̀g.	"It's a hut."
	Lì kā' dɔ́ɔgɔ̄.	"It's not a hut."
with	Lì à nẽ bédugū.	"It's a lot."
	Lì kā' bέdυgύυ.	"It's not a lot."

Before prosodic clitics which neutralise preceding length distinctions, the final vowels of such LFs contrast in quality alone with ε $_{2}$ <u>7.1</u>.

Forms not ending in a short vowel add $-n\epsilon$ to make the secondary LF:

<i>pāmm</i> SF <i>pāmné</i> LF	"a lot"	mà'aa SF mà'anē LF	"only"
g <i>ùllīmm</i> SF g <i>ùllīmnī</i> LF	"only"	kòtàa ^{nε}	"at all"

The LF of $ny\bar{a}e^{n\epsilon/}$ "brightly, clearly" is $ny\bar{a}en\epsilon$ [j̃aĩnɛ̃]. Cf also $m\epsilon$ DK KT SB NT $m\epsilon n$ WK; clause-finally (all sources) $m\epsilon n^{\epsilon}$ "also, too."

5.2 Roots, stems and flexions

Word structure is based on **roots** of the form (C)V(C) or (C)VV(C). Root syllables with no initial consonant are optionally realised with an initial glottal stop [?], e.g. $\dot{u}un^{n\epsilon}$ "dry season" [?u:n]~ [u:n], but there seems to be no reason to ascribe phonemic status to this. However, possible root shapes will be given as CV(C) CVV(C)elsewhere for simplicity. Only *b d g l m n s r* occur as second consonants of roots.

Root vowels show the full range of possible Kusaal vowels, including contrastive length, nasalisation and glottalisation.

Stems are derived from roots by adding up to three of the **derivational suffixes** *b d g l m n s r*. Only *d l m* can follow another suffix.

Nominal stems may also have derivational **prefixes** <u>13</u> of the form V CV CVn CVsin or CVlin, e.g. tītā'ar "big", bòmbàrig "ant", sīlinsíùňg "spider", tàsintàl "palm of the hand." A few stems have two successive prefixes.

A stem may constitute a word by itself, or may add a single **flexional suffix** of the form (C)V(V) or -*mm* (representing -*mv* but realised [m:].)

Prefixes and flexional suffixes draw their vowels from the set of **affix vowels** $a \iota v aa \iota vv$. Several bound particles and pronouns are of the same segmental shape as flexional suffixes. Glottalisation occurs only in $p\dot{a}' \leftarrow *pag$ "earlier today"; nasalisation is not contrastive, but phonetic nasalisation probably explains the ε for ι in various particles realised $n\bar{\varepsilon}$. Prosodic clitics 7.1 cause short LF-final ιv to be lowered to ε σ , realised somewhat closer than as root vowels; the only context in which LF-final short ιv appear as such is with apocope-blocking 5.1.3.

Prefix *i v* are realised [i] [u] when the first mora of the root is *i* or *u*; this is noncontrastive and ignored in the orthography, with *i v* used throughout. Thus $t\bar{t}t\bar{a}$ 'ar [tɪtā:r] "big", $k\partial k\bar{j}r$ [kokor] "voice", but $k\partial k\bar{i}rig$ [kikirig] "fairy", $s\partial s\partial am$ [sisiəm] "wind", $s\bar{i}linsidn$ [silinsid] "spider", $v\partial linvuni$ [vulimvul] "mason wasp", $d\partial ndung$ [dundu:g] "cobra" (KB dunduug.) Nin-tāa [ninta:] "co-wife" has tense *i* because there are no short nasal high vowels **i*nň **v*nň 3.2.3.

As affix vowels, ι and v contrast only after velars and word-initially: ι is the default after alveolars, and v after labials, labiodentals and labiovelars. Prefixes, however, show v rather than ι before root u/v/2 ($d\dot{v}nd\dot{u}ug$ "cobra") and ι instead of v before root $i/\iota/\varepsilon$ ($kp\bar{\iota}kp\bar{\iota}n$ "merchant.") In flexions -mm appears in place of *-mv; ι appears after labial consonants only in pfv LFs like $z\dot{a}b\bar{\varepsilon}$ "fight" where it is probably analogical. $S\bar{u}gvr\dot{v}$ "forbearance" is probably a loanword; in any case, it is likely that the final -v is rounded from - ι because of the rounded root vowel. Velars followed by affix-vowel v could be internally reconstructed throughout as labiovelars (with 3sg $\dot{o} \leftarrow *\eta m\dot{v}$.) A system with only two distinct affix vowels except after velars is probably reconstructable for Proto-Western-Oti-Volta: the Mooré and Farefare pl suffix -do/-ro is probably a shared innovation based on the analogy of sg -go.

Before vowel-initial flexions CVV root-stems become CVy or CVd:

Stem nɔ̄ɔ-	"mouth"	sg <i>nɔ̄ɔr</i> ε/	pl <i>nōyá</i> +
<i>у</i> ū'υ-	"name"	sg <i>yū</i> ' <i>υr</i> ε/	pl <i>yūdá</i> +

No word may begin or end with a consonant cluster, except for LFs and forms with apocope-blocking with final -*mm*: $p\bar{a}mm$ "a lot." Across word division (including within compounds, like $n\bar{w}\bar{a}d$ -bíl "star") any combination of permissible word-final and initial consonants may occur, sometimes with partial assimilation 7.5.

Few consonant clusters are permitted within words. Clusters of homorganic nasal + *C* may occur where noun prefixes attach to a root or to another noun prefix: $k \dot{v} n d \dot{v} \eta^a$ "jackal", $g \bar{v} m p \bar{v} z \bar{\epsilon} r^{\epsilon/}$ "duck", $d \dot{a} n k \dot{c} \eta$ [daŋkoŋ] "measles", and loanwords may show unusual clusters, e.g. $b \dot{v} r k \dot{n}^a$ "honourable person." Otherwise, the only wordinternal clusters permitted are kk tt pp $\eta\eta$ nn mm II mn. Of these, kk tt pp $\eta\eta$ are written k t p η , and realised single except in very slow speech, but still pattern as clusters throughout structurally. The consonants r f s, though never realised as geminates, are sometimes shown by Tone Pattern allocation rules to reflect underlying clusters <u>6.2.1</u>; they may always do so after short root vowels.

All other pairs of consonants must either assimilate to one of these clusters or single consonants or insert an epenthetic vowel (see below).

Stem	kūg-	"chair"	+ sg - <i>ga</i>	\rightarrow	kūka	LF <i>kūk</i>	SF
			+ pl <i>-sı</i>	\rightarrow	kūgusε	LF <i>kūgus</i>	SF
	nób-	"leg"	+ sg - <i>rı</i>	\rightarrow	nóbırē	LF nóbìr	SF
	dūm-	"knee"	+ sg - <i>rı</i>	\rightarrow	dūmnɛ	LF <i>dūm</i>	SF

Gemination of *mm nn ll* before LF affix vowels is readily audible, even before liaison <u>7.2</u>; the 1996 audio NT for example provides numerous examples of $d\bar{\jmath}ll\cdot\delta$ "follow him" (written *dol o*) clearly read as [dɔl:v]. It is harder to hear gemination before an epenthetic vowel, and written materials prior to 2016 rarely mark it, though KB is generally reliable. Urs Niggli's Toende materials only show geminate consonants before LF final vowels preceding prosodic clitics; this may represent an actual difference from Agolle Kusaal.

The cluster *mn* is unstable. Some speakers replace it entirely with *mm*. All my informants have *mm* in the LFs of dual-aspect verb imperfectives like *kàrımmā* "read" (cf Dagbani *karimda*), but there are a few examples of *mn* in the older NT versions:

ka ba li' ba toba ka pu wum na [sic 2.4]
kà bà lí bà tòba 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)

Informants differ with regard to the LF sg forms of $r^{\varepsilon}|a^+$ class *m*-stems:

gbīgımnɛ	SB	gbīgımmɛ	WK	"lion"
dūmnɛ	SB	dūmmɛ	WK	"knee"

The LF sg forms of agent nouns of *m*-stem verbs vary:

m naan ku aan Kiristo tumtum na [sic <u>2.4</u>]. m nāan kú āa-n Kiristo túm-tūmna ⁺ø. 1SG then NEG.IRR COP-DP Christ work-worker:SG NEG. "I would not have been Christ's servant." (Gal 1:10, 1996; KB tumtumma)

The plurals usually show -mn-: tòm-tomnib "servants."

Habitual adjectives from *m*-stem verbs show -*mm*- before epenthetic vowels: $b\bar{v}n-t\dot{v}mm\dot{r}^{\epsilon}$ "useful thing" (pl $t\bar{v}mna^{+}$ for some informants), $b\dot{v}-s\bar{a}n\ddot{n}$ 'amm ιr "goat for destruction, scapegoat" WK.

All cases of written *mna* and *mnɛ* in KB cross word division by the criteria of this grammar, but *-mni-* is common in plurals like *tumtumnib tùm-tūmnıb* "servants."

The default **epenthetic vowel** is ι .

Before LF -g2 -g2 the epenthetic vowel becomes v, remaining v in the SF 5.5.

	SF āaňdıg	LF āaňdıga	"black plum tree"
but	SF gàadvg	LF gàadvgɔ̃	"(sur)passing"
pl	SF <i>mālıma</i>	LF <i>mālımaa</i>	"sacrifices"
but	SF <i>mālvŋ</i>	LF <i>mālט</i> חַכ	"sacrifice"

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

gbīgım	[gbɪgɪm]	"lion"	yūgúm	[jʊgʊm]	"camel"
wābıd	[wabɪd]	"elephants"	dūgvd	[dʊgʊd]	"cooking pots"
dūgudíl	o [dʊgʊdɪb]	"people who cook			

Speakers vary with rounding of epenthetic vowels after rounded root vowels, but this can only become contrastive before word-final velars, where it can lead to reanalysis of the g^a sg suffix as g^2 8.3.2. WK has rounding before velars after short root rounded vowels with intervening b m l, and after mm even when the preceding vowel is not rounded: $n\bar{b}bvg$ "grow" (but $n\bar{b}hr$ "leg"), $k\bar{b}lvg$ "river", yammvg "slave."

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

tìsıd	[tisid]	"gives"	sīgıd	[sigid]	"lowers"
būgur	[bʊgʊr]	"spirit's dwelling"	kūgvr	[kugur]	"stone"

Word-final and epenthetic ιv differ with respect to toneme delinking <u>4.2</u>; this may reflect a prominence contrast. Epenthetic vowels only appear word-finally via loss of final y in the SFs of single-aspect verbs, e.g. $d\bar{\iota}g\iota$ from $d\bar{\iota}g\iota^{ya/}$ "be lying down." In KB $d\bar{\iota}g\iota$ appears as dig almost twice as often as digi when not phrase-final; however, as this behaviour is confined to a single morphological category, it is not clear if it reflects a phonological distinction, and I have no tonal data for such cases.

Diphthongs result from deletion of postvocalic **g* with vowel fusion and from changes of vowel morae before *-*ya* *-*gv* *-*kkv* *-*ŋŋv*. Apocope removes conditioning factors, rendering diphthongs contrastive, just as with the epenthetic vowels above:

	SF <i>vīid</i>	LF vīidé	"owls"
but	SF <i>vīug</i>	LF vīugó	"owl"

5.3 Root alternations

5.3.1 CV~CVV~CVC

Most roots ending in a vowel show a long vowel before all flexional and derivational suffixes: $k\bar{v}^+$ "kill" ipfv $k\bar{v}vd^{a/}$. Some words with short vowels throughout are probably simply **CV*-stems, e.g. $z\bar{u}g^{2/}$ "head" pl $z\bar{u}t^{\epsilon/}$, $z\bar{a}^{+/}$ "millet", $m\dot{u}i^+$ "rice", $k\bar{i}^{+/}$ "millet"; cf <u>6.2.4</u> on absence of L spreading after their cbs.

A number of roots show vowel length alternation. Glottalised roots of this kind are all underlyingly CVg, and their behaviour is due to *g deletion and vowel fusion <u>5.6</u>. Non-glottalised roots show a long vowel before the class suffixes $-g^a - g^a$ and short elsewhere, with following $*d \rightarrow tt *b \rightarrow pp$ (but not $*m \rightarrow mm$ or $*l \rightarrow ll$):

dāvg ⁵ bīig ^a p55g ^{5/} d55g ⁵ fūug ^{5/}	"male" "child" "field" "hut" "clothing"	cf <i>dāp</i> ^a cf <i>bīl</i> ^a pl <i>pɔ̄t^{ε/}</i> pl <i>dɔ̀t^ε</i> pl <i>fūt^{ε/}</i>	"men" "little"
ňyē ⁺ dō ⁺ lù ⁺ or lì ⁺ zò ⁺ dì ⁺ yī ⁺	"see" "rise" "fall" "run" "eat" "emerge"	ipfv <i>ňyēt^{a/}</i> ipfv <i>dūt^{a/}</i> ipfv <i>lùt^a</i> or <i>lìt^a</i> ipfv <i>zòt^a</i> ipfv <i>dìt^a</i> ipfv <i>yīt^{a/}</i>	imp ňyÈm ^a imp dùm ^a imp lùm ^a or lìm ^a imp zòm ^a imp dìm ^a imp yìm ^a
kē ⁺	"allow"	ipfv <i>kēt^{a/}</i>	imp k <i>čl^a</i>

The long vowel before sg $-g^a$ or $-g^c$ is often introduced into the plural, in some cases invariably:

dāvg ^o	"male"	pl <i>dāad</i> ε		
bīig ^a	"child"	pl <i>bīis</i> ^ε		
<i>pɔ̄ɔg</i> ɔ/	"field"	pl <i>pɔ̄ɔd٤/</i>	or	p̄jt ^{ε/}
dòɔgɔ	"hut"	pl dòɔdɛ	or	d``t ^ɛ
fūug ^{ɔ/}	"clothing"	pl <i>fūud</i> ε/	or	fūt ^{ε/}

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

	dìเร ^ɛ dàalım ^m vū'vg ^{ɛ/}	"feed" "masculinity" "come alive"	dì+ dāp ^a vūr ^{ɛ/}	"eat" "men" "alive"
but	gɔ̄sɛ	"look"	ipfv <i>gɔ̄t^{a/}</i> or <i>gɔ̄sıd^{a/}</i>	imp gòm ^a or gòsım ^a
	tìs ^ɛ	"give"	ipfv tìt ^a or tìsıd ^a	-
	yīs ^ɛ or yīis ^{ɛ/}	"make go/come out"	yī ⁺	"emerge"

Gerunds in $-b^{2}$ always show long vowels: $d\bar{\iota}b^{2}$ "food", $n\bar{\gamma}\bar{\epsilon}\epsilon b^{2/}$ "seeing"; so do all regualr gerunds in $-r^{\epsilon}$: $n\bar{\jmath}-l\dot{\jmath}r^{\epsilon}$ "fasting" ("mouth-tying"), $f\bar{u}-\gamma\dot{\epsilon}\epsilon r^{\epsilon}$ "shirt-wearing", but WK has $n\bar{a}$ '- $l\dot{\jmath}r^{\epsilon}$ "place for tying up cows", $w\dot{\iota}d-l\bar{\jmath}r^{\epsilon/}$ "place for tying up horses."

Historically, such roots probably ended in a consonant preserved before vowelinitial suffixes, assimilated before homorganic consonants, and otherwise deleted with vowel fusion to produce *CVV*. For example, three roots with *CVp*- allomorphs show evidence of an underlying form *CVw with $*wb \rightarrow pp$:

dāỵ+	"man", Mooré <i>ráoa</i>	pl <i>dāp</i> a	
tāu̯ň+/	"opposite-sex sib"	pl <i>tāňp^{a/}</i>	
tòň+	"shoot", Mooré <i>tão</i>	tāňp ^o	"war"

Kusaal *CVV* roots with *CVt*- allomorphs typically have Mooré cognates with fronting diphthongs or front vowels: e.g. Mooré *zòe* "run" *lòt* "fall", imperfectives *zòeta*, *lòtta*, versus *kó* "kill", imperfective *kóvdà*; Mooré shows much less levelling than Kusaal in such cases. Evidence for sporadic monophthongisation of earlier fronting diphthongs also appears in Kusaal in the alternation $l\dot{u}^+ \sim l\dot{l}^+$ for "fall", and in

Western Oti-Volta in contrasts like Kusaal dɔ̀ɔgɔ, Mampruli/Dagbani duu, Mooré ròogó as against Hanga dìì, Farefare dèegò, Dagaare dìé "hut, room."

Such diphthongs usually correspond to Nawdm Vr (note that in Nawdm $rr \rightarrow d$, and that before Kusaal $-g^{2}$ and Mooré -go there is a secondary rounding <u>5.5</u>):

Kusaal	Mooré	Nawdm	
tè'ɛgª	tòɛɛgá	tòd pl tòrá	"baobab"
dèɛgª	<i>rèoogó</i> pl <i>reto</i>	dờd pl dờrá	"warthog"

Nawdm *r* probably continues a single Proto-Oti-Volta consonant **l*. Western Oti-Volta has **y* for single **l* after a short root vowel, root-initially and before *a*; elsewhere, and always when *geminated*, **l* became **r*. Only Mooré and Agolle Kusaal maintain the three-way contrast *r/d/l* after vowels; elsewhere *r/d* fall together as *r*, except in Dagbani, where *r/l* fall together as *l*, with original *d* appearing as *r* (cf the Songhay loanword *bùrkìn*^a, Mooré *bùrkĩná*, but Dagbani *bilchina* "honourable.")

*[Kusaal y ā'am ^{m/}	Mampruli y am	Dagbani	Nawdm r áħứı	"gall"
	('n) y í'	(n) y i	(a) y i	(m) r éh	"two"
	y ὸ+	y ⊃	y 0	r iw	"close"
	zì'e ^{ya}	zε y a	зіє у а	jeh r a	"be standing"
	yàa r ım ^m	yaa r im	ya l im	yáà r ŕn	"salt"
	nɔ̄ɔ r ɛ/	noo r i	no l i	nóó ŕ	"mouth"
	tùbυ r ε	tub r i	tibi l i	tób ŕ	"ear"
*[[yī r ε/	yi r i	yi l i		"house"
	gū r a/	gu r i	gu l i		"guard"
	mɔ̃ r a/	ma r i	ma l i	ma d a (d ← rr)	"have" (Nawdm <i>tenir</i>)
*d	mว ̄d ε	тว г і	тэ г і	тว d	"swell"
	mวิว d ะ	moo r i	тэ г і	móó ť	"grass" pl

Mooré and Agolle Kusaal *r* following a short root vowel are due to gemination, analogy, or borrowing. Thus Mampruli/Dagbani *kpari* "lock" corresponds not to Kusaal **kpàd*^{ϵ} but to *kpàr*^{ϵ}, with *r* probably from an obsolete single-aspect verb **kpàr*^a \leftarrow **kpal*[$a \leftarrow$ **kpad*[a "be locked"; cf $g\dot{v}$]^{ϵ} "suspend", $g\dot{v}$]^{la} "be suspended" and the dualaspect type gerunds $p\bar{c}nrib^{c}$, $t\bar{c}nrib^{c}$ from $p\dot{c}nr^{a}$ "be near", $t\epsilon\bar{n}r^{a}$ "remember." The relationship between Mampruli *nyariŋŋu*, Dagbani *ŋariŋ*, Toende Kusaal *âarùŋ* and Agolle Kusaal *ànrvŋ*^c "boat" is unclear but probably involves borrowing.

Buli has y for **l* initially (yáam "gall"); r for **ll* (yérí "house", tara "have" = Kusaal $t\bar{a}r^{a/}$); and *i* or zero otherwise ($t\bar{u}ik$ "baobab", $d\delta k$ "hut", $n\delta ai$ "mouth.") "Warthog" is deri or duok, with the same stem but different noun classes: the vowel in deri is monophthongised, with $r \leftarrow *ll$ (stem-final + flexion-initial **l*).

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In Moba *[appears as l: ńlé "two", lōōń "close", dōōlỳ "pig", tōōlỳ "baobab." Jàṁ "gall" may reflect confusion between two originally distinct Oti-Volta words "gall" and "sense." Gulimancéma has zero for *[before consonants.

The Eastern Oti-Volta languages differ among themselves in the reflexes of *[: e.g. Byali dyā "two", tēēbū "baobab", dīīgā "warthog", nūī "mouth", but Waama yɛ̃ní "two", tōōríbū "baobab", dōríbū "warthog", nɔ́rē "mouth."

Before the noun class plural suffix $-a^+$, stems ending in a root vowel insert -y-, with shortening of long vowels; shortening of $i \partial u \partial p$ produces $\underline{i} e \underline{u} e [\underline{i} \mathbf{i}] [\underline{u} \mathbf{i}]$, found solely in this context. Historically, this may represent analogical introduction of the *l of the sg suffix before pl $-a^+$; cf the regular Nawdm pattern $n \delta \delta f$ "mouth" pl $n \delta \delta f \delta f$.

gāňr ^{ɛ/}	"ebony fruit"	pl <i>gāňyá</i> + (short sg vowel from pl)
bàlàar ^ε	"stick, club"	pl <i>bàlàya</i> +
kùkɔ̃r ^{ɛ/}	"voice"	pl <i>kùkōyá</i> + (*CVy- root)
nɔ̄ɔr ^{ε/}	"mouth"	pl <i>nōyá</i> +
zūυr ^ε	"tail"	pl <i>zūya</i> +
bīər ^{ε/}	"elder same-sex sib"	pl <i>bįēyá</i> +
zūθr ^ε	"hill"	pl <i>zųēya</i> +

Before the stative verb ending *-ya <u>10.2</u> unglottalised long vowels are shortened, but glottalised vowels remain long:

	tōɔgɔ	"bitter"	tōẹª/	"be bitter" (Mooré <i>tóe</i>)
but	<i>รง</i> ิ'งlím ^m	gerund of	sū'e ^{ya/}	"own"

The y belongs to the suffix: the root of $t \bar{c} e^{a/}$ is not *CVy-type; cf Mooré tóogo "hardship" pl tóodo; Nawdm tóógú "amer."

With the irregular nouns *sāe̯ňª/sāe̯ň*⁺ "blacksmith" pl *sāaňbª* and *sɔ̄e̯ňª/sɔ̄e̯ň*⁺ "witch" pl *sɔ̄ɔňbª* there are no *CVt*- allomorphs (cf Mooré *sãado* "smithing", *sốodo* "witchcraft"), and the roots were perhaps originally **CVñ*.

A different rule of attachment of $-a^+$ is followed after root-stems ending with glottalised long vowels CV'V, which change to CVd:

tītā'ar ^ɛ	"big"	pl <i>tītāda</i> +
pòň'ɔr ^ε	"cripple"	pl <i>pòňda</i> +
yū'ur ^{ɛ/}	"name"	pl <i>yūdá</i> +
yū'er ^ε	"penis"	pl <i>yųāda</i> +

Stems in *-*ag*- *-*iag*- *-*uag*- <u>5.6</u> may inflect as *CVC*- stems, or may show analogical forms with -*d*-:

sį̀à'ar ^ε	"forest"	pl <i>si̯à'a</i> +
bà'ar ^ε	"idol"	pl bà'a ⁺ or bàda ⁺ *bagrı; Farefare bàgrè
bįāň'ar ^{ε/}	"mud, riverbed"	pl bi̯áň'a+
mὺ'ar ^ε	"reservoir, dam"	pl mu̯'àa+ or mʋ̀'ada+
zànkù'ar ^ɛ	"jackal"	pl zànku̯'àa+ or zànkù'ada+

In the $CV'V \sim CVd$ alternation an original root-final consonant appears as dbefore vowels but is deleted with glottalisation elsewhere. This consonant may simply have been *d, with * $Vdr \rightarrow V'Vr$ after short root vowels and a cb based on the sg. Stems with sg CVd- in the $r^{\varepsilon}|a^{+}$ noun class would need to be explained by levelling. This usually involves remodelling of pl forms on the sg, but $CV'V^{+}$ plurals would naturally be avoided as ambiguous, and many such words are in fact commoner in pl than sg, e.g. $kp\bar{\varepsilon}ndur^{\varepsilon'}$ "cheek." Others are deverbal nouns, as in $n\bar{l}f njdir$ "trachoma", prone to remodelling after finite verbal forms; yet others are adjectives, like $k\bar{v}dur^{\varepsilon}$ "old", $b\dot{\varepsilon}dur^{\varepsilon}$ "great", where the stem is levelled across noun classes. The second component of $p\underline{u}'\dot{a}$ -sā $dur^{\varepsilon'}$ "young woman" is an original adjective "nulliparous", with former $a|b^{a}$ class agreement: cf Mooré $p\dot{o}g$ -sádà "young woman." Languages without glottalisation treat $r^{\varepsilon}|a^{+}$ class cognates of CV'V-stems exactly like CVV- stems (Mooré $p\tilde{o}ya$, Kusaal $p\dot{o}nda^{+}$ "cripples"), but the rules for addition of pl - a^{+} differ across Western Oti-Volta to the extent that it is clear that levelling must have proceded independently in each subgroup.

Roots ending in \mathfrak{o} or \mathfrak{v} become glottalised before derivational *g and *s:

	kò+	"break" intrans	kờ'ɔg ^ε	"break" trans/intrans
	рòэd ^a	"be few"	<i>p</i> ວ່' <i>ວg</i> ε	"diminish"
	vūe ^{a/}	"be alive"	ν <i>ū</i> 'υg ^{ε/}	"make, come alive"
	nīn-múa+	"concentration"	mù'e ⁺ (*mɔ̃'ɔ̃gι)	"intensify"
	kòɔlúŋ ^ɔ	"broken"	kờ'ɔs ^ε	"break several times"
	tòň+	"shoot"	tòň'ɔs ^ε	"hunt"
	vūę ^{a/}	"be alive"	<i>vū</i> ' <i>us</i> ^{ɛ/}	"breathe, rest"
but	уÈ ⁺	"dress oneself"	yὲεg ^ε	"undress oneself"
	dì+	"eat"	dìıs ^ɛ	"feed"

A derivational change $*[g \rightarrow dg$ appears in

	<i>l</i> 5 ⁺	"tie"	lɔ̄dιg ^{ε/}	"untie"
cf	lóe	"tie" (Mooré)	lódgè (or lókè)	"untie" (Mooré)
	р <i></i> 0+	"divide"	pūdıg ^{ɛ/}	"divide"
cf	púi	"divide" (Mooré)		
	bòı	"get lost" (Toende)	bòdιg ^ε	"lose, get lost":
	yāar ^{ε/}	"scatter"	yādıg ^{ɛ/} "sca	tter"

There are other sporadic $CVV \sim CVC$ alternations which are probably relics of root-final consonant lenitions and deletions. Thus, $CVw \sim CVb$ alternations appear in

nō	+ "tread"	n5bá+	"feet"
cf na	o "tread" (Mooré	é)	
sāz	ŏřr ^ε "liver"	sɔbri	"liver" (Mampruli)
são	oore "liver" (Mooré)	sabili	"liver" (Dagbani)

There are few *CVb*- stems in the $r^{\varepsilon}|a^{+}$ noun class. *N5bir*^{\varepsilon} "foot" has introduced -*b*- from the plural (Toende sg $n\bar{2}\bar{2}t$) and $t\bar{v}bvr^{\varepsilon}$ "ear" may have done so; others are deverbal or adjectival: cf the discussion of *CV'V~CVd* alternations above.

CVV~CVg alternations appear in:

wìid ^a	"draw water" ipfv	wìk ^ε	pfv (← *wiggι)
vī ⁺	"uproot"	vīk ^{ε/}	"uproot" (← *viggι)

5.3.2 CVVC~CVC

Roots of the form *CVVC* are confirmed by cases where they alternate with *CVC*. The alternation appears in derivation:

tūvma+	"work" noun	tùm ^m	"work" verb
yέoŋ	"one"	yīµŋ ^{>/}	"single"
kāal ^{ε/}	"count"	kāl ^{lε/}	"number"
tūvlúg ⁰	"hot"	tūl ^{la/}	"be hot"

The short allomorph is invariable before derivational suffixes other than -lum-"-ness/-hood" and the -y- of stative verbs; thus sáannìm^m "strangerhood" \leftarrow *saanlummu, kpi əm^{ma/} "be strong" \leftarrow *kpi'əmya, but

màal ^ε	"sacrifice" (verb)	māluŋ ^ɔ	"sacrifice" (noun)
pìəlıg ^a	"white"	pèlıg ^ɛ	"whiten"
kpī'oŋ ^ɔ	"strong"	kpɛ̀'ŋ٤	"strengthen"
lìəb ^ɛ	"become"	lèbıg ^ɛ	"turn over"
tōυlúg ⁵	"hot"	tūlıg ^{ɛ/}	"heat"
yāar ^{ɛ/}	"scatter"	yādıg ^{ε∕}	"scatter"
dɛ̄ɛŋ ^a	"first"	dèŋ ^ɛ	"go first"
pìəbɛ	"blow" (flute)	pèbıs ^ɛ	"blow" (wind)
yùul ^ɛ	"swing" intrans	yùlıg ^ɛ	"swing" transitive

 $z(i\eta^a (\leftarrow *z\bar{\imath}(mg\bar{a}) z\bar{\imath}m(+ z\bar{\imath}m- "fish"))$ $n\acute{a}af^o(\leftarrow *n\bar{a}\acute{a}gf\bar{\upsilon}) n\bar{\imath}ig(+ n\bar{a}'-(\leftarrow *n\bar{a}g-)))$ $w\acute{a}af^o(\leftarrow *w\bar{a}\acute{a}gf\bar{\upsilon}) w\bar{\imath}ig(+ w\bar{a}'-(\leftarrow *w\bar{a}g-)))$ $p\bar{\imath}im^{m/}$ $p\bar{\imath}m\acute{a}^+$ $y\dot{\upsilon}m^{m\epsilon}$ $y\dot{\upsilon}m^{m\epsilon}$

Alternation appears in flexion in a few very common nouns:

5.4 Consonant cluster assimilation

The changes described below precede deletion of postvocalic *g. Except between a prefix and a root, 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** (*ι* by default); *kk pp tt ŋŋ* are written with single symbols: *k p t ŋ*.

Nasals usually take up the position of articulation of a following consonant, and then homorganic consonants form clusters, but with fairly numerous exceptions among alveolars, usually explicable as due to remodelling by analogy in flexion.

The treatment of the possible pairs is shown in the table below, with ∂ representing the insertion of an epenthetic vowel. There are gaps where combinations are unattested.

$1\downarrow 2\rightarrow$	g	d	b	т	n	r	s	1	f	у
g	kk	ə	ə	Ð	Ð	ə	ə	ə		ə
d	ə	tt	ə	ə		ə	ə			r
b	ə	ə	рр	[mm]	ə	ə	ə	ə		ə
m	ŋŋ	mn	mm	mm		mn	[:̃s]	nn		mm
n	ŋŋ	nn	mm	ə		nn	ĩs	nn	~f	nn
r	ə	ə	ə	ə		r	ə	tt	ə	
s	ə	ə	ə	ə		ə	ə			s
1	Ð	nn	ə	ə		11	ə	11	ə	11

The unusual change $Id \rightarrow nn$ is carried out with complete regularity. It is found throughout Western Oti-Volta, with e.g. Mooré showing $Id \rightarrow nd$.

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

 $bm \rightarrow mm$ only occurs after a short root vowel

 $ms \rightarrow \tilde{s}$ never occurs after a short root vowel; elsewhere it is optional.

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

 $t\bar{\epsilon}\eta^a$ "land"pl $t\bar{\epsilon}\epsilon\bar{n}s^\epsilon$ \leftarrow *tensi $k\dot{v}li\eta^a$ "door"pl $k\dot{v}lis^\epsilon$ \leftarrow *kvlinsi

For the pl $b\bar{v}t\iota\iota s^{\epsilon}$ of $b\bar{v}t\iota \eta^{a}$ "cup" see <u>2.2</u>.

***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:

nīf ^{ɔ/}	"eye"	pl	nīní+
píıňf ^o	"genet"	pl	pīıní+

*ss inserts an epenthetic vowel in

pūsıg ^{a/}	pūsıs ^{ɛ/}	pūs-	"tamarind"

However, all other examples of $g^a|s^{\epsilon}$ plurals ending in -*sis*^{ϵ} in my materials are for *-*sinsi*, from stems in **m*. A plural **pūs*^{ϵ /} would have appeared to show no ending in SF; nouns usually avoid such ambiguity by selecting a different flexion <u>8.1</u>, but there is a strong association of tree names with the $g^a|s^{\epsilon}$ class and of $r^{\epsilon}|a^+$ and $g^{2}|d^{\epsilon}$ with fruits <u>29.5</u>; *pūsá*⁺ means "tamarind fruits."

**dr* inserts an epenthetic vowel, but is is possible that originally the rule was **Vdr* \rightarrow *V'Vr*, as discussed in <u>5.3.1</u> above; **ds* may have behaved similarly.

The word $nw\bar{a}m^{m\epsilon}$ WK "calabash" has $*mr \rightarrow nn$ for some speakers ($nw\bar{a}n^{n\epsilon}$ SB), and the pl may be remodelled on the sg: $nw\bar{a}na^+$ (Lk 11:39, 1976) $nw\bar{a}ma^+$ SB WK; cf also 1976 NT kobkennib = $k \ge nb + k\bar{n}mrb^a \leftarrow *k \ge b + krmdrba$ "herdsmen."

Derivation precedes flexion in consonant cluster formation.

Regardless of origin, stem-final $kk pp tt \eta\eta mn nn$ never assimilate further; stem-final mm assimilates only with $mmm \rightarrow mm$ in imperatives <u>10.1</u>:

kōt ^{ε/}	kōtíd ^a	kòtım ^a	"slaughter"
<i>vènnıg</i> ^a sg	<i>vὲnnιs^ε</i> pl	<i>vèn-</i> cb	"beautiful"
vènnır ^ɛ	vènna+		
tì-vūnním ^m			"oral medication"
kòňb-kīm ^{na}	kòňb-kīmmıb ^a /kòi	ňb-kīmnıb ^a	"shepherd"
<i>tōmmιr</i> ε DK WK	tūmna+ DK tūmm	a+ WK	"useful"
tùmmím-tāa ⁼			"co-worker"
<i>dàm</i> ^m pfv	dàmmıd ^a ipfv	dàm^{ma} imp	"shake"
dàmmvg ⁵			gerund

Stem-final *II* r(r) assimilate the initial of the noun class suffix $-r^{\varepsilon}$:

$$k \partial g - d\bar{\epsilon} l^{|\epsilon|}$$
 "chair for leaning on"

The tones are probably due to analogy; $k\dot{\nu}g-d\ell l^{\epsilon}$ might have been expected. This assimilation has led to the sg SF forms of agent nouns from single-aspect verbs in *II* r(r) being taken as formed with r^{ϵ} , with new LFs and plurals in $-a^{+}$ 8.3.1.

Stem-internal *nn* and *mm* become single *n* and *m* after after epenthetic vowels and long root vowels. $P\bar{i}bin^{n\epsilon}$ pl $p\bar{i}bina^+$ "covering" has single -*n*- for my informants, but the Mooré cognate has -*nd*-: $p\bar{i}bindga$ "lid, cover." The Mooré equivalent of the assume-stance derivational suffix -*n*- <u>12.1.1</u> is -*nd*-: $z\bar{i}$ "be sitting", $z\bar{i}ndi$ "sit down"; $g\bar{a}e$ "be lying down", $g\bar{a}ande$ "lie down"; $v\bar{a}be$ "être à plat ventre", $v\bar{a}bende$ "se mettre à plat ventre"; tàbe "être collé aux parois de", tàbende "se coller à." Nawdm has -*nt*- in such derivatives, e.g. *jeħra* ipfv "être debout", *jeħnt* pfv "se mettre debout." Geminate *mm* has become single *m* in most sources after after epenthetic vowels and long root vowels in single-aspect verbs <u>12.1.5.1</u>.

In verb flexion and gerund formation $single \ m \ n$ may be followed by unexpected epenthesis as a strategy to avoid ambiguous SFs.

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

bùn ^ɛ	bùn ^{na}	bùnım ^a	"reap"
būnıb ⁵			gerund

3-mora *n*-stems *always* show epenthesis, probably because here $n \leftarrow *nn$:

dìgın ^ɛ	dìgınıd ^a	dìgınım ^a	"lie down"
dìgınvg ⁵			gerund
g`o'on ^ɛ	gɔ̀'ɔnɪdª	gò'ɔnımª	"extend neck"

2-mora *m*-stems regularly assimilate in the imperfective, but NT/KB occasionally has unassimilated forms to avoid ambiguity:

wòm ^m	wùm ^{ma}	wùm ^{ma}	"hear	,11
ka nan kpɛn wʊmic	d ye m bɛɛ li pʋʋgin	nannanna la.		
kà nán kpèn wùm	ıd yé m̀ bέɛ_lì	<i>p</i> บิบgบ-n	nānná-nā	lā.
and still still hear:	IPFV that 1SG EXIST 3IN	IAN inside:sg-loc	now	ART
"and are still heari	ng that I am in it n	ow." (Phil 1:30))	

3-mora *m*-stem ipfv and gerunds *may* assimilate; the imperative must do:

but

tɔ̄ɔm ^{m/}	tóɔm ^{ma} /tɔ̄ɔmíd ^a	tòɔm ^{ma}	"depart"
tóɔŋʰ/tɔ̄ɔmúgʰ			gerund
kàrım ^m	kàrım ^m /kàrımıd ^a	kàrım ^{ma}	"read"
kàrvŋ²/kàrımvg²			gerund

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 $n\bar{\epsilon}^{+/}$, and require epenthesis everywhere else:

Ѝ pū kárìmmā.	"I'm not reading."
Ѝ kárìm nē.	"I'm reading."
Kà bà kárımìd.	"And they were reading."
Kà bà kárìm.	only "And they read."

Examples for assimilation versus epenthetic vowel insertion:

*gg → kk	gìk ^a	"dumb" sg	<i>gìgιs</i> ε pl	
ci	f <i>kɔ̃lıg</i> a	"river" sg	<i>kɔ̄lıs</i> ε pl	
$*dd \rightarrow tt$	bùt ^a	"plant" ipfv	<i>bùd</i> ε pfv	
ci	f dūgud ^{a/}	"cook" ipfv	<i>dūg</i> ε ipfv	
*bb → pp	sōp ^{ɔ/}	"writing" ger	<i>sɔ̄b</i> ε pfv	
ci	f kpārīb^o	"locking" ger	<i>kpàr</i> ε pfv	
*ld → nn	kòn ^{nε}	"bags" pl	<i>kòlug</i> ^c sg	
ci	f zūθbíd^ε	"hairs" pl	<i>zūəbúg</i> ^ɔ sg	
*mg → <u>ŋŋ</u>	bùŋ ^a	"donkey" sg	<i>bòmιs</i> ε pl	
*ng → ŋŋ	gbàỵŋ ^ɔ	"book" sg	<i>gbàna</i> + pl	
ci	f ňwādıg^{a/}	"month" sg	<i>ňwādιs^{ε/}</i> pl	
*nr → nn	<i>tān</i> ^{nε}	"earth" sg	<i>tāna</i> + pl	
*mr → mn	<i>dūm</i> nε	"knee" sg	<i>dūma</i> + pl	
*lr →	gél ^{lε}	"egg" sg	<i>gēlá</i> + pl	
*rr →	kùkpàr ^ɛ	"palm fruit" sg	<i>kùkpàra</i> + pl	
ct	f dìgιr^ε	"dwarf" sg	<i>dìga</i> + pl	
*nb → mm	sáam ^{ma}	"strangers" pl	<i>sāan^{a/}</i> sg	
ct	f nīdıb^{a/}	"people" pl	<i>nīd^{a/}</i> sg	
*mb → mm	kīm ^{mɔ}	"shepherding" ger	<i>kìm</i> ^m pfv	
cf	kādıb ⁵	"driving off" ger	<i>kàd</i> ε pfv	
* →	Bùl ^{lε}	"Buli"	Bùlιsε	"Bulsa"
*rl → tt	Bāt ^{ε/}	"Bisa language"	Bārιs ^{ε/}	"Bisa people"
*ml → nn	Dàgbān ^{nε/}	"Dagbani"	Dàgbām ^{ma/}	"Dagomba"
*nl → nn	Gōrín ^{nɛ}	"Farefare	Gōrís ^ε	"Farefare people"
		language"		

5.5 Diphthongisation before *-ya *-gv *-kkv *-ŋŋv

The changes described below apply after consonant-cluster

assimilation/epenthetic-vowel insertion and before deletion of *g after vowels.

When -y- would become syllable-closing after a short back vowel as a result of apocope, it is changed to \underline{e} , producing a short fronting diphthong:

SF	vūe	LF	vūyá	"be alive"
SF	tōẹ	LF	tōyá	"be bitter"
SF	sā <u>e</u> ň	LF	sāňya	"blacksmith"
SF	sīeň	LF	s <i>ī</i> ňya	"witch"

Vowels are subject to fronting in the LF before y and to rounding before a following rounded vowel if a velar intervenes; these changes *remain* in the SF.

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

sɔ̃ň'e ^{ya/}	← *sɔ̃'ɔ̃ya	"be better than"
sū'e ^{ya/}	← *sv'vya	"own" (cf <i>sū</i> ' <i>vlím</i> ^m "property")

Short unrounded root vowels become diphthongs in \underline{u} before LF *ŋŋv *kkv:

gbàỵŋ ^ɔ	← *gbaŋŋט	"book"	pl <i>gbàna</i> +
lāuk ^o	← *lakkv	"goods item"	pl <i>lā</i> 'ad ^ɛ
yīµŋ ^{ɔ/}	← *уเŋŋʋ	"single"	pl yīná+

Tense *i* does not diphthongise in the only case in my materials: $nn-gb\bar{n}^{-/}body''$ pl $nn-gb\bar{n}a^+$; this may be due to the analogy of the alternative sg $nn-gb\bar{n}$.

Short *ja* becomes *jau*, but short *ua* becomes $\mathfrak{I}: *uakku \to \mathbf{I}kku$

bįāµňk ^o	← *bįãkku	"shoulder"	pl <i>bຼiāň'ad</i> ε
bòk ^o	← *bµakkv	"pit"	pl <i>bὺ'ad</i> ɛ

Unrounded second morae of long vowels become [ʊ] before LF **gv *סָרָני*:

dàvg ⁵	← *daagv	"log"	pl dàad ^ɛ
fēň'og ^{ɔ/}	← *fɛ̃'ɛ̃gv	"ulcer"	pl <i>fēň'εd^{ε/}</i>

The second mora of the long vowel ii becomes tense u, giving iu; this contrasts with the second mora of the long vowel $i\partial$, which becomes [v], giving io [iv]:

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	vīug ^{ɔ/}	← *viigv	"owl"	pl <i>vīid</i> ɛ/
but	dàbīog ⁵	← *dabiəgv	"coward"	pl dàbīəd ^ɛ
	kpī oŋ ^ɔ	← *kpi'əŋŋט	"strong"	pl <i>kpi</i> 'əma+

No parallel case with uu/uv occurs, because of the rule * $uegv \rightarrow correctors$:

Sà'dàbòɔg ^ɔ	← *Sa'dabuøgv	"place of the Sarabose <i>Sà'dàbùøs</i> ε clan"
lām-fɔ́ɔ̀gɔ	← *lam-fuøgv	"toothless" (<i>lām</i> ^{mε/} "gum",
		<i>fùe</i> + "draw out")

Pl vowels are remodelled on the sg: $l\bar{a}m$ -f5 $\dot{c}d^{\epsilon}$ "toothless." The only stem in final $u\theta$ in the $g^{2}|d^{\epsilon}$ class is the formally-plural $z\dot{u}\theta d^{\epsilon}$ "friendship", where there is no sg with g^{2} . The only $g^{2}|d^{\epsilon}$ stems in $i\theta$ in the are $d\dot{a}b\bar{l}og^{2}$ "coward", $kp\bar{l}og^{2}$ "strong", and $piog^{2}$ (? tones) "bald", and there is stem alternation before $g^{a}|s^{\epsilon}$ and $g^{2}|d^{\epsilon}$ suffixes in

bī'a+	bī əs ^ɛ	bià'-	"bad"
bē'og ^o	bē'ɛdɛ	bè'-	

 $B\bar{r}
i m^m$ "enemy" shows the same root with derivational **m*. The alternation suggests a rule **iagv* $\rightarrow \varepsilon \nu gv$, parallel to * $uegv \rightarrow cogv$, with the pl vowels again remodelled on the sg. The broken vowel of $dab\bar{r}og^{2}$ "coward" is perhaps carried over from an obsolete * $dab\bar{r}am^m$ "coward" (= Mooré $rab \dot{\varepsilon} \varepsilon m \dot{a}$.)

The **epenthetic vowel** ι is rounded to υ before LF *- $g\upsilon$ *- $\eta\upsilon$:

	āaňdıg ^a	← *ããdıga	"black plum tree"
but	gàadvg ^o	← *gaadıgv	"(sur)passing" (gerund)
pl	mālıma+	← *malımaa	"sacrifices"
but	mālvŋ ^ว	← *malเŋŋบ	"sacrifice"

5.6 Deletion of *g with vowel fusion

The vowel changes described below apply after diphthongisation by fronting and rounding but before apocope. They are late historically: Haaf 1967 still has e.g. *baga* for *bā*'*a* "diviner" and *winbagr* for *wīn-bá*'*àr* "altar."

Underlying ***g** is deleted after a *ja ua aň jaň uaň* before any vowel, affix or epenthetic, with fusion resulting in glottalised 2-mora vowel sequences:

*agV	→ a'a	*aňgV	→ aň'a
*įagV	→ įa'a	*įaňgV	→ įaň'a
*u̯agV	→ $\upsilon'a$ (word-final $\mu'aa$)	*u̯aňgV	<i>→ טחॅ'a</i> (word-final עֲחׁ'aa)

 $\underline{i}a'a \ u'a \ \underline{i}a\ddot{n}'a \ u\ddot{n}'a$ contrast with $i'a \ u'a \ \underline{i}\ddot{n}'a \ u\ddot{n}'a$, except when shortened by apocope. There is no phonetic difference between $a'a \ a\ddot{n}'a$ arising from *g-deletion and underlying glottalised $a'a \ a\ddot{n}'a$, as in $d\dot{a}'a^{=}$ "market", pl $d\dot{a}'as^{\epsilon}$ ($g^{a}|s^{\epsilon}$ class.)

This rule applies later than the assimilation $*gg \rightarrow kk \ \underline{5.4}$; thus

zàk ^a	"compound"	zà'as ^ɛ	pl	(g ^a s ^ε class)
lāuk ⁵	"item of goods"	lā'ad ^ε	pl	(g ⁰ d ^ε class)
yàk ^ε	"unhang"	yà'al ^ε	"hang up"	
pįàuňk ^o	"word"	pi̯àň'ad ^ɛ	pl	(g^ɔ d^ɛ class)
pųāk ^a	"female" (adj)	pū'as ^ɛ	pl	(g ^a s ^ε class)
bòk ^o	"pit"	bὺ'ad ^ε	pl	(g ⁰ d ^ε class)
pįāň' ^a	"speak" pfv	pįāň'ad ^{a/}	ipfv	
pu̯'āª	"woman"	pū'ab ^a	pl	(^a b ^a class)

Exceptional is $k\bar{a}'e^+$ "not be" $\leftarrow *kag\iota$.

***g** is deleted after **aa iə ue** and their glottalised counterparts (but not after av εo io >> resulting from rounding before *gv.) When an affix vowel follows the *g, fusion creates three-mora vowel sequences (similarly with the glottalised vowels):

*aaga	<i>→ aa <u>7.1</u></i>	*aagı	<i>→ aee</i>
*iəga	→ iaa	*iəgı	<i>→ iee</i>
*uøga	→ uaa	*иөдι	<i>→ uee</i>

The diphthongs *iaa uaa* arise from deletion of the *g in $g^a|s^{\varepsilon}$ class singulars:

	būvg ^a		"goat"	pl <i>būυs</i> ε
but	bāa ⁼	← *baaga	"dog"	pl <i>bāas</i> ε
	sīa+	<i>← *siəga</i>	"waist"	pl <i>sīəs</i> ɛ
	sàbùa+	← *sabuøga	"lover"	pl <i>sàbùøs</i> ɛ

The diphthongs *aee iee uee* appear in dual-aspect "fusion" verbs <u>10.1</u> with stems in **Caag* **Ciəg* **Cuog* and their glottalised counterparts:

pāe+/	← *paagι	"reach"
kpì'e ⁺	← *kpi'əgι	"approach" cf kp ' ∂s^{ϵ} "neighbours"
dūe+/	← *duøgι	"raise, rise"

Original open nasalised $\tilde{\epsilon}\tilde{\epsilon} \tilde{\epsilon} \tilde{\epsilon} \tilde{j}$ only undergo vowel breaking <u>3.2.2</u> before g, elsewhere falling together with the reflexes of former close $\tilde{\epsilon}\tilde{e} \tilde{\epsilon} \tilde{o}\tilde{o}$ as $\epsilon\epsilon n Jon$: breaking occurs in all contexts where g would suffer deletion and nowhere else.

Alternations thus arise in nouns and adjectives in the $g^a|s^{\epsilon}$ class between SFfinal *iaň uaň* and word-internal $\epsilon\epsilon n \, son$ before a consonant:

zìň'a+	"red" g ^a s ^ε class sg	zὲň'εs ^ε	"red" g ^a s ^ε class pl
		zὲň'εd ^ε	"red" g^ɔ d^ɛ class pl
		zÈň'og ^ɔ	"red" g^ͻ d^ε class sg <u>5.5</u>
dùaň+	"dawadawa" sg	dòɔňsɛ	"dawadawa" pl
Mùa ⁺	"Mossi person"	Μὸͻͻεε	"Mossi people"
		ΜὸͻͿ ^ε	"Mooré language"
		Мòɔg ^ɔ	"Mossi country"

Similarly, alternation appears in derivation between fusion verb forms from *- $g\iota$, ending in SF *ieň ueň*, and cognate forms with $\epsilon\epsilon n \, 20n$:

nìe ⁺	"appear"	nèɛlɛ	"reveal"
ňyū'e ^{+/}	"set alight"	ňyɔ̄'ɔs ^{ε/}	"smoke" (noun)
sūeň+/	"anoint"	sōň+	"rub"

Breaking results in fronting before $*-g\iota$ differing from fronting before *-y- <u>5.5</u>:

sūň'e ^{+/}	"become better" WK	sōň'e ^{ya/}	"be better than" (← *sɔ̃'ɔ̃ya)
Sunc		5511 C	

When *aa aaň iə ue* precede a *g which is *not* followed by an affix vowel, the only trace of *g is the disturbance of toneme allocation in Tone Pattern H <u>6.2.1</u>.

náaf ^o	← *nāágfū	"cow" pl <i>nīig</i> í+ cb <i>nā</i> '-
dí'ər ^ɛ	← *dī ʻágrī	"receiving" $(d\vec{r}e^{+/}$ "receive" $\leftarrow *d\vec{r} \Rightarrow g()$
νúθr ^ε	← *vūégrī	"red kapok fruit" pl <i>vūáa</i> =

However, broken *iəň uoň* appear instead of *ɛɛň ɔɔň*:

	nèɛrɛ		"empty" (← "clear")
but	nìər ^ɛ	← *nĩãgrı	gerund of <i>nìe</i> + "appear"
	pɔ̃ň'ɔl ^{ɛ/}		"cause to rot"
but	púň' o r ^ε	← *pũ'ẽgrι	gerund of <i>pūň</i> 'e ^{+/} "rot"

Tones show that the imperfective of fusion verbs has no underlying *g, and older forms in texts reflect this by keeping $\varepsilon\varepsilon n \ DDN$, e.g. pon'od from $p\bar{u}n'e^{+/}$. Later texts, and all my informants, consistently introduce $i\partial n \ u\partial n$ into imperfectives and imperatives by analogy: pun'od $p\bar{u}n'\partial d^{a/}$.

5.6

6 Word tonal structure

6.1 Tone Patterns

There are great constraints on the distribution 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>7.4</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**. For the Western Oti-Volta protolanguage, it would be feasible to take these Patterns as *tonemes* with the *word* as the tone-bearing unit, but synchronically, Tone Patterns are suprasegmental features of word *stems* which allocate an individual toneme to every vocalic mora 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; such rules disrupt the surface distribution of tonemes. For example, these two Pattern H nouns show different tonemes in the singular:

<i>sīiňf^{ɔ/}</i> sg	<i>sīiňs^{ε/}</i> pl	<i>sīň-</i> cb	"bee"
píıňf ^o	pīıní+	pīın-	"genet"

The difference is due to the fact that "bee" has a 2-mora *CVV* stem $s\bar{i}in$ - [s \tilde{i} :], whereas "genet" has a 3-mora *CVVC* stem $p\bar{i}un$ - [pi:n], 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 with agent nouns which drop derivational -*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:

pù'us ^a	pū'vsıdıb ^a	pù'us-	"worshipper"
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Only 2-mora Pattern H and O stems have LF-final tonemes which cannot be simply predicted from the SF tonemes; there are just too few segments for the difference between Patterns H and O to be expressed in the SFs, but the Patterns remain distinguishable in the LF.

0	Lì à nẽ kũk.	"It's a chair."
	Lì kā' kūka.	"It's not a chair."
Η	Lì à nẽ dūk.	"It's a cooking pot."
	Lì kā' dūkó.	"It's not a cooking pot."

Some words show tonal distinctions in the SF which are lost in the LF, like $n\acute{a}af^{2}$ "cow" versus $n\acute{u}'\acute{u}g^{2}$ "hand", but only as a result of toneme delinking <u>4.2</u>. However, even if 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 <u>6.2.3</u> would still need simply to be declared part of a Pattern.

Intrinsic LF-final tonemes are unspecified whenever the last stem toneme is L or H. For descriptive convenience, the LF-final tonemes which appear before the negative prosodic clitic are taken as basic:

- 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

Free words with apocope-blocking <u>5.1.3</u> with SFs ending in M toneme change to final H in the LF (except in $k \ge b \iota g\bar{a}^=$ "one hundred"):

SF <i>yā</i>	LF yáa	"houses"	yā+/
SF <i>bèdvgū</i>	LF bὲdυgύυ	"a lot"	bὲdυgū ^{+/}

Superscript notation writes $y\bar{a}^{+\prime}b\dot{\epsilon}dvg\bar{v}^{+\prime}$ by the usual convention. Three basic Tone Patterns are distinguished in nominals:

Pattern H	initial M or H
Pattern L	initial L
Pattern O	all-M in sg/pl; all-L in cb $% \left({{{\left({{{{{}}}} \right)}_{{{}}}}_{{{}}}}} \right)$

All Western Oti-Volta languages for which I have adequate tonal information have analogues of Patterns H, L and O, with Pattern O alternating between all-H free forms and all-L cbs; the noun tone patterns of Buli also correspond systematically to these, showing respectively H, L and mid tone stems, with all-mid free forms having all-L cbs, tonally identical to those of the Pattern L type.

Akanlig-Pare and Kenstowicz 2002 regard Mooré Pattern O stems as intrinsically tonally unmarked, copying the H tone (= Kusaal M) of a flexional suffix but otherwise defaulting to all-L. Olawsky 1999 takes Dagbani Pattern O stems as toneless, but follows Anttila and Bodomo (on Dagaare) in attributing the change to all-H to stress. This is not workable in Kusaal, and even in Dagbani, stressed verb forms often have all-L tonemes. Tone-copying is supported by the facts that cbs and perfectives are the only all-L open-class word types *not* followed by M spreading, and that such perfectives (when without tone overlay) uniquely show L before liaison; this covers all cases where Pattern O words do *not* change to all-M apart from Pattern LO imperfectives, which historically probably incorporated derivational suffixes which produce Pattern L when added to Pattern O forms <u>6.5</u>. Derivational suffixes also frequently produce Pattern O stems when added to Pattern L forms, which is difficult to reconcile with an analysis of Pattern O as intrinsically toneless. The appearance of H tonemes on the third morae of four-mora Pattern L nominal stems suggests rather that Pattern L has an underlying non-initial M^2 which becomes L or H by internal tone sandhi in surface forms, whereas Pattern O stems are intrinsically all-L. For descriptive purposes it is not necessary to attribute underlying tonemes as such to derivational suffixes; they can simply be classified by the Patterns they produce.

6.2 Nominals

Prefixed nominals are tonally distinctive only in that *cbs* with M prefixes always have H on the root; sg and pl follow normal patterns. L prefixes do not affect stem tonemes at all. Prefixes are ignored in counting stem morae below.

The tones of compounds are determined by external tone sandhi $\underline{7.3}$ $\underline{7.4}$.

Noun and adjective examples will be given in the order sg, pl, cb $\underline{8.1}$. The cb cannot occur phrase-finally and is therefore always affected by apocope.

Quantifiers and adverbs have the same segmental and tonal structure as nouns and adjectives, though often with the addition of apocope-blocking 5.1.3.

6.2.1 Pattern H

Regular Pattern H displays H on the first, second or third mora of the LF (disregarding any prefix.) All tonemes before the H are M, and all following the H are L. This H falls on a third mora if it exists and is vocalic; if not, H falls on the second mora, prior to toneme delinking. Cbs have M tonemes up until any third vocalic mora, which carries H.

νūr ^{ε/}	vūyá+	vūr-	"alive"
yīr ^{ε/}	yā+/	yī-	"house"
fūug ^{ɔ/}	fūud ^{ε/}	fū-	"shirt, clothes"
dūk ^{ɔ/}	dūgud ^{ε/}	dūg-	"cooking pot"
nīd ^{a/}	nīdıb ^{a/}	nīn-	"person"
kūgυr ^{ε/}	kūgá+	kūg-	"stone
gōt ^{a/}	<i>gōtíb</i> ª /tt/	gōt-	"seer, prophet"
sābılíg ^a	sābılís ^ɛ	sābıl-	"black"
sāb(l ^{lɛ}	sābılá ⁺		

²⁾ Toende Kusaal may show word-internal H after L where Agolle does not, e.g zìlím "langue", Agolle zìlım, vs sìbìg "punir" (Niggli 2012 pp 134ff), but this is probably leftward docking of a following H tone left floating by apocope <u>7.3</u> rather than a survival of an earlier stem tone pattern; cf SF bùý LF bùŋá "âne", Agolle LF bùŋā.

yūgúm ^{mε}	yūgumá+	yūgum -	"camel
dī əs ^{a/}	dī əsídìb ^a	dī'əs-	"receiver"
sūgvríd ^a	sūgvrídìb ^a	sūgvríd -	"forgiver, forbearer"
kū'alíŋ ^a	kū'alís ^ε	kū'alíŋ-	traditional smock

By toneme delinking, MH on a long vowel becomes single H.

sú'øŋ ª /ŋŋ/	sū'emís ^ɛ	sū'əŋ-	"rabbit"
sāan ^{a/}	sáam ^{ma}	sāan-	"stranger, guest"
sáannìm ^m			"strangerhood"

Delinking *follows* apocope. Where LFs end in long vowels or diphthongs, or in *-mm* (where the second *m* was historically syllabic but is now consonantal) the SF forms are regular, but if the LF final mora would have carried H toneme by the usual rules, the H appears at the beginning of the final *syllable*; superscript notation still writes the acute tone mark at the end: $v\bar{v}m^{m/}$ SF $v\bar{v}m$ LF $v\bar{v}mm$ "life" <u>5.1.1</u>.

Two subtypes of Pattern H show the H toneme shifted to the left of its expected position because an underlying mora has been lost.

Some words have H on a *second* mora preceded by $r \leftarrow *rr$:

ňyīríſ ^ŗ	ňyīrí+	"egusi seed"
<i>mōrím</i> ^m		"having" (gerund)

Many words have a long root vowel followed by a mora which has been deleted either by reduction of a consonant cluster to a single consonant by assimilation 5.4 or by deletion of *g when no affix vowel follows 5.6. Toneme delinking 4.2 then always results in one H toneme applying to both morae of the long vowel.

níis ^ɛ	← *nīínsī	(beside <i>nīimís</i> ^ɛ)	"birds" (sg <i>níiŋ</i> ª /ŋŋ/)
píıňf ^{>}	← *pīínfū	(pl <i>pīɪní</i> +)	"genet"
wáaf ²	← *wāágfū	(pl <i>wīigi</i> ⁺)	"snake"
yáab ^a	← *yāágbā		"grandparent"
νúθr ^ε	← *vūégrī		"fruit of red kapok"

So too with the gerunds of Pattern H fusion verbs 10.1:

náar ^ɛ	← *nāágrī	gerund of	nāe+/	"finish"
dí'ər ^ɛ	← *dī'ágrī		dī e⁺/	"get"
púň'er ^ε	← *pɔ̃'ɔ̃grī		pūň'e ^{+/}	"rot"

6.2.1.1 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.

nú'ùg ^ɔ	nú'ùs ^ε	nū'-	"hand, arm"
à-gáờňg ⁵	à-gáàňd [€]	à-gāň-	"pied crow"
nóbìr ^ε	nōbá+	nōb-	"foot, leg"
gél ^{le}	gēlá+	gēl-	"egg"
gbéèňm ^m	no pl	gbēň-	"sleep"
kísùg ^o	kīsá+	kīs-	"hateful, taboo" (adj)
áňsìb ^a	āňs-nám ^a	āňs-	"mother's brother"

Here also belong the irregularly formed gerunds $s \circ n s \circ g^a$ "conversing", $g \circ s \circ g^a$ "looking", $k \circ k i r \circ g^o$ "hurrying" (L prefix.)

Some HL words have probably lost a mora: *s r* can represent older *ss rr*, and cf Mooré *gãoobgó* "pied crow." $N\dot{u}'\dot{u}g^{2}$ "hand" has added further class suffixes to an original $|^{\epsilon}$ class form: Nawdm *núhú* pl *níhí*, Gulimancéma *nùu* pl *nìi*. *Nóbìr*^{\epsilon} "leg" is remodelled segmentally on the basis of the plural: cf Toende sg $n\bar{2}'\bar{2}t$ pl *n2ba*.

6.2.2 Pattern L

Pattern L comprises all nouns and adjectives beginning with L in sg/pl. All tonemes are L, except on third or fourth morae when followed by stem-internal *-*m*-(including cases where *-*mg*- has assimilated to -*ŋŋ*-), which carry H.

sù'ug ^a	sù'us ^ɛ	sù'-	"knife"
zàk ^a	zà'as ^ε	zà'-	"dwelling-compound"
màlıf ²	mòlı+	mòl-	"gazelle"
mèɛŋª	mὲεmιs ^ε	mÈɛŋ-	"turtle"
pùgudıb ^a	pùgud-nàm ^a	pùgud-	"father's sister"
sàam ^{ma}	sàam-nàm ^a	sàam-	"father"
àňrʊŋ ^ɔ	àňrıma+	àňrvŋ-	"boat"
kàrvŋ ^ɔ or kàrımv	g ^o		"reading" (gerund)
yàluŋ ^ɔ	yàlıma+	yàlvŋ-	"wide"
zìlιm ^{mε}	zìlıma+	zìlım-	"tongue"
sàal ^a	sàalıb ^a	sàal-	"human"
nòŋıd ^a			"lover"

sìilíŋ ^a	sìilímìs ^ɛ sìilís ^ɛ sìilímà ⁺	sìilíŋ-	"proverb"
zàaňsúŋ ^ວ ກວ້໗ເlím ^m	zàaňsímà+	zàaňsúŋ- nòŋılím-	"dream" "love"
nວ້ŋເdím-tāa ⁼ sùŋเdím-tāa ⁼	<u>12.2.1.4</u>		"fellow lover" WK "fellow-helper"
dàalím ^m bì'isím ^m	dàalímìs ^ɛ	dàalím-	"male sex organs" "milk"

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

bòɔdım ^m	no pl	"will"
zòtım ^m	no pl	"fear"
dàalım ^m	no pl	"maleness"

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

bùgúm ^m	no pl	bùgúm- or bùgōm- "fire"
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 $T\dot{a}dim(s^{\epsilon}$ "weakness", $b\dot{u}dim(s^{\epsilon}$ "confusion" perhaps derive from *-mimsi.

6.2.3 Pattern O

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

būvg ^a	būυs ^ε	bù-	"goat"
tān ^{nɛ}	tāna+	tàn-	"earth"
sīd ^a	sīdıb ^a	sìd-	"husband"
pu̯'āª	pū'ab ^a	pu̯'à-	"woman, wife"
sā'ab ^o	no pl	sà'-	"millet porridge"
gbīgım ^{nɛ}	gbīgıma+	gbìgım-	"lion"
ňwāaŋ ^a	ňwāamιs ^ε	ňwàaŋ -	"monkey"
mēɛd ^a	mēɛdıbª	mèɛd-	"builder"
sįākıd ^a	sjākıdıb ^a	sjàkıd-	"believer"
būtıŋ ^a	būtus ^ɛ	bùtıŋ-	"cup"
<i>m</i> ɛɛdเŋ ^a	mēɛdıs ^ɛ	mèɛdıŋ-	"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) <u>6.5</u>:

pù'us ^a	pū'usıdıb ^a	pù'us-	"worshipper"
kùøs ^a	kūøsıdıb ^a	kù o s-	"seller"

Pattern O nouns and adjectives are all either root-stems or stems derived with **m* **n* or **d*; however, all three suffixes are also seen in Pattern L words. Pattern O all-M LFs become all-L before the interrogative clitics <u>7.1</u>:

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*):

yūgυdιr ^{ε/}	yūgvda+	yùgvd-	"hedgehog"
ňwāaŋ ^a	ňwāamเs ^{ɛ/}	ňwàaŋ-	"monkey"
bāŋıd ^a	bāŋıdıb ^{a/}	bàŋıd-	"wise man"
kpārıdıŋ ^a	kpārıdιs ^{ε/}	kpàrıdıŋ-	"thing for locking"

It also occurs with LFs with three vocalic morae ending in *-mmV*, and with LFs of two vocalic morae ending in *-mm* (which is derived historically from **-mmv*):

gbīgιm ^{mε/}	gbīgıma+	gbìgım-	"lion"
<i>z</i> ɔ̄ɔm ^{mε/}	zɔ̄ɔma+	zòɔm-	"fugitive"
tādım ^{m/}	tādımιs ^{ε/}	tàdım-	"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 nĒ gbīgımmɛ́ɛ?	"Is it a lion?" WK only; rejected by DK
Lì à nĒ gbígìmmεε?	"Is it a lion?" both WK and DK

6.2.4 Noun prefixes

On noun prefixes generally see <u>13</u>. Tonally they are either M or L. L noun prefixes do not affect the rest of the tone pattern of the prefixed word:

Η	dàyūug ^{ɔ/}	dàyūud ^{ε/}	dàyū-	"rat"
HL	Bùsáŋ ^a	Bùsáàňs ^ε	Bùsāŋ-	"Bisa person"
L	kùkpàrıg ^a	kùkpàrıs ^ɛ	kùkpàr-	"palm tree"
0	dàkīig ^a	dàkīis ^ɛ	dàkì-	"sib-in-law via wife"

Word tonal structure

M toneme noun prefixes do not affect the tone of the remaining stem in the sg or pl, but the cb always has a H toneme after the prefix:

Н	zīnzāµŋ ^{ɔ/}	zīnzāná+	zīnzáuŋ-	"bat"
Η	Ňwāmpūrıg ^{a/}	Ňwāmpūrιs ^{ε/}	Ňwāmpúr-	"Mamprussi person"
Η	gūmpūzēr ^{ɛ/}	gūmpūzēyá+	gūmpūzér-	"duck"
Η	tīntōňríg ^a	tīntōňrís ^ɛ	tīntóňr-	"mole" ($r \leftarrow *rr$)
Η	pīpīrıg ^{a/}	pīpīrıs ^{ɛ/}	pīpír-	"desert"
Η	bālērug ^{ɔ/}	bālērıd ^{ɛ/}	bālźr-	"ugly person"
0	fōfōm ^{mɛ}	fūfūma+	fūfúm-	"envy; stye in the eye"
L	sāmán ^{nε}	sāmánà+	sāmán-	"courtyard"

Dependent cbs from originally one-mora stems occasionally behave tonally like prefixes:

0	zūg-kūgυr ^{ε/}	zūg-kūga+	zūg-kúg-	"pillow" <u>8.2</u>
0	kā-wēnnır ^{ɛ/}	kā-wēnna+	kā-wén-	"corn"
Η	pūkpāad ^{a/}	pūkpāadíb ^a	pūkpá-	"farmer" <u>13.1.4</u>

6.3 Verbs

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

Dual-aspect verbs have three finite forms <u>10.1</u>. The $-m^a$ imperative is found only (and always) with tone overlay <u>19.6.1.1</u> so it is unnecessary to treat it further here; perfective and imperfective forms will be cited in that order. Single-aspect verbs have just one finite form, which is imperfective.

The Tone Patterns of all regular deverbal nominals are predictable 6.5.

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 these tone patterns in most perfectives, which resemble nominal cbs in tonal behaviour, and because verb imperfectives originated from *derived* stems <u>6.5</u>. There has also been extensive tonal levelling, extending to gerunds as well. A few 2-mora-stem gerunds survive with Subpattern HL or with Pattern L: segmental and tonal levelling correlate in the two gerunds of $k\bar{l}r^{\epsilon}$ "hurry, tremble", $kik(rig)^{2}$ and $k\bar{l}rlb^{2/}$.

6.3.1 Pattern H

Pattern H resembles Pattern H in nominals. Again, it allocates H to one of the first three morae, with all preceding tonemes M and all following tonemes L. The H is placed on a third mora if it exists and is vocalic, and otherwise on the second, prior to toneme delinking <u>4.2</u>; however, 2-mora perfectives carry MM. The form before interrogative clitics confirms the pattern, because it becomes LL like all other all-M sequences in this context:

Ò pū gɔ̄sɛ.	"She didn't look"
Ò pū gósὲε?	"Didn't she look?"
Ò pῦ dῦgε.	"She didn't cook."
Ò pū dúgὲε?	"Didn't she cook?"

The final mora carries H before liaison words, probably from the same imposition of underlying L as in Pattern LO verbs 7.2.2:

Kà ò dūgí lī "	And she cooked it."
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Verbs show no anomalies due to mora deletion, and no Subpattern HL. Examples for Pattern H:

$y\bar{a}d\iotag^{\epsilon/}$ $y\bar{a}d\iotag(d^{a}$ "scatter" $m\bar{2}2l^{\epsilon/}$ $m\bar{2}2n^{na}$ "proclaim" $d\bar{\iota}g\iotal^{\epsilon/}$ $d\bar{\iota}g(n^{na}$ "lay down" $n\bar{5}k^{\epsilon/}$ /kk/ $n\bar{5}k(d^{a}$ /kk/"take" $l\bar{a}g(m^{m}$ /ŋŋ/ $l\bar{a}g(m^{ma}$ /ŋŋ/"wander searching $v\bar{v}e^{a/}$ "be alive" $d\bar{\iota}g\iota^{ya/}$ "be lying down" $t\bar{\tau}i^{ya/}$ "be leaning" (object	U
zāň/ ^{la/} "be holding"	10000)

As with nominals, toneme delinking <u>4.2</u> results in MH on a long vowel becoming single H; again, LFs ending in long vowels or diphthongs or *-mm* where the LF final *mora* would have carried H toneme by the usual rules show H at the beginning of the final *syllable*:

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tɔ̄ɔm ^{m/}	tóɔm^{ma} or tɔ̄ɔmíd ª	"disappear"
SF tōɔm LF tóɔm	n	
pāe ^{+/}		"reach"
SF pāe LF pāée		

For the tonemes of stative verbs like $kp\bar{r} \partial m^{ma/}$ "be strong" see <u>12.1.5.1</u>. Fusion verbs show no sign of *g in the imperfective tonally, or in agent nouns:

pāe ^{+/}	pāad ^{a/}	not * <i>páad</i> a	"reach"
dī e+/	dī əd ^{a/}	not * <i>dí</i> 'əd ^a	"get"
pūň'e ^{+/}	pūň'ød ^{a/}	not * <i>púň'ed</i> a	"rot" WK

Contrast the corresponding gerunds in $-r^{\varepsilon}$: $p\acute{a}ar^{\varepsilon} di' \partial r^{\varepsilon} p\acute{u}n' \partial r^{\varepsilon}$.

6.3.2 Pattern LO

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

bùd ^ɛ	bùt ^a	"plant"
dì+	dìt ^a	"eat"
mὲ+	mèɛdª	"build"
zàb ^ε	zàbıd ^a	"fight, hurt"
bùəl ^ɛ	bùøn ^{na}	"call"
bòdιg ^ε	bòdıgıd ^a	"get lost, lose"
nìŋ ^ɛ	nìŋıd ^a	"do"
màal ^ɛ	màan ^{na}	"sacrifice"
dìgın ^ɛ	dìgınıd ^a	"lie down"
wàŋເm ^m	wàŋເm ^{ma}	"waste away"
sìilım ^m	sìilım ^{ma}	"cite proverbs"
<i>zàaทัรเm</i> ^m	zàaňsım ^{ma}	"dream"
	zìň'i ^{ya}	"be sitting down"
	tàbı ^{ya}	"be stuck to"
	tèňr ^a	"remember"
	v èn ^{na}	"be beautiful"

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

Ò nà b5dıg.	"He'll get lost."
Ò nà vēn.	"She'll be beautiful."
Ò kù zābε.	"She won't fight."

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	Ò kὺ bɔ̄dιgɛ.	"He won't get lost."
	Ò kù bɔ̄dıgıda.	"She won't be getting lost."
	Ò kừ būenna.	"She won't be calling."
	Ò nà b5dıgı m.	"He will lose me."
	Ò kù bɔ̄dıgı má.	"He will not lose me."
	Ò nà b5dıgı bá.	"She will lose them."
	Ò kù bɔ̄dıgı báa.	"She won't lose them."
	Ò kù bɔ̄dıgıdı má.	"He won't be losing me."
	Ò kù zābıdı má.	"He won't be fighting me."
	Ò kù zābıdın <i>έ</i> .	"He wouldn't have been fighting."
	Ò kù sīilımm.	"She won't cite proverbs" WK
but	Ò kù lāŋímm.	"She won't wander about searching (<i>lāŋím</i> ^m)."

Such forms are always followed by M spreading:

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

The LF before the bound pronoun ^o can here show either M or H (all WK):

	Ò kừ zāb∙ó-o.	"He won't fight him."
or	Ò kù zāb∙o-o.	"He won't fight him."

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

Ň ná bòdιgεε?	"Will I get lost?"

6.4 Particles

Some particles have the segmental and tonal structure of nouns.

Right-bound liaison words all have a single mora with a fixed-L toneme 7.3. Catenator-*n* is toneless and transparent to M spreading. Left-bound liaison words carry H after host-final M and M otherwise; this M becomes H in the LF 7.2.2.

Left-bound particles with the Short Form *CV* which are *not* liaison words have three possible Tone Patterns, corresponding to the H, L and O Patterns of nominals. Most are Pattern H, like the article $l\bar{a}^{+/}$. Pattern L are $n\bar{w}a^+$ "this" and sa^+ "hence, ago"; Pattern O is the perfective $y\bar{a}^+$ <u>19.6.2.1</u>. Pattern H particles change the M to H in the LF (cf apocope-blocking <u>6.1</u>.) Before the negative prosodic clitic <u>7.1</u> the Pattern H LFs thus end in H, while the Pattern O particle ends in M, and before the two interrogative prosodic clitics <u>7.1</u>, Pattern O becomes all-L. Thus with $n\bar{\epsilon}^{+/}$ and $y\bar{a}^+$:

Lì bòdıg nē.	"It's lost."
Lì bòdıg nέε?	"Is it lost?"
Lì bòdıg yā.	"It's got lost."
Lì bòdıg yàa?	"Has it got lost?"

Ka o ba' nɛ o ma pu baŋ ye o kpɛlim yaa.

Kà ò $b\bar{a}$ 'né ò mà $p\bar{v}$ bányé òkpèlum yāa + ø.and 3AN father:sg with 3AN mother:sg NEG.IND realise that 3AN remain PFVNEG."His father and mother did not realise that he had remained." (Lk 2:43)

6.5 Tone in derivation

Root tone patterns can be deduced from the tone patterns of words with stems lacking any derivational suffix, and by comparing patterns in derived stems.

It is exceptional for forms derived from H roots to show L, O or LO Patterns, or vice versa, but it happens systematically in the derivation of assume-stance verbs from stance verbs $\underline{12.1.1}$.

The word *gīŋılím*^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 *gīiňlím*^m *id*.

Roots showing Subpattern HL in nouns and adjectives fall together with regular Pattern H in all other derived or cognate words:

áňsìb ^a	"maternal uncle"	āňsíŋ ^a	"sister's child"
kísùg ^o	"hateful"	kīs ^{a/}	"hate"
gósìg ^a	"looking"	ḡวs ^ɛ	"look"

After O/L roots derivational suffixes themselves differ in tonal behaviour, some producing Pattern L stems and others Pattern O. The Tone Pattern is determined entirely by the *last* derivational suffix, unless this is **m* as a second suffix, or **y* as a formant of stative single-aspect verbs. Pattern O roots can give rise to Pattern L stems, and *vice versa*:

bīig ^a	"child"	bìilím ^m	"childhood"	(-/-)
nà'ab ^a	"chief"	nā'am ^m	"chiefship"	(- <i>m</i> -)

Most derivational suffixes added to O/L roots produce Pattern L/LO stems. No stem with *g */ *s or *b as a final derivational suffix is Pattern O.

All segmentally regular gerunds have predictable Tone Patterns; most segmentally irregular gerunds formed from root verbs are tonally regular.

from Pattern H verbs			Pattern H	
from Patter	n LO verbs			
2-mo	ra stem perfective		Pattern O	
other	wise		Pattern L	
			,	
dūgε	"cook"	\rightarrow	dūgub ^{5/}	
nōk ^{ε/}	"take"	\rightarrow	nōkír ^ɛ	
dīgıl ^{ɛ/}	"lay down"	\rightarrow	dīgılúg ²	
mè ⁺	"build"	\rightarrow	mēɛb ^ɔ	
		\rightarrow	mɛ̀ɛdím-tāa ⁼	"fellow-builder"
sùŋ ^ε	"help"	\rightarrow	sùŋır ^ɛ	
dìgın ^ɛ	"lie down"	\rightarrow	dìgınvg ^ɔ	
<i>zàaทรเm</i> m	"dream"	\rightarrow	zàaňsúŋ ^ɔ	

The regular assignment of 3- and 4-mora stem Pattern LO verb gerunds to Pattern L can be explained by the fact that the great majority of such stems have a Pattern-L-deriving suffix; others would follow their analogy.

Imperfective gerunds 12.2.1.4 with **d* from Pattern LO verbs are Pattern L, as in *bbpdim*^m will" and *mked(m-tāa*⁼ "fellow-builder." This **d* is historically identifiable with the *d* of the dual-aspect imperfective -*d*^a, where it preceded an original imperfective flexion -*a* before extensive levelling resulted in -*d*^a behaving as a unitary flexion; this accounts for the merger of Patterns L and O in dynamic imperfectives. In dynamic single-aspect verbs, the **y* of the ending -*y*^a behaves tonally like dual-aspect **d*, but in stative verbs **y* does not alter the Tone Pattern of the preceding form. The Tone Patterns of stative verbs have been assimilated to those of dynamic verbs, however <u>12.1.5.1</u>.

Agent nouns, deverbal adjectives and instrument nouns also have predictable Tone Patterns:

from Pattern H verbs	Pattern H
from Pattern LO verbs	
containing derivational -d-	Pattern O
otherwise	Pattern L

The suffix **d* in these formations is Pattern-O-deriving: $b\bar{c}dtr^{\epsilon}$ "desirable", $m\bar{\epsilon}\epsilon dt\eta^{a}$ "building implement." Stems where this **d* is absent (not just assimilated into a cluster as -*mn*- or -*nn*-) are Pattern L, with a change of Tone Pattern possible even within a single noun paradigm.

There is little evidence for change of Tone Pattern alone, without any segmental stem alteration, as a derivational process; a possible case is *gbāuŋ*^{)/} "skin", "book" DK, *gbàuŋ* "book" WK.

7 External sandhi

Kusaal shows a range of intricate external sandhi processes: complete or partial suppression of apocope, two kinds of tone sandhi, and segmental contact phenomena.

Sandhi after right-bound words often differs from that between word-forms capable of ending a phrase and even left-bound following dependents. Perfectives behave as if right-bound in tone sandhi and with word-final stop devoicing in Toende Kusaal 3.1 fn; perfectives and single-aspect verbs ending in fronting diphthongs monophthongise phrase-internally like cbs, and unlike singulars (even singulars before the article $|\bar{a}^{+/}\rangle$:

sāeň lā	"the blacksmith"		
sàň-kàŋā	"this blacksmith"		
Ò sừ'u lớr.	"She owns a lorry."	sū'e ^{ya/}	"own"
Lì nàa nĒ.	"It is finished."	nāe+/	"finish"

7.1 Prosodic clitics

Prosodic clitics³ cause a preceding word to appear as a Long Form, completely suppressing apocope. All four cause lowering of short LF-final ιv to ϵ \prime respectively, which are realised slightly closer in this case than as root vowels.

Before prosodic clitics, and in forms with apocope-blocking, final $-m\iota$ and $-m\upsilon$ become -mm whenever the m is not geminated. The final m was presumably once syllabic, but the current realisation of -mm is [m:].

tìım ^m	"medicine"	SF tìım	LF tīımm	← *tìเmū
dāam ^{m/}	"millet beer"	SF <i>dāam</i>	LF dáamm	← *dāamύ
vūm ^{m/}	"life"	SF vōm	LF vúmm	← *vūmmú

Word-final i = ue diphthongise to *ia ua* before prosodic clitics <u>3.2.2</u>. None of these changes occur before liaison <u>7.2</u>.

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 or even tonally identical SF and LF, as for example:

³⁾ The concept of prosodic "clitics" is also useful for describing complex clause structures <u>20.1</u>. Mooré has the clause-final particle *yé* after negative VPs, and segmental vocative and interrogative clitics are also common in West Africa. For clitic-like elements cross-linguistically which lack segmental form see Spencer and Luís 2012: 5.5.1 on Tongan "definitive accent."

but	sīa+	"waist"	SF sīa	LF sīaa	← *sīəga
	dà'a=	"market"	SF dà'a	LF dā'a	← *dà'agā
	bāa=	"dog"	SF bāa	LF bāa	← *bāaga
	kú∙o=	"kill him" ←	<i>k</i> ō+ "kill" +	° "him/her"	SF/LF [kʊ:]

The **negative prosodic clitic** appears at the end of a clause containing a negated or negative verb <u>19.5</u>. Superscript notation <u>5.1.1</u> represents LFs as they appear before the negative prosodic clitic, both segmentally and tonally.

Lì	à nẽ nóbìr.	"It's a leg."	
3INAN	COP FOC leg:sg.		
	kā' nóbirē +ø. Neg.be leg:sg neg.	"It's not a leg."	
Lì	à nẽ dũk.	"It's a cooking pot."	
3INAN COP FOC pot:SG.			
	<i>kā' dūkó ⁺ø.</i> NEG.BE pot:SG NEG.	"It's not a pot."	

Unlike short *ι ν*, long final *ιι νν* are not lowered:

Bà à nē mólì.	"They are gazelles."
3PL COP FOC gazelle:PL.	
Bà kā' mólīu +ø.	"They are not gazelles."
3PL NEG.BE gazelle:PL NEG.	

The **vocative prosodic clitic** ends a vocative clause. It has similar tonal and segmental effects to the negative clitic. The audio NT version sometimes shows a change of final H tone to falling (found also with some Hausa speakers, Jaggar p18.)

M bīisε +ø!"My children!"1SG child:PL voc!

Pu'aa, bɔ ka fʋ kaasida? Pu̯'āa ⁺ø, bɔ́ kà fʋ̀ kāasídà ⁺ø? Woman:sg voc, what and 2sg cry:IPFV cQ? "Woman, why are you crying?" (Jn 20:13) This is not a vocative noun form, but a particle following the entire clause:

dau onε an yadda niŋida dāμ ´nì àň yàddā-níŋìdā +ø man:sg REL.sg COP faith-doer:sg voc "You man, who are a believer!" (1 Cor 7:16)

Two **interrogative prosodic clitics** end questions. Final vowel length distinctions are neutralised to short in content questions, long in polar questions:

Lì à nẽ nớbìr. 3INAN COP FOC leg:SG.	"It's a leg (<i>nóbır^ɛ)</i> ."	
Ànɔ́'ɔnì ø ňyē nɔ́bιrὲ +ø? Who caī see leg:sg cq?	"Who saw a leg?"	
Lì à nẽ nóbưrèe +ø? 3INAN COP FOC leg:sg pq?	"Is it a leg?"	
Lì à nẽ dūk.	"It's a cooking pot (<i>dōkɔ</i> /)."	
Ànó'ɔnì ňyē dūkó?	"Who saw a pot?"	
Lì à nẽ dūkóɔ?	"Is it a pot?"	
Lì à nẽ kūk.	"It's a chair (<i>kōk</i> ^a)."	
Ànó'ɔnì ňyẽ kúkà?	"Who saw a chair?"	
Lì à nẽ kúkàa?	"Is it a chair?"	
Lì à nē gbīgım.	"It's a lion (<i>gbīgım^{nɛ})."</i>	
Ànó'ɔnì ňyē gbígìmne?	"Who saw a lion?"	
Lì à nē gbígìmnɛɛ?	"Is it a lion?"	

Length neutralisation results in a five-way $a \varepsilon \circ \iota v$ contrast in LF-final vowels by quality alone in this context:

Ànó'ɔnì ňyē kúkà?	"Who saw a chair (<i>kūk</i> ª)?"
Ànó'ɔnì ňyē yīré?	"Who saw a house (yīr ^{ɛ/})?"
Ànó'ɔnì ňyē dóɔgò?	"Who saw a hut (<i>dɔ̀ɔg</i> ɔ)?"
Ànó'ɔnì ňyē mólì?	"Who saw gazelles (m)ול")?"
Ànó'ɔnì ňyē bédugú?	"Who saw a lot (<i>bὲdʊgʊ̄+/</i>)?"

External sandhi

The two interrogative prosodic clitics induce a tonal change in the preceding LF. Like many other West African languages, Kusaal signals questions with a final *falling* intonation. All questions, polar or content, end with a L or H toneme.

Word-final M changes to L. Words with all-M tonemes change to all-L. This is an actual change of tonemes, not just a matter of intonation; the new L tonemes are subject to M spreading <u>7.3</u>. In Kusaal (unlike Dagbani) this lowering only affects the final word, not a sequence of several all-M words.

Ànɔ´'ɔnì ø ňyɛ́ bà bìiga +ø? Who cat see 3PL child:sg cq? "Who saw their child (bīig^a)?"

Ànɔ´'ɔnì ňyē bíigà?	"Who saw a child?" tonally identical to
Ànɔ́'ɔnì ňyē sú'υgà?	"Who saw a knife (<i>sù'ug</i> ª)?"
Fù bóòd bó?	"What (<i>b</i> ɔ̄+) do you want?"
Ànó'ɔnì ňyɛ̄ zu̯éyà?	"Who saw hills (<i>zu̯ēya</i> +)?"
Ѝ ná bวdเg.	"I will get lost."
À ná bòdιgεε?	"Will I get lost?"
Ò pū gɔ̄sɛ.	"She didn't look"
Ò pū gósὲε?	"Didn't she look?"
Ò pῦ dῦgε.	"She didn't cook."
Ò pū dúgὲε?	"Didn't she cook?"

7.1.1 Long Forms in clause adjuncts

Clause adjuncts are not followed by M spreading, even though M spreading elsewhere can cross phrase boundaries. Some single-word clause adjuncts always end in a LF, and occasional examples occur with ya'-clauses:

Kikirig ya'a mor **buude**, fun tis o ka o lebig o moogin.
Kìkīrıg yá' mɔ̄r būvdɛ, fūn tís·ò ø kà ò lɛ̀bıg ò mɔ̄ɔgv-n.
Fairy:sG if have innocence, 2SG.CNTR give 3AN.OB and 3AN return 3AN grass:SG-LOC.
"When a fairy is right agree so that it will go back to the bush." KSS p38 (Give the devil his due.)

Fù ná kū	l bēog.	"You'll go home tomorrow."
2SG IRR go	.home tomorrow.	
Bēogó	fù ná kūl.	"You're going home tomorrow." SB
Tomorrow	2SG IRR go.home.	

but

Forms displaying this feature cannot be used as VP or NP constituents.

The LF form is like that seen before the negative prosodic clitic. In KB, all examples written $b\varepsilon ogv$ precede liaison; clause adjuncts with a final vowel are always written $b\varepsilon ogz$. Similarly, KB consistently shows final -v in the apocope-blocked word 5.1.3 $b\varepsilon degv \ b\varepsilon dvgv^{+/}$ "a lot", but just as consistently has final -z in bzugz $b\overline{z} x ug\overline{z}$ "because", dinzugz din $z ug\overline{z}$ "therefore", alazugz àlá $z ug\overline{z}$ "therefore."

Ka o kaas bɛdegv."And he wept greatly." (Genesis 27:38)Kà ò kāas bɛ́dvgū.And ʒan weep great:ADV.

bɔzugɔ ba zi' onε tumi m la naa. bɔ̄ zúgɔ̄, bà zī' ɔ´nì tùmı 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)

7.2 Liaison words

Liaison words partially prevent apocope applying to the preceding word, which retains its final affix vowel in downranked form with loss of quality contrasts. The vowel preceding liaison is not epenthetic and occurs where epenthesis does not: contrast the gerund $d\bar{u}m^{m_2}$ from *dumbv "biting" with $d\dot{u}m\iota$ $b\bar{a}$ "bite them." Words which have not undergone apocope, such as the clause linker particles $k\dot{a}$ and $y\bar{\epsilon}$, do not change before liaison.

Left-bound liaison words are always preceded by liaison. There are two sets.

Position 1 left-bound liaison words are the locative particle n^{ϵ} <u>16.3</u>, which attaches directly after nominal sg or pl forms, along with the discontinuous-past marker n^{ϵ} <u>23.1.1</u> and the postposed 2pl subject pronoun ^{ya} <u>21.3</u>, which attach directly after verb forms. In this grammar, all these words are hyphenated to the preceding host word, except when ^{ya} is completely deleted by apocope.

Position 2 left-bound liaison words comprise the bound object personal pronouns $m^a f^{o o} l \iota^+ t \iota^+ y a^+ b a^+ 15.3.1$. They either attach directly to a verb word or after discontinuous-past n^{ε} or 2pl subject ^{ya}. They are written as separate words, except with the 3sg animate pronoun, which is deleted by apocope.

Liaison words which are either right-bound or free comprise all the right-bound personal pronouns \dot{m} f \dot{v} \dot{o} l \dot{i} t \dot{i} y \dot{a} b \dot{a} , the personifier particle \dot{a}/\dot{n} <u>15.5</u>, $\dot{a}n\dot{5}'\dot{5}n^{\epsilon}$ "who?" <u>15.3.4</u>, nominaliser- \dot{n} <u>24</u>, catenator-n <u>22.1</u>, all words with the number prefixes \dot{a} b \dot{a} b \dot{v} <u>13.3</u>, and all words with manner-adverb prefix \dot{a} <u>13.2</u>. Liaison is not invariable before these words, except with with personal pronouns immediately preceded by a verb within the same verb phrase; older texts show liaison more widely.

External sandhi

Tì gòsí_ bà bīis.	"We looked at their children."
1PL look.at 3PL child:PL.	(Liaison before <i>bà</i> "their")

The basic liaison change is that when the preceding host word LF ends in a short vowel it is downranked to ι . For some speakers, ι becomes v after g preceded by a rounded root vowel.

LF-final -mm behave as -mV; -iə -ue remain as such, not becoming -ia -ua 3.2.2.

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 7.5.

The liaison words $^{\circ ya} ya^+ ya$ and words beginning with the number prefix a subsequently cause new quality changes in the mora preceding liaison.

Examples with host LFs ending in short vowels:

kūk ^a	"chair"	+ n ^ε "at"	\rightarrow	kūkι-n ^{ε/}
dūk ^{ɔ/}	"pot"	+ n ^ε "at"	\rightarrow	dūkí-n ^ε
bòɔd ^a	"want"	+ tı ⁺ "us"	\rightarrow	bòɔdī tí+
<i>pɔ̄ɔg</i> ɔ/	"field"	+ n ^ε "at"	\rightarrow	pɔ̄ɔgú-n ^ε
yàug ⁵	"grave"	+ n ^ε "at"	\rightarrow	yàυgū-n ^{ε/}

Bà bòɔdī m.	"They love me."
Bà pū bóɔdī má.	"They don't love me."
Bà bòɔdī lí.	"They want it."
Bà pū bóɔdī líı.	"They don't want it."

LFs ending in *-mm*:

từm ^m	"send"	+ <i>tı</i> + "us"	\rightarrow	tùmı tī+/
dāam ^{m/}	"beer"	+ n ^ε "at"	\rightarrow	dāamí - n ^ɛ
kù'øm ^m	"water"	+ n ^ε "at"	\rightarrow	kù'өmī-n ^{ε/}

LFs ending in long vowels:

dà'a=	"market"	+ n ^ε	"at"	\rightarrow	dā'a-n ^{ε/} <u>5.1.1</u>
Kà bà kúu m).		"And they k	illed m	.e." (<i>kū</i> ⁺ "kill")
Kà bà pũ kúu mā.			"And they didn't kill me."		
Kà bà kúu bā.			"And they killed them."		
Kà bà pũ kứ	v báa.		"And they d	idn't ki	ill them."

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Kà bà kíə lī.	"And they cut it." (<i>ki̯à+</i> "cut")
Kà bà pū kíə líı.	"And they didn't cut it."
Kà bà ňyέε m.	"And they saw me." (<i>ňyē</i> + "see")
Kà bà pῦ ňyέε mā.	"And they didn't see me."

Reduction of 3-mora diphthongs to 2-mora long vowels:

pāe+/	"reach"	+ <i>tı</i> + "us"	\rightarrow	páa tī+/
pīe+/	"wash"	+ tı ⁺ "us"	\rightarrow	píə tī+/
dūe+/	"raise"	+ tı ⁺ "us"	\rightarrow	dúə tī+/

Single-aspect verbs with LFs ending in -ya make forms analogous to those of fusion verb perfectives. They drop the ya, monophthongise diphthongs and prolong preceding short vowels (see further <u>5.1.2</u>):

sū'e ^{ya/}	"own"	+ /1 ⁺ "it"	\rightarrow	sú'ט lī+/
vūę ^{a/}	"live"	+ n ^ε dp	\rightarrow	<i>vū</i> ט−n ^{ε/}

Four liaison words are reduced by apocope to segmental zero, and the only sign of their presence as SFs is the preceding liaison, with any associated changes to the vowel quality and toneme of the mora before liaison. This is invariably the case with the pronoun $^{\circ}$ [σ] "him/her" and the postposed 2pl subject pronoun ya :

	bòɔd ^a	"want"	+ 0	"him/her"	\rightarrow	b`od∙ó - o	(SF bòɔd∙ō)
SF	gòsımī_ø	"look ye!"				Traditional:	gosimi
LF	gòsımī_ yá					Traditional:	gosimiya

Nominaliser-n <u>24</u> combines with a preceding pronoun subject to produce a special set of pronouns <u>15.3.1</u>, but for my informants it is segmental zero in all other contexts; its presence remains apparent in the change of pre-liaison M tonemes to H. Older texts frequently show *n* and/or liaison, but even texts which use *n* nearly always omit it after words with SFs ending in nasal consonants. In KB, *n* (without liaison) occurs mostly after foreign proper names.

After pause, all sources realise catenator- $n \ 22.1 \ 21.4.1$ as a syllabic nasal assimilated to the position of the following consonant. Elsewhere, WK has liaison before a particle with no segmental realisation, written \emptyset in interlinear glossing:

Kà ò z 2 2 \emptyset $k \bar{\epsilon} \eta$ $n \bar{a}$. "And he came running" And 3AN run CAT come hither. Bɔ̄ɔ Ø lá +Ø? "What's that?" What cAT that cQ?

After a final vowel which is not a free word root vowel, WK has a consonantal nasal, assimilated to the position of the following consonant. Almost all instances of n in KB similarly appear after words with apocope-blocking, or after foreign names; the particle is usually segmental zero, with preceding liaison. Older sources again often show n and/or liaison, with n rare after words with SFs ending in nasal consonants.

Realisations with neither n nor liaison also occur, particularly after verbs often used as "auxiliaries"; some preverbs probably originated in this way. This is significantly more frequent in NT/KB after words ending in -*m* -*n* -*l* or in vowels.

Texts confirm that both nominaliser- \dot{n} and catenator-n are preceded by liaison, with LF geminate consonants kept before the affix vowel:

ya zuobid wusa **kalli** an si'em yà zūobíd wūsa kállì ø àň sī'əm 2PL hair:PL all number:SG NZ COP INDF.ADV "how much the number of all your hairs is" (Lk 12:7)

7.2.1 Vowel quality changes

Fronting of the second mora of a LF-final long vowel occurs before the 2pl object pronoun ya^+ exactly as before word-internal y <u>5.5</u>, with any back mora becoming *e* [1] but no change to front morae:

	Bà bòɔdī yá.		"They love you."
	Kà bà ňyέε yā.		"And they saw you (pl)." (<i>ňyɛ</i> + "see")
but	Kà bà kúe yā.	[kʊɪja]	"And they killed you (pl)." ($kar{\upsilon}^+$ "kill")
	Kà bà kíe yā.	[kiɪja]	"And they cut you (pl)." (<i>ki̯à</i> + "cut")

This recreates a fronting diphthong in monophongised fusion verb pfv forms:

	Kà bà páa bā.	"And they reached them." (<i>pāe</i> +/ "reach")
but	Kà bà páe yā.	"And they reached you (pl)."

External sandhi

For some speakers, rounding of unrounded long vowel second morae and of the default LF-final short vowel ι takes place before the 2 sg object pronoun f^{2} "you":

	Kà bà kíə f.	"And they cut you (sg)."
or	Kà bà kío f.	
	Kà bà ňyέε f.	"And they saw you (sg)."
or	Kà bà ňyέo f.	
	Kà bà páa f.	"And they reached you (sg)."
or	Kà bà páv f.	
	Ѝ gbáň'a f.	"I've grabbed you (sg)."
or	Ň gbáň'υ f.	

Rounded forms are invariable in the 1996 NT version; this may simply reflect an orthographic decision to write *uf* rather than *if* consistently for the supposed object pronoun "you."

There is never rounding before the noun class suffix P.

The 3sg animate object pronoun ^o [v] "him/her" and the postposed 2pl subject pronoun ^{ya}, both of which lose their entire segmental form in their SFs, share the property that they completely override the vowel quality of the pre-liaison mora, creating **secondary diphthongs** 3.2.5.

Before ^o the preceding mora becomes $\cdot o 2.4$ [v], always lax. In the LF the preliaison mora fuses with the [v] of the LF of the pronoun itself create a long vowel [v:], written $\cdot o - o$:

bòɔdā tùm ^m kīa ňyēε	"wants "send" "cut" "see"	" + 0 + 0 + 0 + 0	$\begin{array}{c} \rightarrow \\ \rightarrow \\ \rightarrow \\ \rightarrow \\ \rightarrow \end{array}$	bòɔd∙ó-o tùm∙ó-o kì∙ō-o ňyē∙ó-o	SF b: SF từ SF kì SF ňy	om∙ō ∙o
Fù bóod (25G want	ō_ Ø . ЗАN.OB.		"Υοι	ı love her."		[fʊbɔ:dʊ]
Fὺ pū 2SG NEG.IND	<i>bʻod.</i> ó -o want-3AN.o	+ <i>ø.</i> Эв Neg.	"Υοι	ı don't love h	er."	[fʊpʊbɔ:dʊ:]
Fù ňyÉ∙o 2sg see	_ Ø. 3AN.OB.		"Υοι	ı've seen her.		[fʊj̃ɛ̃ʊ̃]
Fὺ pū 2SG NEG.IND	<i>ňу€∙ó-о</i> > see-заn.ов	+ø. s NEG.	"Υοι	ı've not seen	her."	[fʊpʊj̃ɛ̃ʊ̃:]

- 1				 -0 		
zū+	"steal"	+ °	\rightarrow	ZÚ∙O⁻ ⁰	SF [zuʊ]	LF [zuʊ:]
ňyē+	"see"	+ °	\rightarrow	ňyέ∙o⁻ ^o	SF [ĵε̃ʊ]	LF [j̃ɛ̃ʊ:]
dì+	"eat"	+ 0	\rightarrow	dì∙o⁻⁰	SF [dɪʊ]	LF [dɪʊ:]
kįà+	"cut"	+ °	\rightarrow	kì∙o⁻°	SF [kiʊ]	LF [kiʊ:]
pāe+/	"reach"	+ °	\rightarrow	pá∙o⁻º		
pīe+/	"wash"	+ 0	\rightarrow	pí∙o⁻ ^o		
dūe+/	"raise"	+ ⁰	\rightarrow	dú∙o⁻⁰		
à <u>e</u> ň ^a	"be"	+ °	\rightarrow	àñ∙o⁻º		
Mane a o.			"I am	he." (Jn 18:5	5, 1976)	
Mān∟ ø áň·o_ø.						
1SG.CNTR CAT COP 3AN.OB.						

Before ^{ya} the preceding mora becomes lax [1], written *e* after vowel symbols other than ε , and ι otherwise:

	gòsım		"look!"	
SF	gòsımī	Ø	"look ye!"	Traditional: <i>gosimi</i>
LF	g`zsımī	yá	<u>21.3</u>	Traditional: gosimiya

In many cases this has the same outcome as fronting before word-internal y and the 2pl object pronoun ya^+ , but this replacement also affects front vowels:

	kū+ kįà+	"kill" "cut"	+ ^{ya} + ^{ya}	\rightarrow \rightarrow	kūe ^{-ya/} kīē ^{-ya/}	[kʊɪ] [kiɪ]
	pāe+/ pīe+/ dūe+/	"reach" "wash" "raise"	+ уа + уа + уа	\rightarrow \rightarrow \rightarrow	pāe ^{-ya/} pīe ^{-ya/} dūe ^{-ya/}	[]
but	bè+	"be"	+ ^{ya}	\rightarrow	bēı ^{-ya/}	[bɛɪ]

Before liaison words beginning with \dot{a} - the quality of the final vowel mora of the preceding word is not predictable from the phonology alone.

Before $\partial n \beta' \partial n^{\epsilon}$ "who?", the manner-adverb prefix ∂ - and the personifier-particle allomorph ∂ - the LF-final vowel is ι (v after a velar preceded by a rounded vowel):

Ò nìŋí	jàlá.	"She did thus."
заn do	ADV:thus	(contrast <i>àlá</i> "how many?" below)

```
yeli Abaa "said to Dog" KSS p20
yÈlı_À-Bāa
say pers-dog:sg
```

Fusion verbs <u>10.1</u> show forms in final e [I] in these cases, instead of the monophthongs *aa iə ue* usual before another word in the VP <u>7.5</u>:

[n] loo Abaa zuur	" tying Dog's tail" <u>15.5</u> KSS p20
n lóɔ_À-Bāa zúùr	
cat tie pers-dog:sg tail:sg	

but 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 $\dot{a} e \breve{n}^a$ "be something" always appears as $\dot{a} a \breve{n}$, not $\dot{a} e \breve{n}$.

```
Ka fu aan anɔ'ɔnɛ?"And who are you?" (Jn 1:19)Kà fù áaň ànɔ́'ɔnɛ̀ +ø?And 2sg cop who cq?
```

Before the number prefix *a*- the pre-liaison vowel is instead -*a*:

Ṁ mór nɛ̃ bīisá_ àtáň'. "I have three children." ISG have FOC child:PL NUM:three.

Pἐεdá 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 $-\dot{a} \dot{a}$ - to \dot{a} - with the number prefix (effectively just treating it as having an ordinary L toneme susceptible to M spreading):

Nū'-bíbìsálákà fù ňyētá+ø?hand-small:PL NUM:how.many and 25Gsee:IPFVcQ?"How many fingers do you see?"

Elsewhere, my informants show liaison before \dot{a} only between imperatives and \dot{a}/\dot{a} , where - \dot{a} is contracted to either - \dot{a} - or - \dot{a} - depending on the speaker.

```
gòsımí lá or gòsım álá
```

"Keep on looking!"

WK and DK both always round the LF-final vowel before \dot{o} "his/her":

Bà gòsú ò bĩig."They've looked at her child."3PL look:at 3AN child:sg.

All written sources show -i (i.e. -i [I]), presumably the original form.

The number prefix *a*- originated as **ŋa*-, the old $r^{\varepsilon}|a^{+}$ class pl agreement <u>13.3</u>. Original word-internal **ŋ* has disappeared throughout Western Oti-Volta (synchronic non-initial *ŋ* always deriving from **mg* or **ng*), while word-medial *y w* survive in many contexts. Initial **ŋ* preceding prefix vowels may likewise have disappeared early. Sandhi effects may outlive the complete phonetic disappearance of a consonant, as with the French "*H* aspiré"; the data could be thus accounted for by supposing that **ŋa* lost its initial consonant earlier than the personifier particle 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*.

7.2.2 Toneme changes

Left-bound liaison words themselves carry H toneme after host-final M toneme and M after L or H. M on a long vowel becomes H before prosodic clitics, and M becomes H before interrogative clitics.

Kà ṁ zábì bā.	"And I've fought them."		
Kà ṁ pũ zábì f5.	"And I didn't fight you."		
Μ̀ zábī bá.	"I've fought them."		
Ň pū bóɔdī fó.	"I don't love you."		
Ѝ pū bɔ́ɔdī báa.	"I don't love them."		
Kà ṁ pū zábì báa.	"And I didn't fight them."		
Ànɔ́'ɔnì kύυ bá?	"Who has killed them?" SF kúv bā		

The locative particle n^{ε} does not alter the preceding toneme:

pūug ^a	"inside"	+ <i>n</i> ^ε	<i>→ pūυgυ-n^{ε/}</i>	
bīig ^a	"child"	+ <i>n</i> ^ε	→ bīigι-n ^{ε/}	WK
mὺ'ar ^ε	"dam, lake"	+ <i>n</i> ^ε	→ mὺ'arī-n ^{ε/}	
pว̄วg ^{ɔ/}	"field"	+ <i>n</i> ^ε	→ pɔ̄ɔgύ-n ^ε	
yàad ^ɛ	"graves"	+ <i>n</i> ^ε	→ yàadī-n ^{ε/}	WK
kūvdíb ^a	"killers"	+ <i>n</i> ^ε	→ kūvdíbī-n ^{ε/}	WK
dà'a ⁼	"market"	+ <i>n</i> ^ε	$\rightarrow d\bar{a}$ 'a-n ^{$\epsilon/$} for dà'a	ā-n ^{ε/} <u>4.2</u>

Discontinuous-past n^{ϵ} and 2pl ^{ya} always impose M on the preceding mora: dūaε $\rightarrow d\bar{\nu}a\nu - n^{\epsilon/2}$ "cook" $+ n^{\varepsilon}$ \rightarrow b)digī-n^{$\epsilon/$} bòdιg^ε "lose" + n^ε vādιg^{ε/} → yādıqı-n^{ε/} + n^ε "scatter" kūvd^{a/} "kill" *→ kūvdι-n*^{ε/} + n^ε ipfv $\rightarrow y\bar{a}d_{l}q(d\bar{l}-n^{\epsilon/l})$ yādıgída ipfv "scatter" + n^ε $\rightarrow m\bar{\epsilon}\epsilon - n^{\epsilon/}$ for $m\dot{\epsilon}\bar{\epsilon} - n^{\epsilon/} \underline{4.2}$ $m\dot{\epsilon}^+$ "build" + **n**^ε dɔ̃llı, yá "Follow ye not!" Dā +ø!

NEG.IMP follow 2PL.SUB NEG!

Indicative perfectives without independency-marking tone overlay <u>19.6.1.1</u> change LF-final LM \rightarrow LL and MM \rightarrow MH before bound object pronouns

bòdιgε	"lose"	+ <i>m</i> ^a "me"	→ bòdıgı m ^a
dì+	"eat"	+ /1 ⁺ "it"	→ dìι lī ^{+/}
yādıg ^{ε/}	"scatter"	+ <i>m</i> ª "me"	→ yādıgí m ^a
dūg ^ε	"cook"	+ /1 ⁺ "it"	→ dūgí lī ^{+/}
gɔ̄sɛ	"look"	+ ° "him/her"	→ gɔ̄s·ó ^{-o}
kū+	"kill"	+	→ kúv mª for kūú mª <u>4.2</u>

Pattern H fusion verb perfectives behave exactly like CVV-stems:

pāe ^{+/}	"reach"	+ <i>m</i> ª "me"	<i>→ páa m</i> ª
dī e+/	"get"	+ <i>ba</i> + "them"	→ dí'ə bā+/

After all other verb forms, object pronouns do not alter the host tonemes:

zàbıd ^a	"fights"	+	→ zàbıdī m ^{a/}
dìt ^a	"eats"	+ / <i>l</i> + "it"	→ dìtī lí+
yādıgíd ^a	"scatters"	+ <i>ba</i> + "them"	→ yādıgídī bá+
kūud ^{a/}	"kills"	+ <i>m</i> ª "me"	→ kūvdí m ^a
sū'e ^{ya/}	"own"	+ / <i>l</i> + "it"	→ sú'υ /ī+/

The sequence $\cdot o - o$ resulting from the LF of the 3sg animate pronoun ^o fusing with the vowel before liaison is subject to toneme delinking <u>4.2</u>:

Ň bóɔd∙ō.		"I love him/her."
À pū bɔ́ɔd∙ó-o. (∢	- <i>·ō-</i> ó)	"I don't love him/her."
Kà bà kú∙o.	[kʊ:]	"And they killed him."
Kà bà pū kú∙o.	<u>7.1</u>	"And they didn't kill him."
Kà bà kí∙o.		"And they cut him."
Kà bà pū kí∙ō-o.		"And they didn't cut him."
Kà bà ňy£∙o.		"And they saw her."
Kà bà pū ňyē∙ó-o		"And they didn't see her."

Irrealis mood forms of Pattern LO verbs:

Ò nà b5dıgı m.	"He will lose me."
Ò kừ b፺dιgι má.	"He will not lose me."
Ò nà bɔ̄dιgι bá.	"She will lose them."
Ò kù bɔ̄dıgı báa.	"She won't lose them."
Ò kừ b፺dιgιdι má.	"He won't be losing me."
Ò kù zābıdı má.	"He won't be fighting me."
Ò kù zāb∙ó-o.	"He won't fight him."
Ò kù zāb∙o-o.	"He won't fight him."

Irrealis Pattern LO and indicative Pattern H thus contrast before object pronouns in 2-mora stems:

zābe + m ^a	\rightarrow	zābı m ^{a/}	"will fight me"
dūge + m ^a	\rightarrow	dōgí m ^a	"cook for me"

All liaison words which are not left-bound begin with a fixed-L toneme 7.3 except for catenator-*n*, which has no toneme.

Verbs before fixed-L forms show the same final tonemes as with left-bound liaison words, except that M tonemes necessarily change to H.

Perfective without tone overlay:

Kà tì díı bà dīıb. And 1PL eat 3PL food.	"And we ate their food."
Kà ò bódıgì bà bùmıs. And 3AN lose 3PL donkey:PL.	"And he lost their donkeys."
Kà ò dūgí bà dīıb. And 3AN cook 3PL food.	"And he cooked their food."

or

Imperfective without tone overlay:

Kà bà dìtī bá."And they were eating them."And 3PL eat:PFV 3PL.OB.

but Kà bà dìtí bà dītb. "And they were eating their food." (ML \rightarrow HL) And 3PL eat: IPFV 3PL food.

Noun LFs before fixed-L liaison words end in H toneme as expected:

bane na yel Zugsobi ba tuuma a si'em la bànı nà yɛl Zūg-**sɔ́bí** bà tūvmá ø àň sī'əm lā REL.PL IRR say head-EMPTY.AN 3PL deed:PL NZ COP INDF.ADV ART "Those who will tell the Lord how their deeds are." (Heb 13:17, 1996)

Before the fixed-L toneme 7.3 of nominaliser- \dot{n} a final M tone becomes H. For my informants this is the only sign of the presence of the particle, except when it is combined in the special form of the preceding subject pronouns.

 $D\bar{a}\chi$ $l\bar{a}$ $z\dot{a}b$ $n\dot{a}'\dot{a}b$ $l\bar{a}.$ "The man has fought the chief."man:SG ART fight chief:SG ART $D\bar{a}\chi$ $l\bar{a}$ $g\dot{2}s$ $n\dot{a}'\dot{a}b$ $l\bar{a}.$ "The man has looked at the chief." $D\bar{a}\chi$ $l\bar{a}$ $g\dot{2}s$ $n\dot{a}'\dot{a}b$ $l\bar{a}.$ "The man has looked at the chief."but $d\bar{a}\chi$ $l\dot{a}_{...}$ $g\dot{2}ab$ $n\dot{a}'ab$ $l\bar{a}$ "the man having fought the chief"but $d\bar{a}\chi$ $l\dot{a}_{...}$ $g\dot{2}ab$ $n\dot{a}'ab$ $l\bar{a}$ "the man having fought the chief"

 $d\bar{a}\mu$ $l\dot{a}$ $g\bar{c}s$ $n\dot{a}$ 'ab $l\bar{a}$ "the man having looked at the chief" man:sg ART NZ look.at chief:sg ART

Before catenator-*n* the final toneme of a modified LF is M after M toneme and L otherwise. M spreading follows whenever the *preceding* word would induce it <u>7.3</u>.

amaa o kena ye o tom tisi ba àmáa ò kā nā yé ò túm ø tìsı bā but 3AN come hither that 3AN work CAT give 3PL.OB "but he came to serve them" (Mt 20:28) M nók sú'ugù ø kiá nīm lā.
15G pick.up knife:sg cat cut meat:sg art.
"I cut the meat with a knife."

7.2.3 The pronoun ^{ya} before liaison

The pronoun ^{ya} adopts the allomorph -*n*(- before liaison, both before pronoun objects and before $a|a^+$ "thus" <u>19.4</u>. The pronoun was historically **na*, which regularly became **yã* with subsequent loss of emic nasalisation, as always with affix vowels. When the -*a* is deleted by apocope, *y* is also deleted. When followed by a liaison word, the vowel *a* was not deleted but became *ι*, before which *n* became *n*-. (Cf also nin^{ε} "do" = Toende Kusaal ếŋ, locative $n^{\varepsilon} \sim n\bar{\iota}^{+/}$ = Toende -*ι*, nie^+ "appear" = Toende yẽe, $n\bar{\imath}n^a$ "body"= Mooré y $\bar{\imath}nga$.)

dɔllı yá "Follow ye not!" Dā +ø! NEG.IMP follow 2PL.SUB NEG! "Receive ye!" Dì'əmī ø! receive:IMP 2PL.SUB! "Receive ye them!" Dì'əmī-ní bā! receive:IMP-2PL.SUB 3PL.OB Dì'əmī-n∙ó "Receive ye her!" Ø! receive:IMP-2PL.SUB 3AN.OB. Sidiba, nongimini ya pu'ab. Sīdıba $+ \phi$, nòŋımī-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. +ø, si̯àkımī-ní yà dū'adıb nóyà. Bīise 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-níàlá!"Keep ye on receiving!"receive:IMP-2PL.SUB ADV:thus!(Realised Dì'əmī-ní lá! or dì'əmī-n álá!)

7.3 M spreading

Most words not bound to the right and ending in L or H tonemes cause an initial L toneme in a following word to change to H toneme, unless there is an intervening pause. If the L toneme is "fixed" (see below) a preceding M toneme must become H instead 4.1. M spreading follows

all words, bound or free, ending in M toneme all other words which are not bound to the right, *except* Verb perfectives without independency-marking tone overlay <u>19.6.1.1</u> Certain words affected by L spreading <u>7.4</u> Words ending in an affix vowel with H toneme right-bound subject pronouns <u>19.6.1.2</u> (including ellipted subjects <u>20.2.2</u>) $\delta l \hat{l} b \hat{a}$ except preceding independency marking $\hat{m} f \hat{v} t \hat{i} y \hat{a}$ except preceding independency marking after $y\bar{\epsilon}$ catenator-*n* is transparent to M spreading <u>7.2.2</u>

The number and manner-adverb prefixes \dot{a} - <u>13.2</u> <u>13.3</u> are followed by M spreading to the stem.

M spreading does not occur after clause adjuncts <u>20.2.1</u>. The occurrence of M spreading is otherwise unaffected by syntax:

Bà tìs ná'àb lā búŋ.
3PL give chief:sg ART donkey:sg.
"They gave the chief a donkey (bùŋ^a)."

Bà ňw $\dot{\epsilon}$ ' ná'àb lā súŋā. "They beat the chief well ($s\dot{v}\eta\bar{a}^{+/}$)." 3PL beat chief:sg ART good:ADV.

Raising is absent after words ending in an affix vowel with H toneme:

<i>À dìga lú yā.</i> 15G dwarf:PL fall PFV.	"My dwarfs have fallen down."
À yōgomá lù yā. 15g camel:pL fall pFv.	"My camels have fallen down."

M spreading examples, with zàb^ε "fight" gɔ̄s^ε "look at" nà'ab^a "chief": Kà-clause, without independency-marking tone overlay; all subject pronouns are followed by raising; perfectives are followed by raising only if ending in M:

but

Main clause, with independency marking; the verbs have tone overlay and are now both followed by M spreading; 3rd persons are not followed by M spreading:

À záb ná'àb lā.	"I've fought the chief."
Ò zàb ná'àb lā.	"He's fought the chief."
Ѝ gós ná'àb lā.	"I've looked at the chief."
Ò gòs ná'àb lā.	"He's looked at the chief."

A minimal pair: *ba* "them" is followed by M spreading; *bà* "they, their" is not:

Ò gòsĩ bá bέdugū.	"She looked at them a lot."	(<i>ba</i> object)
Ò gòsí bà bὲdυgū.	"She looked at a lot of them."	(<i>bà</i> possessive)

Certain words carry an initial/sole L toneme which is never subject to M spreading. These **fixed-L** words comprise all liaison words not bound to the left except for catenator-*n*, which is toneless, along with the linker particle *kà* "and":

right-bound personal pronouns	m̀ fù ò lì tì yà bà
personifier particle	à-/ ì-
<i>ànڬ'òn٤</i> "who?"	
nominaliser (however realised)	'n
all words with number prefixes	à- bà- bù-
manner-adverb prefix	à-
linker particle	kà

Initial à- in loanwords may be treated as fixed-L by analogy. If there is no intervening pause, a preceding M toneme must become H:

Bà kùʊdī bá.	"They kill them."
3PL kill:IPFV 3PL.OB.	
Bà kùudí bà būus. 3PL kill:IPFV 3PL goat:PL.	"They kill their goats."
Lì à né à-dàalúŋ. 3INAN COP FOC PERS-stork:sg.	"It's a stork"

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but

ba diib n yit na'ateŋ la na zug
bà díıb n yīt ná'-tēŋ lā nā zúg
3PL food NZ emerge:IPFV king-land:SG ART hither upon
"because their food came from the king's land" (Acts 12:20, 1996)

wuu saa naani iank ya nya'aŋ n ti paae ya tuona la. wōv **sáa** ø nāanı įáňk yà ňyá'aŋ n tí páe yà tùena lā like rain:sg Nz then jump 2PL behind CAT after reach 2PL before.ADV ART "like when lightning leaps from East to West" (Mt 24:27, 1996)

After words bound to the right and ending in M toneme, M spreading is transparently a tone spreading process, H representing ML on a single mora <u>4.1</u>. Right-bound pronouns have fixed-L tonemes for my informants even when followed by M spreading, but ILK and Niggli's materials show M, which can be taken as having given rise to *floating* M tonemes in current Agolle. M spreading after SFs ending in H or L can similarly be attributed to affix vowel tonemes left floating after apocope. However, from a purely descriptive standpoint this is simply an indirect way of labelling the conditions under which M spreading occurs, which are in fact largely determined by syntactic rôles. Words with identical L-final sg and cb forms like mà "mother" $z\mu$ à "friend" $d\mu'$ átà "doctor" and *lànnug* "squirrel" <u>8.2</u> show M spreading after the sg but not the cb; the single-aspect verbs $b\hat{\epsilon}^+$ and $n\hat{\sigma}\eta^{\epsilon}$ are followed by M spreading, unlike Pattern LO perfectives; *l* $\hat{\epsilon}\epsilon$ "but" is followed by M spreading when affected by independency marking, though it is not even a verb and has no flexion.

7.4 L spreading

L spreading takes place exclusively within NPs and AdvPs. It occurs after any free form as a predependent, with the exception of the contrastive personal pronouns (like $m\bar{a}n$ "my"); it also occurs after any cb ending in M toneme, whether as dependent or head. Historically, L spreading after cbs may have arisen from a final L toneme like that imposed on verb perfectives <u>7.2.2</u>; this might explain its absence after some 1-mora forms <u>6.2.4</u>. After free predependents, it may reflect an old associative L toneme.

L spreading affects only the one following word, which may be a cb. Words beginning with M or H tonemes change all tonemes to L^4 . Pattern L words are completely unaffected.

L spreading applies before initial M spreading; in the majority of cases the preceding word also induces M spreading, and the new initial L toneme becomes H.

⁴⁾ Unfortunately I did not think to check how words with M prefixes behave with L spreading. e.g *dāu lā* ?tíntòňríg/tíntòňríg/tíntòňríg/tíntoňríg"the man's mole (tīntoňríg^a)."

Examples with a cb as head:

bù-pìəlıg ^a	"white goat"	bù-pāalíg ^a	"new goat"
bī-púŋ-pìəlıg ^a	"white girl"	bī-púŋ-pāalíg ^a	"new girl"
nō-píəlìg ^a	"white hen"	nō-páalìg ^a	"new hen"

Cb as dependent $(n\bar{z}zr^{\epsilon})$ "mouth", $d\bar{r}\partial s^{a}$ "receiver" pl $d\bar{r}\partial s(d\bar{t}b^{a})$:

nō-dí'àsª	"chief's interpreter"

pl nɔ̄-dí'əsìdıba

No L spreading after personal pronouns:

m̀ bīig	"my child" (<i>bīig</i> ^a)
m̀ tìıg	"my tree" (<i>tìıg</i> a)
mān bīig	"my child"
mān tíìg	"my tree"
m̀ gbīgim	"my lion" (<i>gbīgım</i> ^{nɛ})
m yūgúm	"my camel" (<i>yōgύm</i> ^{nε})

L spreading after words which do not also induce M spreading:

m̀ biຼēyá bìis	"my elder same-sex siblings' children (<i>bīis</i> ε)"
m̀ bi̯ēyá fùud	"my elder same-sex siblings' clothes (<i>fūud</i> ^{ε/})"

L spreading after free noun phrases also followed by M spreading:

dāỵ bîg	"a man's child" (cf <i>dàu̯-bīig</i> ª "male child")
dāỵ tíìg	"a man's tree"
nà'ab bíìg	"a chief's child"
dāu̯ lā gbígìm	"the man's lion"
dāu lā yúgùm	"the man's camel"

Unlike M spreading, L spreading occurs only *within* NPs and AdvPs; there is thus a tonal minimal pair between

Bà tìs ná'àb lā bîìg.	"They've given (it) to the chief's child."
3PL give chief:sg art child:sg.	(L spreading applied to <i>bīig</i> ^a "child")
Bà tìs ná'àb lā bīig.	"They've given the chief a child."
3PL give chief:sg art child:sg.	(No L spreading applied to <i>bīig</i> ^a)

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It occurs regardless of the meaning or rôle of the preceding dependent:

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mɔ̄ɔgu-n wábùg lā "the wild (in-the-bush) elephant (w\bar{a}bug^{\prime})"
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After *heads*, L spreading only occurs with cb heads, not free forms:

	kūg-yínnì	"one stone" with <i>y(nni</i> as adjective <u>15.4.2.1</u>
but	kūgor yīnní	"one stone"
	wābug lā	"the elephant"
	wābıs pīiga	"ten elephants"
	wābıs pīiga lā	"the ten elephants"

The final element of a compound induces following M spreading in accordance with the usual rules <u>7.3</u> regardless of whether it has been subject to L spreading, so that M spreading appears everywhere except after words ending in a affix vowel with H toneme and cbs ending in L or H:

bù-wōk	"tall goat"
nō-wók	"tall hen"
bù-wōk-píəlìg	"tall white goat"
bù-wōk-páalìg	"tall new goat"
nō-wók-pìəlıg	"tall white hen"
nō-wók-pāalíg	"tall new hen"
bù-wōk díìb	"a tall goat's food"
nō-wók díìb	"a tall hen's food" ($d\bar{\iota}\iota b^{\circ}$ "food")

A word with only one or two tonemes, affected by both M *and* L spreading after a free predependent is not itself followed by M spreading.

The final vowel mora of a word affected by L spreading always has M to neme before the locative particle n^{ϵ} :

	dāu lā pʻogū-n	"in the man's field (<i>pɔ̄ɔg</i> ɔ/)"
	dāu lā púugū-n	"inside the man" (<i>pūvg</i> ^a "inside")
like	dāu lā dóɔgū-n	"in the man's hut (dɔ̀ɔɡʰ)"

Examples, using the frames "the man's $(d\bar{a}y | \bar{a}) X$ has got lost $(b \dot{c} d \iota g y \bar{a})$ " and "my elder same-sex siblings' $(\dot{m} b \dot{i} \bar{e} y \dot{a}) X$ has got lost":

Pattern L, not subject to L spreading:

bùŋ ^a	"donkey"	Dāu lā búŋ bódìg yā.
àňrvŋ ^ɔ	"boat"	Dāu lā áňrùŋ bźdìg yā.
dòɔgɔ	"house"	Dāỵ lā dóòg bódìg yā.

Pattern HO nouns appear unchanged after L and M spreading, and by analogy have unchanged following tone sandhi; words like *náaf*² "cow" fluctuate:

à-gáờňg ^o	"pied crow"	Dāu lā gáùňg bódìg yā.
náaf ^o	"cow"	Dāu̯ lā náàf bódìg yā or Dāu̯ lā náàf bòdıg yā.

Pattern H and O nouns, affected by L spreading:

	wābug ^{ɔ/}	"elephant"	Dāu̯ lā wábùg bòdıg yā.	
	<i>pɔ̄ɔg</i> ɔ/	"field"	Dāỵ lā póòg bòdıg yā.	
	bāŋ ^a	"ring"	Dāỵ lā báŋ bòdıg yā.	
	pūvg ^a	"inside"	Dāỵ lā púùg bòdıg yā.	
but	wābug ^{ɔ/}	"elephant"	Ѝ bịēyá wàbug bódìg yā.	no M spreading
	bāŋ ^a	"ring"	Ѝ bi̯ēyá bàŋ bźdìg yā.	no M spreading
	yūgvdır ^ɛ	"hedgehog"	Ѝ bi̯ēyá yùgʋdır bódìg yā.	no M spreading
	yūgvdır ^ɛ	"hedgehog"	Dāỵ lā yúgvdìr bódìg yā.	three tonemes

L spreading applies sequentially, reflecting the substructure of NPs and AdvPs. When L spreading affects the first component of an existing compound, the second component retains any previous L and M spreading effects:

	dāu̯ lā bú-pìəlɪg	"the man's white goat (<i>bù-pìəlıg</i>)"
	dāu̯ lā bú-pāalíg	"the man's new goat (<i>bù-pāalíg</i>)"
	dāu lā nó-píəlìg	"the man's white hen (<i>nɔ̄-píəlìg</i>)"
	dāu̯ lā nź-páalኒ̀g	"the man's new hen (<i>nɔ̄-páalìg</i>)"
but	dūg-káŋā	"this pot" (<i>dūk</i> ^{ɔ/} cb <i>dūg-</i> "pot")
	[sālıma dúg-]kàŋā	"this [golden pot]"

The order of applications of L spreading may also be revealed by the absence of M spreading after some words affected by L spreading (see above.) Thus

[fūug dɔ́ɔ̀g]	"tent" (<i>fūug</i> ^{ɔ/} "cloth", <i>dòɔg</i> ^ɔ "house")
pù'ʊsʊg [fúùg dɔ́ɔ̀g]	"tabernacle" (<i>pù</i> ' <i>vsvg</i> ² "worship")

but Lì kā' [[[dāu lā bîig] bìər] náàf] zòvrē. "It's not the man's child's elder-same-sex-sibling's cow's tail." WK (bīig^a "child" bīər^{ε/} "elder sib of same sex" náaf² "cow" zōvr^ε "tail")

7.5 Segmental contact phenomena

The initial consonant and emic nasalisation of the deictic particle $\breve{n}w\dot{a}^+$ "this" are lost when it appears as a dependent after a word ending in a consonant:

bīis ňwá	"these children"	[bi:sa]
zàam ňwá	"this evening"	[za:ma]
but <i>pų</i> 'ā ňwá	"this woman" (e.g. as vocative)	[pʊ̯awã]

The initial / of the definite article $l\bar{a}^{+/}$ assimilates totally to a preceding word-final -*r*, and [r:] simplifies to [r]:

yīr lā	"the house"	[jira]
pùkòɔňr lā	"the widow"	[pʊkɔ̃:ra]

Toende Kusaal shows this assimilation after all final consonants (Niggli 2012). The 1976 NT occasionally shows forms like *nidiba* for $n\bar{n}d\iota b$ $l\bar{a}$ "the people."

Initial *n* of focus- $n\bar{\epsilon}^{+/}$ 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 nē.	"They're dying."	[ba kpi:dɛ]
À zót nē.	"I'm afraid."	[m zɔt:ɛ]
Ѝ mór nē bīisá àyí'.	"I have two children with me."	[m mɔrɛ bi:sa:ji̯]
Lì pè'ɛl nē.	"It's full."	[lɪ pɛ̯:l:ɛ]
Lì sàň'am nē.	"It's spoilt."	[lı sã̃:m:ε]

Final nasal consonants of right-bound words and noun prefixes assimilate to the place of articulation of a following consonant, as does syllabic \dot{n} but not \dot{m} :

dànkòŋ	"measles"	[daŋkɔŋ]
nīn-bámmā	"these people"	[nimbam:a]
nàm zī'	"still not know"	[nanzı]
Ň-Bīl	Mbillah (personal name)	[ņbil]
Ѝ nóŋī_f.	"I love you."	[m̪nວŋɪf]

I follow traditional orthography in writing final nasals of prefixes as n everywhere except before $p \ b \ m$, where I write m.

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but

Within phrases, word-final short vowels denasalise before initial *n* or *m*:

àwá nā	"like this here" (<i>àňwá</i> "like this")
kē nā	"come hither" (<i>kɛ̃ň</i> + "come")

Some right-bound $CV\check{n}$ - elements lose nasalisation even when the following consonant is not a nasal. Thus with compounds of $s\check{u}\check{n}f^{\prime\prime}$ "heart" like $s\check{u}$ -málısìm^m "joy", $s\check{u}\check{n}$ -kpí'òŋ^o "boldness", $s\check{u}\check{n}$ -péɛ̀n^{nɛ} "anger" the 1996 NT and older sources write sumalism sukpi'oŋ/sukpi'euŋ supeen, reflecting the bleaching and phonological simplification which has created noun prefixes from some original cbs <u>13.1.4</u>. KB restores the nasalisation in writing: svnkpi'euŋ "boldness", svnpɛɛn "anger."

With $\dot{a}\underline{e}\check{n}^a$ "be something/somehow" there is loss of nasalisation before the focus particle $n\bar{\epsilon}^{+/}$ (for the loss of the <u>e</u> see below):

	À á nε̄ dāỵ.	"I'm a man."
but	Lì àň súŋā.	"It's fine."

Older written materials write an directly before a complement as a not ann, but KB consistently has an [\tilde{a}] whenever the form is not followed by $n\bar{\epsilon}^{+/}$.

Combining forms, and verb forms which are not VP-final, may not end in fronting diphthongs unless the next word begins with *y*. Otherwise, the fronting diphthongs are replaced by the corresponding monophthongs 3.2.2: $ae \rightarrow a; oe \rightarrow o; ve \rightarrow v; ae \rightarrow aa; ve \rightarrow vv; ie \rightarrow ia; ue \rightarrow ua$.

but	sāẹň lā sàň-kàŋā	"the blacksmith" "this blacksmith"		
	Ò sù'u lór.	"She owns a lorry."	sū'e ^{ya/}	"own"
	Lì àň súŋā.	"It's good."	àẹň ^a	"be something"

Ti ya'a vue, ti vunε tis Zugsob la. Tì yá' vūẹ, tì vú nē ø tís Zūg-sób lā. IPL if be.alive, IPL be.alive FOC CAT give head-EMPTY.AN ART. "If we live, we live to the Lord." (Rom 14:8): (vūẹª/ "be alive")

Èňrıgım_ ø pāa du̯'átà. Shift.along:IMP CAT reach doctor:sg. "Shift along up to the doctor." (*pāe*^{+/} "reach")

Lì nàa nē.	"It is finished."	<i>nāe</i> +/ "finish"
Dúə wēlá?	"[You] arose how?" <u>28</u>	<i>dūe</i> +/ "arise"

See also the examples with fusion verb perfectives before liaison <u>7.2</u>. The verb $k\bar{a}'e^+$ "not be/not have" loses e before complements but not adjuncts:

 \dot{O} kā' bīiga +ø. "She is not a child." 3AN NEG.BE child:SG NEG.

 $D\bar{a}\underline{v}$ $l\bar{a}$ $k\bar{a}$ ' $djg\bar{v}$ -n $l\dot{a}a$ $+\phi$. Man:sg art NEG.BE room:sg-LOC art NEG. "The man's not in the room." ($djg\bar{v}$ -n $l\bar{a}$ as complement)

but *Sɔ' kae na nyaŋi dɔl zugdaannam ayi'... Sɔ̄' kā'e_ø ná ňyāŋı_ø dɔ̄l zūg-dáàn-nàm àyí' ...* INDF.AN NEG.BE CAT IRR prevail CAT follow head-owner:PL NUM:two ... "Nobody can serve two masters." (Mt 6:24)

Dāu kā'e dóogū-n láa +ø.
Man:sg neg.be room:sg-loc ART neg.
"There's no man in the room." (dòogū-n lā as adjunct)

This fronting loss is regular in my informants' speech and in the audio version of the NT, but older written materials very frequently still write fronting diphthongs:

voen	= vūv-n	"would live" (Gal 3:21, 1996)
Kristo da faaɛn ti	= Kristo dá fāaň tí	"Christ saved us." (Gal 5:1)
m wa'e ne	= ṁ wá'a nē.	"I'm going" ILK

Àẹň^a "be something" is always written *aa* or *aan* before liaison; this might reflect consistent absence of stress, but it seems more likely that the rarity of phrasefinal àẹň^a has prevented the analogical introduction of phrase-final spelling phrasemedially. *Fāeň^{+/}* "save" is perhaps written *faaenn* instead of *faann* to distinguish the forms from those of *fāň⁺* "grab, rob"; the 1996 NT has two instances of the certainly spurious *faaenm* for imperative *faanm*. (See also <u>14.1</u> on *faangid* "saviour", *faangir* "salvation.") Clearcut errors like *Noŋilim pu naae da* (1 Cor 13:8, 1996 NT) for KB *Nɔŋilim pu naada* "Love does not come to an end" confirm that the orthographic tradition has encompassed the writing of diphthongs for undoubted monophthongs.

Morphology

8 Noun flexion

8.1 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 *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 $a|b^a$, $g^a|s^{\epsilon}$, $g^{2}|d^{\epsilon}$, $r^{\epsilon}|a^+$ and $f^{2}|\iota^+$ **noun classes**. Two unpaired non-count suffixes $-b^2 -m^m$ 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 $r^{\varepsilon}|a^{+}$ classes <u>15.2.2</u>. A few isolated remnants of agreement will be pointed out as they occur.

An expected class suffix may be replaced by one from a different class if the regular form would be rendered ambiguous by consonant cluster assimilation and/or apocope. This has become regular with class $g^{2}|d^{\varepsilon}$ stems ending in m n following a short vowel, which always use the plural suffix $-a^{+}$ instead of $-d^{\varepsilon}$, as do all gerunds with sg g^{2} . Mampruli and Dagbani also show -a for the plural of m n stems in this class (cf Mampruli *gbaŋŋu* "skin", pl *gbana*), so this suppletion is probably driven by the fact that cluster assimilation would cause the expected plural to resemble a $r^{\varepsilon}|a^{+}$ sg. Suppletion does not take place in Mooré or Farefare, where the $g^{2}|d^{\varepsilon}$ pl suffix has a rounded vowel, unlike the $r^{\varepsilon}|a^{+}$ sg. cf Mooré *gãongò* "skin" pl *gãndo*.

Adjectives avoid potentially ambiguous suffixes altogether $\underline{9}$.

In two cases, the sg LF has adopted the form proper to a different class suffix that would have produced the same SF: rounded vowels before $-g^a$ may result in LFs ending in ->, as in $n\dot{u}\dot{}u\dot{}g^{>}$ "hand", and $a|b^a$ stems in /n r following a *short* root vowel show LF - ϵ with / and n geminated, as if the suffix were r^{ϵ} , e.g $Bin^{n\epsilon}$ "Moba person."

Noun flexion

Two subclasses are semantically motivated: a subclass of $a|b^a$ referring to older/important people uses b^a as the *singular* suffix, and names of languages belong to a subclass of $r^{\epsilon}|a^+$ with the singular suffix l^{ϵ} .

alpa ba (sg)	sīd ^a nà'ab ^a	sīdıb ^a nà'-nàm ^a	sìd- nà'-	"husband" "chief"
g ^a s ^ε	būvg ^a	būυs ^ε	bù-	"goat"
g ^ͻ d ^ε	dòɔgɔ bū'əsúgɔ	dòɔd ^ɛ bū'əsá+	dò- bū'øs-	"hut" "question"
r ^ε a ⁺ ιε	nɔ̄ɔr ^{ɛ/} Kūsáàl ^ɛ	nōyá+	nō-	"mouth" "Kusaal"
f ^o lı ⁺	mòlıf ^o	mòlı+	mòl-	"gazelle"
b	sā'ab ^ɔ		sà'-	"porridge"
m ^m	tìım ^m		tì-	"medicine"

The classes are thus as follows:

Stems in *m* with long root vowels in the ${}^{a}|b^{a}$ class avoid the plural suffix b^{a} ; some $g^{a}|s^{\varepsilon}$ class nouns with human reference have alternative plurals with b^{a} ; countable nouns in the m^{m} class form plurals with $-a^{+}$ or $-s^{\varepsilon}$ or nam^{a} ; and the small $f^{2}|\iota^{+}$ class has some members with $f^{2}|\iota^{+}$ suffixes in only one number. The sg suffix $-l^{a}$ is found only in the irregular adjective $b\bar{l}/a$ "little" $\underline{9}$.

Few other cases of irregular sg/pl pairing occur; examples are

pēʿogɔ/	<i>pε̄</i> 'εs ^{ε/}		pē'-	"sheep"
gbè'og ^o	gbè'ɛdɛ		gbè'-	"forehead"
	gbèda+			
bįāųňk ²	bįāň'ad [€]	WK	biàň'-	"shoulder"
	bįāň'ada+	SB		

The sg SF is usually enough to identify the noun class correctly, given whether the word has human reference. Where it is not enough, there is often vacillation between classes, suggesting that speakers do use these criteria to determine class membership; cf the assignment of loanwords to noun classes <u>8.6</u>.

Nouns with sg SF ending in a long monophthong, or in an unrounded vowel mora followed by a velar, belong to $g^a|s^{\epsilon}$ (exceptions are $b\bar{a}'a^{=}$ "traditional diviner" and $nay\bar{i}ig^a$ "thief", both $a|b^a$); all nouns ending in a rounding diphthong followed by a velar belong to $g^{2}|d^{\epsilon}$, as do most ending in a long rounded monophthong followed by a velar, but some have pl s^{ϵ} .

Noun flexion

Human-reference nouns are otherwise ${}^{a}|b^{a}$, except for stems ending in a long vowel, which have been transferred to $r^{\varepsilon}|a^{+}$ in Agolle Kusaal. The b^{a} -singular subclass contains most human-reference nouns in sg SF -*b*, and also sàam^{ma} "father", $diam^{ma}$ "man's parent-in-law", $dayaam^{ma}$ "woman's parent-in-law"; exceptional is $z\bar{z}am^{n\varepsilon}$ "fugitive" ($r^{\varepsilon}|a^{+}$).

All nouns in SF -*f* belong to $f^{0}|\iota^{+}$.

Underived mass nouns in -*m* belong to m^m , and in -*b* or -*p* to the b° class.

Non-human-reference count nouns ending in l n r belong to the $r^{\epsilon}|a^{+}$ class, as do those ending in m apart from a few m^{m} -class count nouns like $y\bar{a}'am^{m'}$ "gall, gall bladder", $p\bar{u}um^{m'}$ "flower", $d\dot{a}al(m^{m}$ "male sex organs", $p\dot{v}'al(m^{m})$ "female sex organs." $P\bar{i}im^{m'}$ "arrow" is a relic of a "long thin things" $|c|^{\epsilon}$ class, lost in Western Oti-Volta.

The class membership of regular deverbal nouns is predictable.

As with almost all noun class systems, there are correlations between class membership and meaning, though with frequent exceptions; see <u>29</u> for examples. This association can be exploited to change the significance of a stem <u>11.2</u>.

The $|b^a|$ class has exclusively human-reference membership, though many nouns referring to people belong to other classes. There is a subclass of nouns for elders and other important people which use the plural b^a as singular.

The $g^a|s^{\epsilon}$ class has general membership but notably includes the great majority of tree names, many larger animals, and tools. Almost all ethnic group names belong to $a|b^a$ or $g^a|s^{\epsilon}$ except for Zàngb $\hat{\epsilon}og^{\circ}$ "Hausa" and Nàsāara⁺ "European"; the place inhabited by the group has sg $-g^{\circ}$.

The $g^{2}|d^{\epsilon}$ and $r^{\epsilon}|a^{+}$ classes are the default non-human countable classes. They include all nouns naming fruits, and about four out of five nouns for body parts. Human-reference nouns in $g^{2}|d^{\epsilon}$ seem to be pejorative: $b\bar{a}|\bar{\epsilon}rvg^{2}|$ "ugly person", $d\bar{a}b\bar{n}og^{2}$ "coward", $z\bar{2}|vg^{2}|$ "fool." Some original $a|b^{a}$ class nouns have been reallocated to $r^{\epsilon}|a^{+}$ for phonological reasons e.g. $b\bar{\imath}ar^{\epsilon}|$ "elder same-sex sibling."

The l^{ϵ} subclass includes all names of languages.

The small $f^{2}|\iota^{+}$ class includes two groups: animals, and small round things. It contains all names of seeds. No $f^{2}|\iota^{+}$ noun refers to people.

The b^{2} class has only three members known to me that are not gerunds: $s\bar{a}^{a}ab^{2}$ "millet porridge, TZ", $t\bar{a}n\bar{p}^{2}$ "war" and $k\bar{\iota}^{i}\iota b^{2}$ "soap."

The m^m class includes names of liquids and substances and abstract nouns. There are few count nouns, and none referring to people or animals. Names of liquids are all m^m or b^2 or formally plural.

8.2 Remodelled combining forms

For levelling between sg and pl forms see 5.3 5.5.

Combining forms, lacking a flexional suffix and always subject to apocope, would be often reduced by the usual rules to ambiguous forms. Often the expected cb is replaced by a form which is segmentally **but not tonally** that of the singular.

nīf ^{ɔ/}	nīní+	nīn- or nīf-	"eye"
zìň'a+	zὲň'εs ^ε	zįàň'- or zὲň'-	"red" (adjective)
wōk ^{ɔ/}	wā'ad ^{ε/}	wā'- or w5k-	"long, tall" (adjective)
tāňp ^o		tàňp-	"war"
zūg ^{ɔ/}	zūt ^{ε/}	<i>zū</i> - or <i>zūg-</i>	"head"

Mooré and Toende both show *zu*- consistently in cases where Agolle has $z\bar{u}g$ -: Mooré *zusoaba*, Toende *zùsóp* correspond to Agolle $z\bar{u}g$ -*sób*^a "boss"; Mooré *zúkúká*, Toende *zùkúk* to Agolle $z\bar{u}g$ - $k\bar{v}gvr^{\epsilon}$ "pillow." Moreover, $Z\bar{u}g$ -*sób*^a "Lord" is very frequently read $Z\bar{u}$ -*sób*^a in the audio version of the NT. The cb $z\bar{u}g$ - sometimes behaves tonally like a noun prefix <u>6.2.4</u>.

The "regular" cb of nīf^{>/} "eye" is nīn-, but as a head it appears as nīf-: nīf-káŋā "this eye." Nīn- still predominates as a dependent: nīn-dáa⁼ "face", nīn-tám^m "tears", nīn-gótìs^ε "spectacles." Gbàu̯ŋ[>] "letter, book" now has the cb gbàu̯ŋ-, but the "regular" cb gbàn- still occurred as a generic complement in the 1976 NT e.g. gbanmi'id gbànmī'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+	zīnzáuŋ-	"bat"
àňrʊŋ ^ɔ	àňrıma+	àňrvŋ-	"boat"

So too with CV-stems in the $r^{\varepsilon}|a^+$ class:

gbēr ^{ɛ/}	gbēyá+	gbēr-	"thigh"
kùkɔ̃r ^{ε/}	kùkōyá+	kùk코r-	"voice"
	(but	; kùk ɔ̄-títā'a r	"loud voice" NT)

Vv̄m^{m/} cb *vv̄m*- "life", *kūm*^m cb *kùm*- "death" are probably *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+/	<i>kī-</i> or <i>kā-</i>	"cereal, millet"
lā'af ^o	līgıdı+	là'- or lìg-	"cowrie" pl "money"

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Two words have distinct sg- and pl-reference cbs:

dāỵ+	dāp ^a	dàu- sg dàp- p	"man, male person"
tāu̯ň+/	tāňp ^{a/}	<i>tāuň-</i> sg <i>tāňp-</i> p	l "sib of opposite sex"

Disambiguation is clearly involved with some longer remodelled cbs:

kòlug ^o	kòn ^{nε}	kòlug-	"bag"
lànnıg ^a	lànnıs ^ɛ	lànnıg-	"squirrel"
kòlug-kàŋā	"this bag"	cf cb <i>kòl-</i> from	<i>kɔ̃lıg</i> ª "river"
lànnıg-pìəlıg	"white squirrel"	cf cb <i>làn-</i> from	<i>lān</i> ^{nε} "testicle"

Remodelling of cbs after sg/pl forms never affects tones, revealing that cases where a sg/pl seems to precede an adjective or dependent pronoun in fact show cbs:

dàu̯-sờŋ	"good man"	cf <i>dāỵ</i>	"man"
dàp-sùma	"good men"	cf <i>dāp</i>	"men"

Remodelled cbs are traditionally written as separate words; as the orthography does not mark tone, this can lead to ambiguous forms. e.g. *yamug bipuŋ* (Acts 16:16, 1976) for *yàmmug-bī-púŋ* "slave girl" not *yàmmug bí-púŋ* "slave's girl" <u>15.7.1.4</u>.

8.3 Paradigms

For tones see <u>6.2</u>. Combining forms are frequently remodelled segmentally after the singular <u>8.2</u>, regularly so with stems in m and n.

By default, sg and pl class suffixes simply attach after a stem-final epenthetic vowel or root vowel. Complications arise from consonant assimilation instead of epenthesis, rounding of stem-final vowels before singulars in $-g^{2} - k^{2} - \eta^{2}$, deletion of the *g of the sg suffix g^{a} after aa ia ue aaň ɛɛň ɔɔň, and the combination of root-vowel-final stems with the flexions a, ι^{+} and a^{+} .

8.3.1 ^a|b^a

Most stems ending in consonants straightforwardly show -^a in the sg:

sīd ^a	sīdıb ^a	sìd-	"husband"
nīd ^{a/}	nīdıb ^{a/}	<i>nīn-</i> irreg	"person"
sàal ^a	sàalıb ^a	sàal-	"human being"
kpāad ^{a/}	kpāadíb ^a	kpāad-	"farmer"

kūvd ^{a/}	kūvdíb ^a	kūvd-	"killer"
kpīkpīn ^{na/}	kpīkpīnn(b ^a	kpīkpín-	"merchant"
bì-pīt ^{a/}	bì-pītíb ^a	bì-pīt-	"younger child"
wād-tís ^a	wād-tísìb ^a	wād-tís-	"lawgiver" NT
zà'-nō-gúr ^a	zà'-n5-gúrìb ^a	zà'-nɔ̄-gúr-	"gatekeeper" NT

Agent nouns from 3-mora stems in *s* regularly drop the *d* formant in sg and cb, which can result in "tonal heteroclites" <u>6.2.3</u>. Many also have nam^a plurals.

kùøs ^a	kūøsıdıb ^a	kù o s-	"seller"
pù'us ^a	pū'usıdıb ^a	pù'us-	"worshipper"
dì'əs ^a	dī əsıdıb ^a	dì'əs-	"receiver"
tù'as-tù'as ^a	tù'as-tū'asıdıb ^a	tù'as-tù'as-	"talker"
sīgıs ^{a/}	sīgısídìb ^a	sīgıs-	"lowerer"
dìıs ^a	dìıs-nàm ^a	dìıs-	"glutton"

The same behaviour is found with agent nouns from a few other verbs too:

sòs ^a	s <i>īs</i> ıdıb ^a	sòs-	"beggar"	
tìs ^a	tīsıdıb ^a	tìs-	"giver"	WK
kīs ^{a/} or kīsıd ^{a/}	kīsıdíb ^a	kīsıd- (only)	"hater"	

These may be original 3-mora stem verbs with $*ss \rightarrow s$. There are also

zàb-zàb ^a	zàb-zàb-nàm ^a	zàb-zàb-	"warrior"
	zàb-zābıdıb ^a		
gbān-záb ^a	gbān-záb-nàm ^a	gbān-záb-	"leatherbeater"
ňwī-ték ^a	ňwī-tékìdıb ^a		"rope-puller"

Exceptionally, consonant assimilation of *md does not appear in the plural in

	pu̯'à-sāñ'am ^{ma}	pu̯'à-sāň'amıdıb ^a	pu̯'à-sàň'am-	"adulterer"
(cf	yūʊm-yú'ùm ^{na}	yōvm-yú'ùmnıb ^a	yūʊm-yú'ùm-	"singer")

Stems ending in vowels in this class are problematic because of the vowelinitial sg suffix. There is no single rule for the outcome.

Four highly irregular nouns end in diphthongs in the sg:

dāuٍ+	dāp ^a	dàỵ-, dàp- <u>5.3.1</u>	"man"
tāuň ^{+/}	tāňp ^{a/}	tāuň-, tāňp-	"sib of opposite sex"

sāeň+	WK	sāaňb ^a	sàň-	"blacksmith"
sā <u>e</u> ň ^a	DK			
sīeň+	WK	sɔ̄ɔňbª	sòň-	"witch"
sīeň ^a	DK			

There are also the two original **g*-stems

pu̯'ā ^a ← *pu̯aga	pū'ab ^a	pỵ'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:

wìıd ^a	wìıb ^a	wìıd-	"hunter"
sɔ̄ň'ɔd ^{a/}	sɔ̄ň'ɔb ^{a/}	sɔ̄ň'ɔd-	agent noun of <i>sɔ̃ň</i> 'e ^{+/}
			"be better than"
pūkpāad ^{a/}	pōkpāadíb ^a	pūkpá-	"farmer" (but <i>kpāad^{a/}</i>
			<i>id</i> is regular)

Sg final - υ is dropped elsewhere in the paradigm of

pītú ⁺	pītíb ^a	pīt-	"younger sibling
			of same sex"

Sàam-pīt^{a/} "father's younger brother" and *bì-pīt*^{a/} "younger child" are regular.

Another solution to the difficulty of adding sg ^a to stems ending in a long vowel is to use the suffix r^{ε} instead; related languages, including Toende Kusaal, keep $-b^{a}$ plural forms, but in Agolle Kusaal such words have acquired $-a^{+}$ plurals and passed over completely into the $r^{\varepsilon}|a^{+}$ class:

pùkòɔňr ^ɛ	pùkòňya ⁺	"widow"
pókốót	pokõp	Toende <i>id</i>
pɔkõorɛ	pokõpa	Farefare <i>id</i>
dà-kòɔňr ^ɛ	dà-kòňya ⁺	"bachelor"
dákốot	dakôp	Toende <i>id</i>
dàkôorὲ	dakôpa	Farefare <i>id</i>

This transfer explains several human-reference nouns found in $r^{\varepsilon}|a^{+}$, e.g. $b\bar{\imath}\partial r^{\varepsilon/}$ "elder sibling of the same sex", $p\dot{\imath}n' \imath r^{\varepsilon}$ "cripple", $ny\bar{\varepsilon}'\varepsilon r^{\varepsilon/}$ "next-younger sibling" (but Toende sg $y\tilde{\varepsilon}'et$ pl $y\tilde{e}ra$ *id*.)

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Noun flexion

Stems in *l n r* following a *short* root vowel show LF - ε with *l* and *n* geminated. This represents remodelling based on the SF, which could be the outcome of adding either -^a or - r^{ε} . If the SF could *not* result from attachment of sg - r^{ε} , as with stems in *nn mm mn* <u>5.4</u>, nouns with *b*^a plurals always have sg -^a.

The assimilation $*nb \rightarrow mm$ takes place in the plural:

Dàgbān ^{nε/}	Dàgbām ^{ma/}	Dàgbān-	"Dagomba person"
Bìn ^{nε}	Bìm ^{ma}	Bìn-	"Moba person"
Kὺtān ^{nɛ/}	Kùtām ^{ma/}	Kùtān-	member of EW's clan
Mɔ̃r ^{ε/}	Мэ́эт ^{ma} irreg	Mōr-	"Muslim"

Agent nouns from single-aspect verbs with stems in -*ll* or -*r*(*r*) not only show alternative - ε LF sg forms but also have analogical plurals in -*a*⁺ alongside -*b*^a.

	ňyà'an-dòl ^{la} ňyā'an-dól ^{lɛ} gbàn-zāňl ^{la/}	ňyà'an-dòllıb ^a ňyā'an-dóllà+ gbàn-zāňllíb ^a	ňyà'an-dòl- ňyā'an-dól- gbàn-zāňl-	"disciple" NT <i>id</i> WK "one with a book in hand" KT WK
or	bù-zāňl ^{la/} bù-zāňl ^{lɛ/}	bù-zāňllíb ^a bù-zāňllá ⁺	bù-zāňl-	"goat-carrier" WK
or	gbàn-mɔ̄r ^{a/} gbàn-tār ^{a/} bù-mɔ̄r ^{a/} bù-mɔ̄r ^{ε/}	gbàn-mɔ̄ríb ^a gbàn-tāríb ^a bù-mɔ̄ríb ^a bù-mɔ̄rá ⁺	gbàn-mɔ̄r- gbàn-tār- bù-mɔ̄r-	"book-owner" DK <i>id</i> DK "goat-owner" WK

WK specifically rejected all interpretations as head + deverbal adjective. Stems in VVn- undergo consonant assimilation in the pl: $*nb \rightarrow mm$:

sāan ^{a/}	sáam ^{ma}	sāan-	"guest, stranger"
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Stems in *VVm*- have sg $-m^m$ instead of $-m^a$. The assimilation $*mb \rightarrow mm$ would cause SF sg and pl to coincide at least segmentally; this is avoided by using pl s^{ε} or by pluralising with nam^a :

kpī im ^{m/}	<i>kpī</i> 'imís ^ε	kpī'im-	"dead person, corpse"
zū'em ^{m/}	zū'amís ^ε	zū'em-	"blind person"
tādım ^{m/}	tādιmιs ^ε	tàdım-	"weak person"
	tàdım-nàm ^a		

In two words WK accepted -*b*^a pl forms as LFs but not SFs, demonstrating that avoidance of ambiguity drives the variations:

<i>кр</i> ееňт ^т	<i>kpēɛňmma</i> LF only		
	kp <i>ɛ̀ɛňm-nàm</i> a	kp <i>è</i> ɛňm-	"elder"
bi əm ^m	bramma LF or	ıly	
	bì'əm-nàm ^a	bì'əm-	"enemy"

A subclass of nouns referring to older/important people has $-b^a$ in the sg, and makes the plural with $nam^a \underline{8.4}$:

nà'ab ^a yáab ^a (*yāágbā) pùgudıb ^a áňsìb ^a	nà'-nàm ^a yāa-nám ^a pùgưd-nàm ^a āňs-nám ^a	nà'- yāa- pùgud- āňs-	"chief" "grandparent" "father's sister" "mother's brother"
With * <i>mb</i> \rightarrow <i>mm</i> :			
sàam ^{ma} dìəm ^{ma} dàyáam ^{ma}	sàam-nàm ^a dìəm-nàm ^a dàyāam-nám ^a	sàam- dìəm- dàyāam-	"father" "man's parent-in-law" "woman's parent-in- law"

8.3.2 **g**^a|**s**^ε

Straightforward examples include:

bบิบg ^a	būυs ^ε	bù-	"goat"
ňwādıg ^{a/}	ňwādιs ^{ε/}	ňwād-	"moon, month"
āaňdıg ^a	āaňdıs ^ɛ	àaňd-	"Vitex doniana"
bù-dìbıg ^a	bù-dìbιs ^ε	bù-dìb-	"male kid"
kpìibıg ^a	kpìibιs ^ε	kpìib-	"orphan"
yàmmıg ^a	yàmmıs ^ɛ	yàm-	"slave"
kɔ̄lıg ^a	kɔ̃lıs ^ε	kòl-	"river"
kpùkpàrıg ^a	kpùkpàrıs ^ɛ	kpùkpàr-	"palm tree"
pūsıg ^{a/}	pūsιs ^{ε/}	pūs-	"tamarind"
<i>zōɔg</i> a	z̄ɔsɛ		"run, race"
būdıg ^a			"planting"

Root-stems in *Caa Cia Cue* delete the *g of the sg suffix $-g^a \underline{5.6}$:

Noun flexion

bāa ⁼ <u>7.1</u>	bāas ^ε	bà-	"dog"
sīa+	sīəs ^ɛ	sįà-	"waist"
sàbùa ⁺	sàbùøs ^ɛ	sàbỵà-	"lover, girlfriend"

Nasal *iaň uaň* here alternates with *ɛɛň ɔɔň*:

zìň'a ⁺	zὲň'εs ^ε	zįàň'- or zὲň'-	"red" (adjective)
nū'-íň'a+	nū'-έň'ὲs ^ε	nū'- <i>έ</i> ň'-	"fingernail"
nūa ^{+/}	nɔ̄ɔs ^{ε/}	nō-	"hen"

Stems in *CVg- display consonant assimilation in the sg via *gg $\rightarrow kk$:

gìk ^a	gìgıs ^ɛ	gìg-	"dumb person"		
*Cag- *Ci̯ag- *Cu̯ag- delete *g when there is no assimilation <u>5.6</u> :					
zàk ^a pụāk ^a	zà'as ^ɛ pū'as ^ɛ	zà'- pu̯'à-	"compound" "female" (adjective)		

Stems in -*m*- and -*n*- show -*ŋ*- in the sg, via $*mg \rightarrow \eta\eta$ and $*ng \rightarrow \eta\eta$, and the cbs adopt the sg form; in the pl $*ns \rightarrow \tilde{:}s 5.4$ whereas -*ms- remains with 2-morastems, but is frequently assimilated in longer stems. There are, however, no unequivocal three- or four-mora *n*-stems in this class in any case.

tēŋ ^a	tēεňs ^ε	tèŋ-	"land"
pàŋ ^a	pàaňs ^ɛ	pàŋ-	"power"
bùŋ ^a	bùmιs ^ε	bùŋ-	"donkey"
nāŋ ^a	nāmเร ^ะ	nàŋ-	"scorpion"
sú'өŋ ^a	sū'emís ^ɛ	sū'øŋ-	"rabbit"
níiŋ ^a	níis ^ɛ	nīiŋ-	"bird"
	nīimís ^ɛ		
kùlıŋ ^a	kùlιs ^ε	kùlıŋ-	"door"
	kùlιmιs ^ε		
kū'alíŋ ^a	kū'alís ^ε	kō'alíŋ-	sleeveless traditional
	kō'alímìs ^ε		smock
mēɛdıŋª	mēɛdıs ^ɛ	mèɛdıŋ-	"building tool"
	mēɛdımıs ^ɛ		
pīəsíŋ ^a	pīəsís ^ɛ	pīəsíŋ -	"sponge"
	pīəsímìs ^ɛ		$\leftarrow p\bar{i}e^{+/}$ "wash (self)"

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Various irregular stem alternations are seen in

bīig ^a	bīis ^ε	bī- or bì-	"child"
bèrıŋ ^a	b <i>èr</i> ıgıs ^ɛ		a plant used for fibre
tàmpūa+	tàmpว̄วs ^ε	tàmpò-	"housefly" DK (no <i>ň</i>)
būtıŋ ^a	būtus ^ε	bùtıŋ-	"cup" <u>2.2</u>

Very irregular in both flexion and phonology is

sāŋá+	<i>sānsá</i> + /ns/	sān-	"time"
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These human-reference nouns have alternative plurals with the suffix $-b^a$:

dàsāŋ ^a	dàsām ^{ma}	dàsàŋ-	"young man"
	or <i>dàsāaňs</i> ε		
Yàaŋ ^a	Yàam ^{ma}	Yàaŋ-	"Yanga, Yansi person"
	or Yàamιs ^ε /Yàaňs ^ε		
Sà'dàbùa ⁺	Sà'dàbùøb ^a		clan name
	or <i>Sà'dàbùθs</i> ε		

Several s^{ϵ} -plural stems with rounded vowels have sg g° for the expected g^{a} . WK avoids the change to $-g^{\circ}$ with human-reference nouns.

	kūug ^{a/}	kūus ^{ε/}	kū-	"mouse"
or	kūug ^{ɔ/}			
	sờ'ug ^a	sὺ'υs ^ε	sù'-	"knife"
or	sù'ug ^o			
	nú'ùg ^ɔ	nú'ùs ^ε	nū'-	"hand"
	zùnzòŋ ^a	zùnzòɔňsε	zùnzòŋ-	"blind person"
or	zùnzòŋ ^ɔ			
	tèŋ-zùŋ ^ɔ	tὲŋ-zὺυἤs ^ε		"foreign land"
but		pi̯àň'-zùna+		"foreign language"
	yú'טŋ ^כ	yū'υmís ^ε	yū'טק-	"night"
	zùuňg ^ɔ	zùuňs ^ε	zùň-	"vulture"
	(or <i>zùuňd^ɛ</i>		

Compare Mampruli *nuuwa* pl *nuusi* "hand", *suuwa* pl *suusi* "knife", *kuuwa* pl *kuusi* "mouse", *zuuwa* pl *zuusi* "vulture" (but *yuŋŋu* pl *yunsi* "night.")

In yammug "slave" the epenthetic vowel before the flexion has been rounded by the -*m*- and the resulting SF reinterpreted as ending in g^{2} : yàmmug^a WK yàmmιs^ε yàm- "slave" or yàmmug²

Some original $g^{2}|d^{\varepsilon}$ nouns have substituted pl $-s^{\varepsilon}$ for $-d^{\varepsilon}$ instead of $-a^{+}$ <u>8.3.3</u>:

	à-dàalúŋ ^ɔ	à-dàalís ^ε WK	à-dàalúŋ-	"stork"
		à-dàalímìs ^ɛ		
	sī'úŋ ^ɔ	sī ⁻ imís ^ɛ	sī uŋ-	a kind of big dish
cf	dì <i>isúŋ^ɔ</i>	dìısís ^ɛ	dìısúŋ-	"spoon"
		dìısímà+		

Two words of this type drop -*s*- from the stem in the plural:

wīlเรง์ŋ ^ว	wīlımís ^ɛ	wīlısúŋ -	a kind of snail
yālเรம์ŋ ^ว	yālımís ^ɛ	yālısúŋ-	"quail"

8.3.3 **g³|d^ε**

All stems in m n after a short vowel, and all gerunds, use pl a^+ instead of d^{ε} . Before the sg $-g^{\circ} - k^{\circ} - \eta^{\circ}$ stem-final vowels are rounded, changing epenthetic vowels to v and creating rounding diphthongs from root vowels <u>5.5</u>.

dàug ⁵	dàad ^ɛ	dà-	"piece of wood"
vāʋňgɔ/	vāaňd ^{ε/}	vāň-	"leaf"
fēň'og ^{ɔ/}	fēň'εd ^{ε∕}	fēň'-	"ulcer"
dàbīog ⁵	dàbīəd ^ɛ	dàbịà-	"coward"
vīug ^{ɔ/}	vīid ^{ε/}	vī-	"owl"
mɔ̄ɔgɔ	mɔ̄ɔdɛ	mò-	"grass, bush"
dùndùug ^o	dùndùud ^ɛ	dùndù-	"cobra"
	zùθd ^ε		"friendship"
wābug ^{ɔ/}	wābıd ^{ɛ/}	wāb-	"elephant"
zūθbúg ^ວ	zūθbíd ^ε	zūøb-	"(human head) hair"
bālērvg ^{ɔ/}	bālērıd ^{ɛ/}	bālźr-	"ugly person"
	or <i>bālērιs^{ε/}</i>		
bēsvg ^o	bĒsıd ^ɛ	bès-	kind of pot
Dènnug ⁵			Denugu (place name)

Some stems ending in root vowels have plurals of the form CVt^{ε} 5.3.1:

dòɔgɔ	dòɔd ^ε or dòt ^ε	dò-	"hut, room; clan"
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So too $p\bar{2}g^{2}$ "farm, field", $f\bar{u}ug^{2}$ "clothing, shirt." The sg has a short vowel in				
zūg ^{ɔ/}	zūt ^{ε/}	<i>zū-</i> or <i>zūg-</i>	"head"	
*Cag- *Ci̯ag- *Cu̯	uag- stems <u>5.6</u> show	sg -k ^ɔ , and <u>u</u> a beco	mes ɔ before -k ^ɔ <u>5.5</u> :	
lāµk ⁵	lā'ad ^ɛ	là'-	"(item of) goods"	
bįāųňk ^o	bi̯āň'ad⁵ WK bi̯āň'ada⁺ SB	bi̯àň'-	"shoulder"	
lòk ^o	lù'ad ^ε	lỵ'à-	"quiver (for arrows)"	
Stems in CVd sh	now -t- in the pl <u>5.4</u> v	ria * <i>dd → tt</i> :		
ùdvg ⁵	ùt ^ε	ùd-	"(piece of) chaff"	
Stems in CVg de	evelop <i>kk</i> in the sing	ular via * <i>gg → kk</i> :		
dūk ^{ɔ/}	dūgud ^{ɛ/} dūgub dút ^ɛ	dūg-	"cooking pot" "cooking pots" SB	
Stems in / devel	op the cluster <i>nn</i> in	the pl via * <i>ld → nn</i> :		
zวิlug ^{ว/}	zɔ̄n ^{nε/}	z51-	"fool"	
sìlvg ⁵	sìn ^{nε} or sìlιs ^ε	sìl-	"hawk"	
The only $m n$ stems making plurals with $-d^{\epsilon}$ are CVVC root-stems:				
làngávŋ ^ɔ	làngāamá ⁺ or làngáam ^{mɛ}	làngāvŋ-	"crab"	

So too $mang\bar{a} \omega \eta^{2}$ "crab", the plural-only $s\bar{u}n\bar{n}-p\dot{\epsilon}\epsilon n^{n\epsilon}$ "anger" and perhaps the placename $T\epsilon mp\dot{a}an^{n\epsilon}$ "Tempane", if the second element is from $p\bar{a}al(g^{a})$ "new."

All stems in *n m* following a short vowel use the plural suffix a^+ instead of d^{ϵ} . They show $-\eta$ - in the sg, via $*ng \rightarrow \eta\eta$ and $*mg \rightarrow \eta\eta$, and normally use the sg segmental (but not tonal) form as cb <u>8.2</u>.

gbàỵŋ ⁵	gbàna+	gbàn- or gbàuŋ-	"letter, book"
zīnzāu̯ŋ ^{ɔ/}	zīnzāná+	zīnzáuŋ-	"bat"
àňrʊŋ ^ɔ	àňrıma+	àňrʊŋ-	"boat"
māluŋ ^ɔ	mālıma+	màluŋ-	"sacrifice"

The expected *y*-glide is absent in the sg and cb of

nìn-gbīŋ ^{ɔ/}	nìn-gbīná ⁺	nìn-gbīŋ-	"body"
	5		5

This may represent the influence of the alternate sg form $nin-gbin^{n\epsilon/}$.

All regular gerunds of 3-mora- and 4-mora-stem dual-aspect verbs belong to this noun class except for those with stems ending in velars and fusion verbs, which have the singular suffix r^{ϵ} <u>11.1.1</u>. Only stems in *-s*- and *-sum*- have plurals, always with *-a*⁺:

bū' o súg ^o	bū'esá+	bū' o s-	"question"
zàaňsúŋ ^ɔ	zàaňsímà+	zàaňsúŋ-	"dream"

Gerunds of 3-mora *n*-stem verbs never assimilate $*ng \rightarrow \eta\eta$, and gerunds of 3-mora *m*-stems only assimilate $*mg \rightarrow \eta\eta$ optionally: thus $diginug^{2}$ "lying down", $zi\check{n}'inug^{2}$ "sitting down." $t\acute{2}2\eta^{2}$ or $t\acute{2}2m\check{u}g^{2}$ "departing", $sa\check{n}'u\eta^{2}$ or $sa\check{n}'amug^{2}$ "destroying", $karu\eta^{2}$ or $karumug^{2}$ "reading."

8.3.4 r^ε|a⁺

Straightforward examples include:

kūgυr ^{ε/}	kūgá+	kūg-	"stone"
dìgır ^ɛ	dìga+	dìg-	"dwarf"
bàlàŋır ^ɛ	bàlàŋa+	bàlàŋ-	"hat"
yūgvdır ^ɛ	yūgvda+	yùgvd-	"hedgehog"
pu̯'à-sādır ^{ɛ/}	pu̯'à-sādá+	pu̯'à-sād-	"young woman"
nóbìr ^ɛ	nōbá+	nōb-	"leg"
līıbır ^ε	līıba+	lìıb-	"twin"
sāngúnnìr ^ɛ	sāngúnnà+	sāngún -	"millipede"
bì'isır ^ɛ	bì'isa+	bì'is-	"woman's breast"
sūmmιr ^ε	sūmma+	sùm-	"groundnut"

For the allomorphism in *CVV* root-stems before the plural $-a^+$ see <u>5.3.1</u>. Unglottalised vowel stems:

bīər ^{ɛ/}	bįēyá+	bįā-	"elder same-sex sib"
zūθr ^ε	zuēya+	zuà-	"hill"
nɔ̄ɔr ^{ε/}	nōyá+	nō-	"mouth"
<i>z</i> ῡυr ^ε	zūya+	zù-	"tail"

Glottalised	vowel	stems:	
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tītā'ar ^ε	tītāda+	tītá'-	"big" (adjective)
ňyē̄'εr ^{ε/}	ňyēdá+	ňyē'-	"next-younger sibling"
pòň'ɔr ^ε	pòňda+	pòň'-	"cripple"
yū'טr ^{ɛ/}	yūdá+	<i>уū</i> '-	"name"
yū'⊖r ^ε	yųāda+	уù'өг- <u>8.2</u>	"penis"

Stems in **Cag-* **Ciag-* **Ci*

bà'ar ^ɛ	bà'a ⁺ or bàda ⁺	bà'-	"idol" (Farefare <i>bàgr</i> è)
ňyā'ar ^ε	ňyā'a+	ňyà'-	"root" (← *ɲɛg-)
si̯à'arɛ	si̯à'a+	sįà'-	"forest"
bįāň'ar ^{ε/}	bi̯áň'a+	bįāň'-	"wet mud, riverbed"
mὺ'ar ^ε	mu̯'àa+	mu̯'à-	"reservoir, dam"
	or <i>mù'ada</i> +		
zànkὺ'ar ^ε	zànkự'àa+	zànkự'à-	"jackal"
	or <i>zànkù'ada</i> +		
kùndù'ar ^ε	kùndu̯'àa+	kùndự'à-	"barren woman"
	or <i>kùndù'ada</i> +		

So too, even in a case where the glottalisation is not derived from *g:

kì-dà'arε kì-dà'ada ⁺ WK	"bought-in millet'
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Stems in deleted *g after a long vowel include

and all fusion verb gerunds <u>10.1</u> like $gb\check{a}\check{n}'ar^{\varepsilon}$ from $gb\bar{a}\check{n}'e^{+/}$ "grab", $di'ar^{\varepsilon}$ from $d\bar{r}e^{+/}$ "get", $d\check{u}ar^{\varepsilon}$ from $d\bar{u}e^{+/}$ "rise."

Some root-stems show *CV* with a short vowel before r^{ε} , with cb *CVr*- <u>8.2</u>:

gbēr ^{ɛ/}	gbēyá+	gbēr-	"thigh"
gberer	gbeya '	gber-	"thigh"

Similarly $k\partial k \bar{\sigma} r^{\epsilon/}$ "voice" $kp \partial k \bar{\sigma} r^{\epsilon/}$ "tortoise" $g \bar{a} \bar{n} r^{\epsilon/}$ "ebony fruit" $g \bar{\sigma} m p \bar{\sigma} z \bar{\epsilon} r^{\epsilon/}$ "duck" $\bar{n} \gamma \partial - v \bar{\sigma} r^{\epsilon/}$ "life".

2-mora stem verbs make gerunds in $-r^{\varepsilon}$ instead of $-b^{\circ}$ after a noun cb: $n\bar{\jmath}-l\dot{\jmath}\dot{\jmath}r^{\varepsilon}$ "fasting" ("mouth-tying"), $f\bar{u}-y\dot{\varepsilon}\dot{\varepsilon}r^{\varepsilon}$ "shirt-wearing"; vowel shortening appears in $n\bar{a}$ ' $l\dot{\jmath}r^{\varepsilon}$ "area in compound for tying up cows" and $w\dot{\iota}d-l\bar{\jmath}r^{\varepsilon/}$ "area for tying up horses." Noun flexion

Stems in *m n l r* undergo consonant assimilation in the sg: $*rr \rightarrow r$, $*lr \rightarrow ll$, $*nr \rightarrow nn$, $*mr \rightarrow mn$; on the instability of the cluster *mn* see <u>5.2</u>.

kùkpàr ^ɛ	kùkpàra+	kùkpàr-	"palm fruit"
<i>kpān^{nε}</i>	kpāna+	kpàn-	"spear"
má'an ^{nε}	mā'aná+	mā'an-	"okra"
<i>pībιn^{nε}</i>	pībına+	pìbın-	"covering"
<i>dūm</i> ^{nε}	dūma+	dùm-	"knee"
<i>z</i> ɔ̄ɔm ^{nε}	zōɔma+	zòɔm-	"fugitive"
yὺυm ^{nε}	yùma+	yùʊm-	"year" <u>5.3.2</u>
gbīgım ^{nɛ}	gbīgıma+	gbìgım-	"lion"
gél ^{le}	gēlá ⁺	gēl-	"egg"
ίι/ ^{Ιε}	īılá+	ī <i>t</i> l-	"horn"

With unusual sandhi in the sg, and presumably analogical levelling

<i>ňwān^{nε}</i> SB	<i>ňwāna</i> + NT	ňwàn-/ňwàm-	"calabash"
<i>ňwām^{mε}</i> WK	<i>ňwāma</i> + SB WI	K NT	

An exceptional suppletive plural, segmentally and tonally, is seen in

	dāar ^ɛ	dābá+	dà-	"day"
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These two $r^{\varepsilon}|a^+$ class words probably have 1-mora stems:

[Mampruli <i>zari</i>]	zā+/	zā-	"millet"
yīr ^{ɛ/}	yā+/	уī-	"house"

Language names <u>29.4</u> all belong to a $r^{\varepsilon}|a^{+}$ subclass partly formed with the suffix - l^{ε} . The suffix is always - l^{ε} after stems ending in a root vowel:

Language		Speakers	
Kūsáàl ^ɛ	Kusaal	Kūsáàs ^ε	Kusaasi
Bùsáàňl ^ɛ	Bisa	Bὺsáàňs ^ε	Bisa
ΜὸͻͿε	Mooré	Μὸͻs ^ε	Mossi
Sìmīil ^ɛ	Fulfulde	Sìmīis ^ɛ	Fulɓe
Zàngb <i>ɛɛ</i> lɛ	Hausa	Zàngb <i>ɛɛd</i> 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^{ε} , or assimilates to the stem final in a way which is indistinguishable from r^{ε} :

Noun flexion

Nàbır ^ɛ	Nabit	Nàbıdıb ^a	Nabdema
Tùønnır ^ɛ	Toende Kusaal	<i>Τùθn^{nε}</i>	Toende area
Dàgbān ^{nε/}	Dagbani	Dàgbām ^{ma/}	Dagomba
Bìn ^{nε}	Moba	Bìm ^{ma}	Moba
Yàan ^{nɛ}	Yansi	Yàaňs ^ɛ	Yansi
<i>Gōrín</i> ^{nε}	Farefare	Gūrís ^ε	Farefare
Tàlιn ^{nε}	Talni	Tàlιs ^ε	Tallensi
Bùl ^{lɛ}	Buli	Bùlιs ^ε	Bulsa
Àgɔ̀l ^{lɛ}	Agolle Kusaal	Àgɔ̀l ^{lɛ}	Agolle area

However, stems in *-r*- show the distinctive assimilation $*rl \rightarrow tt \ 5.4$:

Yāt ^{ε/}	Yarsi	Yārιs ^{ε/}	Yarsi
Bāt ^{ε/}	Bisa	Bārιs ^{ε/}	Bisa

Unexpected epenthesis occurs in:

Kàmbùnır ^ɛ	Twi	Kàmbùmιs ^ε	Ashanti
ŇwāmpūrιI ^{ε/}	Mampruli	Ňwāmpūrιs ^{ε/}	Mamprussi

8.3.5 f²|*ι*⁺

The plural $-\iota^+$ causes the stem vowels *aa iə* $\varepsilon\varepsilon$ to undergo "umlaut" to *ii*. Straightforward examples for the $f^{2}|\iota^+$ class are

màlıf ²	mòlı+	mòl-	"gazelle"
bīilíf ²	bīilí+	bīil-	"seed"
ňyīríf ^o	ňyīrí+	ňyīr-	"egusi"
zūríf ^o	zūrí+	zūr-	"dawadawa seed"
būn-búudìf ²			"plant"

Two 1-mora stem $f^{p}|\iota^{+}$ nouns are

no sg	kī+/	kī- or kā-	"cereal, millet"	
cf Mampruli sg <i>ka</i>	afu pl kyi id.			
no sg	mùį+	mùi̯-	"rice"	
cf Mooré sg <i>muiifu</i> pl <i>mùí id</i> .				

Two words have stems in **Caag*- with deletion of *g 5.6:

Stems in -*n*- show consonant assimilation in the sg with $*nf \rightarrow \tilde{:}f \quad \underline{5.4}$:

nīf ^{5/}	nīní+	nīn- or nīf-	"eye"
píıňf ^o	pīıní+	p <i>ī</i> เn-	"genet"
kíiňf ^o	kīiní+		"millet seed"
zú'uňf ^o	<i>z</i> ū'υnί+		"dawadawa seed"

The sg is probably remodelled after an umlauted pl (cf $m\dot{a}$ ' $an^{n\epsilon}$ "okra") in

míif ^o mīiní+	"okra seed"
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In two words stem -*d*- is lost in the sg:

wìəf ^o	wìdı+	wìd-	"horse"
lā'af ^o	līgıdı+	là'- or lìg-	"cowrie" pl "money"

Some words only have $f^{p}|\iota^{+}$ class suffixes in one number. This may reflect the obsolescence of the class; alternatively, some cases may be relics of lost classes.

	zíiŋ ^a	zīm(+	zīm-	"fish"
	wālıg ^a	wālıs ^ɛ	wàl-	a kind of gazelle
	or	<i>wālí</i> + tones <i>sic</i> W	K	
	sībıg ^{a/}	sībí ⁺	sīb-	a kind of termite
	sīiňf ^{ɔ/}	sīiňs ^{ε/}	sīň-	"bee"
or	sīiňg ^{a/}			
	sūňf ^{ɔ/}	sūňyá+	sūň-	"heart"
or	sūuňr ^{ε/}			
	kpā'úŋ ^ɔ	kpī iní +	<i>kpā</i> '- irreg	"guinea fowl"

8.3.6 b^o

Only three b° class nouns have been found which are not gerunds:

sā'ab ^o	sà'-	"millet porridge, TZ"
tāňp ^o	tàňp-	"war" <u>5.3.1</u>
kī'ıb ^{ɔ/}		"soap"

Noun flexion

All regular gerunds from 2-mora-stem dual-aspect verbs belong here <u>11.1.1</u>: stems in *b* show -*p*- via **bb* \rightarrow *pp*: $s\bar{s}p^{5/}$ from $s\bar{s}b^{\epsilon}$ "write", $l\bar{s}p^{5/}$ from $l\bar{s}b^{\epsilon}$ "throw stones at", and stems in *m* show **mb* \rightarrow *mm*: $k\bar{\iota}m^{m_{2}}$ from $k\bar{\iota}m^{m}$ "tend a flock/herd", $w\bar{\upsilon}m^{m_{2}}$ from $w\bar{\upsilon}m^{m}$ "hear." Stems in *n* do not assimilate, however: $b\bar{\upsilon}n\iota b^{2}$ from $b\bar{\upsilon}n^{\epsilon}$ "reap."

 $Y\bar{i}s^{\epsilon}$ "make go/come out" has the expected gerund $y\bar{i}s\iota b^{\prime\prime}$; the alternate form $y\bar{i}s\epsilon'$ has $y\bar{i}s\epsilon'$, the only 3-mora stem in the b^{\prime} class.

8.3.7 m^m

Countable nouns in m^m class form plurals with $-a^+$ or $-s^{\epsilon}$, or use nam^a <u>8.4</u>. Straightforward forms include:

dāam ^{m/}	dā-	"millet beer, pito"
mèlıgım ^m		"dew"
kūdım ^m		"olden days"
dū'uním ^m	dū'un-	"urine"
zàam ^m	zà-	"evening"
yā'am ^{m/}	yā'am-	"gall; gall bladder"
dàalım ^m		"masculinity"
yàarım ^m	yàar-	"salt"
zāaňsím ^m	zāaňs-	"soup"

There are probably no stems ending in short root vowels; cf the cbs in

vōm ^{m/}	vūm-	"life"
kūm ^m	kùm-	"death"
zōm ^{m/}	zōm-	"flour"

 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 <u>6.2.2</u>.

bùgóm ^m		bùgúm- or bùgōm	- "fire"
pūum ^{m/}		pūum-	"flowers, flora"
bì'isím ^m			"milk"
dàalím ^m	dàalímìs ^ɛ	dàalím-	"male sex organs"
pīim ^{m/}	pīmá+	pīm-	"arrow" <u>5.3.2</u>

Pīim^{m/} "arrow" is a remnant of an old "long, thin things" ا² class, preserved in e.g. the Gurma languages and Nawdm: cf Nawdm *fíímú* "arrow", plural *fíímí*.

8.4 Nàm plurals

The word nam^a can pluralise words which do not make a plural through the class system. It appears as the NP head, with a predependent noun appearing as cb if it is a count noun and as sg or pl if it is a mass noun <u>15.6</u>. Nam^a is not a suffix.

Plurals with nam^a are made for nouns where the pl stem differs from the sg, or the regular pl would be ambiguous; nouns using $-b^a$ as sg 8.3.1; nouns with a bare stem as sg; loanwords; pronouns without distinctive pl forms, like $an5'bn^{\epsilon}$ "who" when asking for a plural answer or $n\bar{\epsilon}'^{+/}$ inanimate "this" in older materials 15.2.1; plural forms with singular meanings; mass nouns used with count meanings; quantifiers as noun-phrase heads 15.4.1; and forms with the personifier particle 15.5.

Examples:

mà+	mà nám ^a	mà-	"mother"
	(tone <i>sic</i> , as if unc	ompounded)	
bā' ^{+/}	bā'-nám ^a	bā'-	"father"
zuà+	zuà-nàm ^a	zuà-	"friend"
bùrkìn ^a	bùrkìn-nàm ^a	bùrkìn-	"honourable person"
k <i>ɛɛkɛ̀</i> +	k <i>`ek`e</i> -nàm ^a	k <i></i> eke-	"bicycle"
dāan ^a	dàan-nàm ^a	dàan-	"owner of"
tīráàn ^a	tīráàn-nàm ^a	tīráàn-	"neighbour, peer"
	dà-pūvdá nàm ^a		"crosses"
	kūt nám ^a		"nails"; sg also "iron"
	bē'ɛd námª		"evils"
	bùgóm nám ^a		"fires, lights"
	sā'ab nám ^a		"portions of porridge"
	dāam nám ^a		"beers"

8.5 Nouns with apocope-blocking

A number of nouns ending in $-\iota^+$ or $-\upsilon^+$ display apocope-blocking <u>5.1.3</u>:

būudı+	bùud-	"tribe"
nà'ası+		"honour"
kābırí+		"entry permission"
sūgvró+		"forbearance"
pīint+	pìin-	"gift"

Some are loans from related languages without apocope, like $k\bar{i}b\dot{v}^+$ "soap" (from Mampruli.) Cognates of $b\bar{u}ud\iota^+$ show that the $-d\iota$ represents the d^{ϵ} pl suffix: Mooré $b\dot{u}udu$ "family, kind" sg $b\dot{u}ugu$. $N\dot{a}'as\iota^+$ may be s^{ϵ} pl. $K\bar{a}b\iota r\dot{\iota}^+$ and $s\bar{u}gvr\dot{v}^+$ may be r^{ϵ} sg, with $k\bar{a}b\iota r^{\epsilon\prime}$ "ask for admission" and $s\bar{u}gvr^{\epsilon\prime}$ "forbear" as back-formations. Noun flexion

With $p\bar{i}in\iota^+$ cf Mampruli piini id; Mampruli also has $r^{\epsilon}|a^+$ type sg piinni pl piina, but Dagbani pini shows that single n is original, because Dagbani preserves long vowels in originally closed syllables. The word may reflect a noun class obsolete in Western Oti-Volta; ii is probably umlauted from aa, as in $f^{2}|\iota^+$ class plurals (cf Gulimancéma paabu "gift.")

8.6 Loanwords

Loanwords adopt noun classes by analogy <u>8.1</u> or make nam^a plurals <u>8.4</u>:

g ^a s ^ɛ : àrazàk ^a	àrazà'as ^ɛ	àrazà'-	"riches"
			Hausa <i>arzìkii</i>
màlįāk ^{a/}	màlįā'as ^{ε/}	màlįā'-	"angel" DK (Arabic)
g ^ɔ d ^ɛ : gādvg ^{ɔ/}	gāt ^{ɛ/}	gād-	"bed" Hausa <i>gadoo</i>
lòmbò'ɔgɔ	làmbà'ɔdɛ	lòmbò'-	"garden"
			Hausa <i>làmbuu</i>
r ^ε a ⁺ : l <i>́</i> sr ^ε	lóyà+ tones sic	lór-	"car, lorry"
	or <i>lóom^{ma}</i>		cf <i>Μ5r</i> ^ε <u>8.3.1</u>
àl <i>áp</i> ìr ^ɛ	àlźpìya+		"aeroplane" SB
wādır ^{ɛ/}	wādá ⁺	wād-	pl "customs, law"
			(English "order")
gādv+	gādv-nám ^a	gādu-	"bed" WK
k <i></i> eke+	k <i>ɛ̀ɛkɛ̀-nàm</i> ª	k <i>è</i> ɛkè-	"bicycle" Hausa <i>kèekè</i>
dāká+	dāká-nàm ^a	dāká-	"box" Hausa <i>àdakàa</i>
tέεbùl ^ε	téɛbùl-nàmª	téɛbùl-	"table"
Nàsāara+	Nàsàar-nàm ^a	Nàsàar-	"white person,
	or <i>Nàsàa-nàm</i> a	Nàsàa-	European" <u>29.4</u> ;
			cf Hausa <i>Nàsaara</i>

Loanwords ending in L or H toneme distinguish sg from cb by the fact that M spreading only follows the sg, conforming to the usual rule 7.3:

dự'átà ná'àb	"a doctor's chief"
du̯ˈátà-nàˈab	"a doctor-chief, doctor who is a chief"

Some all-M loanwords change final M to H in the cb on the analogy of Kusaal nouns with M toneme noun prefixes <u>6.2.4</u>: *dūnıya*⁺ "world" (Arabic دنيا *dunya*:), *dūnıyá-kàŋā* "this world."

9 Adjective flexion

Unlike nouns, most Kusaal adjectives show suffixes from more than one noun class. This reflects the prehistory of the language, in which noun classes triggered agreement and adjectives took the suffix of the head noun, which preceded as a combining form, effectively infixing the adjective stem between the noun stem and its suffix. Like most Western Oti-Volta languages, Kusaal has lost the agreement system, but adjectives commonly remain extant with suffixes from more than one class, now usually in free variation. Thus from $b\bar{v}vg^a$ "goat":

bù-pìəlıg ^a	bù-pìəlιs ^ε	bù-pìəl-	(g a sε)	"white goat"
bù-pìəl ^{lɛ}	bù-pìəla+	bù-pìəl-	(r ɛ a+)	id

A few traces of agreement remain, accounting for all cases with $m^m 15.7.1.1$. There is also some preference for $g^a|s^{\epsilon}$ suffixes for human reference: $n\bar{n}-s\dot{a}b\iota|\dot{s}^{\epsilon}$ "Africans", where $n\bar{n}-s\dot{a}b\iota|\dot{a}^+$ is accepted by informants but is much less common, and $Z\mu\dot{a}-w\dot{i}s^{\epsilon}$ "Red Zoose" (clan), where the adjective does not normally use pl s^{ϵ} . The suffixes $a|b^a$ and $f^o|\iota^+$ appear only in set expressions; b^o never occurs at all.

WK claims a meaning difference in intensity in gradable adjectives with sg suffixes of different classes, consistently ranking them $g^a r^{\epsilon} g^{\circ}$ in decreasing order, so that $f\bar{u}$ - $p(\hat{a})lg$ "white shirt" is whiter than $f\bar{u}$ - $p(\hat{a})l d$. However, DK specifically denied any difference of meaning.

Class suffixes are avoided when their combination with stem finals would give rise to unclear or ambiguous SFs. The availability of alternatives from three classes permits avoidance much more freely than with nouns. A further major constraint is that only two adjectives show suffixes from both the $g^a|s^{\varepsilon}$ and $g^{\circ}|d^{\varepsilon}$ classes:

	zìň'a ⁺	zèň'ɛsɛ	zèň'-	"red"
	zὲň'og ^ɔ	<i>zèň'ɛdɛ</i> or <i>zèňda</i> +		
	bī ⁻ a ⁺	bī'əs ^ɛ	bià'-	"bad"
	bē'og ^o	bē'ɛdɛ	bè'-	
also	<i>bē̇'εd</i> ⁼ sg	<i>bè'ɛd-nàm</i> ª pl		

Other adjectives are *either* g^{a} - or g^{a} -type, along with $r^{\varepsilon}|a^{+}$ class suffixes; this probably reflects simplification of the old agreement system prior to its complete abandonment. Adjectives of the g^{a} type include:

wàbıg ^a	wàbıs ^ɛ	wàb-	"lame"
wàbır ^ɛ	wàba ⁺		

vènnıg ^a vènnır ^ɛ rare	vènnıs ^ɛ vènna ⁺	vèn-	"beautiful"
vÈňllıg ^a	vèňllıs ^ɛ vèňlla ⁺		"beautiful"
sābılíg ^a sābíl ^{iɛ}	sābılís ^ɛ sābılá ⁺	sābıl-	"black"

Similar are $w\bar{\epsilon}nn\iota r^{\epsilon}$ "resembling" $p\bar{a}al(g^{a} \text{ "new" } z\hat{a}al^{|\epsilon} \text{ "empty" } b\hat{a}a\breve{n}l\iota g^{a} \text{ "slim" } p\hat{a}l\iota g^{a}$ "white."

Sg r^{ε} is not used with g^{a} -type stems in m n:

dēɛŋª	dēɛňsɛ		
	dēɛmɪsɛ	dèɛŋ-	
	dēɛna+		

Pl s^{ε} is not used with 2-mora stems in *m n*, or with any stems in *s d*:

gīŋ ^a	gīma+	gìŋ-	"short"
būgvsíg ^a būgvsír ^ɛ	būgusá ⁺	būgvs-	"soft"
pòɔdıgª pòɔdır ^ɛ	pòɔda+	pòod-	"few, small"

Similarly $m\bar{a}$ ' $as(r^{\epsilon}$ "cold, wet" $m\bar{a}ls(r^{\epsilon}$ "sweet" $t\bar{\epsilon}bs(r^{\epsilon}$ "heavy" $l\bar{a}bs(r^{\epsilon}$ "wide." Adjectives of the g^{2} -type only show pl d^{ϵ} in a few 2-mora stems ending in vowels or plosives:

nèog ^ɔ nèɛr ^ɛ	nèɛd ^ɛ nèya+	nè-	"empty"
wìug ^ɔ wìir ^ɛ	wìid ^ɛ wìya ⁺	wì-	"red"
wɔ̄k ^{ɔ/} wā'ar ^{ε/} rare	wā'ad ^{ε/} wā'á ⁺	wā'- or wɔ̄k-	"long, tall"

kūdug ^o kūdır ^ε	kūt ^ε rare kūda+	kùd-	"old"
<i>bèdug⁵ bèdır^ɛ rare</i>	bèda+	bèd-	"great"
tītā'vg ^o rare tītā'ar ^ɛ	tītāda+	tītá'-	"big"

Adjectives of the g^{2} -type with stems in l m n r s do not use sg r^{ϵ} , and accordingly end up with sg g^{2} pl a^{+} only:

sùŋ ^ɔ	sùma+	sùŋ-	"good"
kísùg ^o	kīsá+	kīs-	"hateful, taboo"
dà-zēmmúg ^o	dà-zēmmá+	dà-zēm-	"equal piece of wood"
tūvlúg ²	tūvlá+	tūul-	"hot"
lāllúg ^o	lāllá+	lāl-	"distant"
mì'isvg ^o	mì'isa+	mì'is-	"sour"
wàỵŋ ^ɔ	wàna+	wàỵŋ-	"wasted, thin"
kpī oŋ ^ɔ	kpī'əma+	kpì'oŋ-	"hard, strong"
zùlvŋ ^ɔ	zùlıma+	zùloŋ-	"deep"
yī-pźňrùg ^ɔ	yī-pźňrà+		"nearby house"

Similarly yàlvŋ[>] "wide" ňyālúŋ[>] "wonderful" yɛ̃l-nárùŋ[>] "necessary thing." Resultative adjectives derived with *-lum- <u>12.2.1.2.2</u> belong here. KT (but not WK) also has forms without -m- in both sg and pl:

kpìilúŋ ^ɔ	kpìilímà+	kpìilúŋ-	"dead"	WK
nīn-kpíilùg ⁵	nīn-kpíilìma+		"dead person"	KT
gēɛňlúŋ ^ɔ	gēɛňlímà+	gēɛňlúŋ-	"tired"	WK
nīn-gέɛňlùg ^ɔ	nīn-g <i>é</i> ɛňlìma+		"tired person"	KT
pè'ɛlúŋɔ	pè'ɛlímà+	pè'ɛlúŋ-	"full" WK	KT
	dūg-pć'ɛlà+		"full pots"	KT

Habitual adjectives are derived with d <u>12.2.1.2.1</u>, but the d is often assimilated or dropped, so not all habitual adjectives are d-stems. They are g^{a} -type for WK, but g^{a} -type for KT. In either case, the pl suffix is always a^{+} , as expected:

kōυdír ^ε	kūvdá+	kūud-	"murderous;
<i>kūvdíg</i> a WK			liable to be killed"
<i>kūυdúg</i> ^ͻ KT			

tōmmır ^ɛ	tōmma+ WK tōmna+ KT	tùm-	"working, helpful"
sīnnír ^ɛ rare sīnníg ^a	sīnná ⁺	sīn-	"silent"
m5r ^{ε/}	mōrá+	mōr-	"having"
kùg-dĒl ^{lε/}	kùg-dĒllá ⁺		"chair for leaning on"

Stems in $g k \eta$ do not use the sg suffixes $g^a g^{\circ}$:

bōn-túlıgìr ^ɛ	būn-túlıgà+		"heating thing"
ňwī-tékìr ^ɛ	ňwī-tékà+	ňwī-ték-	"pulling-rope"
būn-súŋìr ^ɛ	būn-súŋà+		"helpful thing"

Adjectives derived from 4-mora stem verbs in -m in KT's speech take g^a or g^a sg and $-a^+$ pl; they may drop the -m- in the plural:

nīn-pú'alìŋ ^a	nīn-pú'alìma+	"harmful person"
nīn-záaňsùŋ ^ɔ	nīn-záaňsà+	"dreamy person"

Some adjectives simply belong to a single noun class even though this cannot be accounted for by the stem-suffix incompatibilities outlined above:

νūr ^{ε/}	vūyá+	vūr-	"alive"
dāvg ⁵	dāad ^ε	dà-	"male"
tōɔgɔ	tɔ̄ɔdɛ	tò-	"bitter"
p <u>u</u> āk ^a	pū'as ^ε	pự'à-	"female" (human)
ňyá'aŋ ^a	ňyá'as ^ε	ňyā'aŋ-	"female" (animal)
	or <i>ňyā'amís</i> ε		
ňyЀɛsíŋª	ňyὲɛnsís ^ɛ	ňyὲɛsíŋ-	"self-confident"

and similarly *vɛ̀ňllíŋ*^a "beautiful" *mālısíŋ*^a "pleasant" *lāllíŋ*^a "distant."

bīl^a bībιs^ε bìl- or bì- "little"

The sg flexion -*la* is found more widely in other Western Oti-Volta languages, where it has a diminutive sense: thus Farefare *níílá* "chick", *pììlà* "lamb", *bùdíblá* "boy", *púglá* "girl", *kíílá* "young guinea fowl"; Mooré *bìríblá* "boy", *bìpúglá* "girl", *bùllá* "kid." The plural stem *bib*- is reduplicated.

10 Verb flexion

Though written solid with the verb in traditional orthography, discontinuouspast n^{ϵ} 23.1.1 and the 2pl subject ^{ya} 19.7.3 are not flexions but bound liaison words.

10.1 Dual-aspect

Some 90% of verbs are dynamic <u>19.2</u> **dual-aspect** verbs, using the stem form for perfective aspect and adding $-d^a$ for imperfective. Synchronically, $-d^a$ is simply a flexion, but historically this probably represents thoroughgoing levelling of a formation with a *derivational* suffix **d* preceding the same imperfective flexion -a as appears in single-aspect verbs. A suffix $-m^a$ marks imperative mood whenever the verb carries the independency-marking tone overlay <u>19.6.2.2</u>.

Perfective, imperfective and $-m^a$ imperative are cited in order. Straightforward examples include:

kū+	kūvd ^{a/}	kùum ^a	"kill"
kpèň'+	kpèň'ɛdª	kpèň'ɛmª	"enter"
kįà+	kìəd ^a	kìəm ^a	"cut"
kųā+	kūød ^{a/}	kùøm ^a	"hoe"
gòň+	gòɔňd ^a	дòɔňm ^a	"hunt"
dūgε	dūgud ^{a/}	dùgum ^a	"cook"
yùug ^ɛ	yùugıd ^a	yùugım ^a	"delay, get late"
yādıg ^{ɛ/}	yādıgíd ^a	yàdıgım ^a	"scatter"
pįāň' ^a	pįāň'ad ^{a/}	pįàň'am ^a	"speak; praise"
dỵ'à ^a	dù'ad ^a	dù'am ^a	"bear, beget"
nōk ^{ε/}	n <i>āk</i> íd ^a	nòkım ^a	"take"
gāŋ ^{ɛ∕}	gāŋíd ^a	gàŋım ^a	"choose"
kpàr ^ε	kpàrıd ^a	kpàrım ^a	"lock"
sūgυr ^{ε/}	sūgvríd ^a	sùgʊrɪm ^a	"forgive"
bàs ^ε	bàsıd ^a	bàsım ^a	"go/send away"
sīgıs ^{ɛ/}	sīgısíd ^a	sìgısım ^a	"lower"
kōt ^{ε/}	kōtíd ^a	kòtım ^a	"slaughter"

Some root-stems ending in a vowel show a *CV*- allomorph in both imperfective and imperative, with -t- for -d- 5.3.1:

dì+	dìt ^a	dìm ^a	"eat"
ňyē ⁺	ňyēt ^{a/}	<i>ňу</i> Èт ^а	"see"

and likewise $l\hat{i}^+/l\hat{u}^+$ "fall", $d\bar{v}^+$ "go up", $y\bar{i}^+$ "go/come out", $z\hat{z}^+$ "run, fear."

Stems in -*d*- show -*t*- in the ipfv via $*dd \rightarrow tt$:

bùd ^ɛ	bùt ^a	bùdım ^a	"plant"
gàad ^ɛ	<u>gàt</u> a <u>3.2.1</u>	gàadım ^a	"pass, surpass"

Stems in *I* generate a cluster in the ipfv via $*Id \rightarrow nn \ \underline{5.4}$:

vūl ^ε	vōn ^{na/}	vòlım ^a	"swallow"
màal ^ɛ	màan ^{na}	màalım ^a	"make; sacrifice"
dīgıl ^{ɛ/}	dīgín ^{na}	dìgılım ^a	"lay down"

Only 2-mora *b*-stems assimilate $*bm \rightarrow mm$:

lèb ^ɛ	l <i>èb</i> ıd ^a	lèm ^{ma}	"return"
sɔ̄b ^ε	รวิbเd ^{a/}	sòm ^{ma}	"write"
lìəb ^ɛ	lìəbıd ^a	lìəbım ^a	"become"
Ēεňb ^{ε/}	ēɛňbídª	<i></i> ѐЕňbım ^a	"lay a foundation"

Only 2-mora *n*-stems show $*nd \rightarrow nn$; only $k\bar{\epsilon}\eta^{\epsilon/}$ (below) shows $*nm \rightarrow mm$:

bùn ^ɛ	bùn ^{na}	bùnım ^a	"reap"
mɔ̄n ^ε	mɔ̄n ^{na/}	mònım ^a	"make porridge"
gò'ɔnɛ	gò'ɔnɪd ^a	gò'ɔnımª	"extend neck"
dìgın ^ɛ	dìgınıd ^a	dìgınım ^a	"lie down"

The *nn*-stem $s \dot{u} n^{\epsilon}$ does not assimilate at all:

<i>sùn^{nε} sùnnıd</i> ^a <i>sùnnım</i> ^a "bow head	d"
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4-mora *m*-stems always assimilate $*md \rightarrow mn$, *mm*, while 3-mora *m*-stems assimilate optionally; 2-mora stems regularly assimilate, but the NT/KB sometimes have unassimilated forms to avoid ambiguity <u>5.4</u>.

sìilım ^m	sìilım ^{ma}	sìilım ^{ma}	"quote proverbs"
lāŋím ^m	lāŋím ^{ma}	làŋเm ^{ma}	"wander searching"
kàrım ^m	kàrım ^m /kàrımıd ^a	kàrım ^{ma}	"read"
<i>tวิวm^{m/}</i>	tóɔm ^{ma} /tɔ̄ɔmíd ^a	tòɔm ^{ma}	"depart"
tùm ^m	tùm ^{ma}	tùm ^{ma}	"work"

Like *tòm^m* are *wòm^m* "hear", *kìm^m* "tend a flock or herd", *dùm^m* "bite."

Stems in *-mm*- only assimilate in the imperative:

tàm ^m	tàmmıd ^a	tàm ^{ma}	"forget"
cum	cummu	cum	Inget

Like *tàm^m* are *zàm^m* "cheat, betray", *dàm^m* "shake", *lèm^m* "sip, taste"; the cognate Mooré verbs have *-mb-*: *zâmbe* "cheat", *râmbe* "stir", *lèmbe* "taste".

Fusion verbs show deleted *g after *aa iə uə aaň* $\varepsilon \varepsilon n \to \infty 5.6$. *G-deletion appears only in the perfective and gerund; elsewhere *g is absent, not deleted (for the tonal implications see <u>6.3.1</u>.) For the perfective forms before liaison see see <u>7.2</u>.

fāeň+/	fāaňd ^{a/}	fàaňm ^a	"save"
dī e+/	dī əd ^{a/}	dì'əm ^a	"get, receive"
dūe+/	dūød ^{a/}	dù <i>e</i> m ^a	"rise, raise"
pūň'e ^{+/}	pūň'ød ^{a/}	pùň'өm ^a	"rot" WK

Irregular dual-aspect verbs are few. Most show a derivational suffix in the perfective which is dropped in the imperfective. This is probably a survival of older patterns: outside the Western group, Oti-Volta languages often drop perfective derivational suffixes when forming imperfectives. Nawdm has a regular conjugation which drops pfv *g* in the ipfv, e.g *jehlg* pfv "*poser verticalement*", *jehla* ipfv.

ḡวระ	g <i></i> sıd ^{a/}	gòsım ^a	"look"
	or <i>gɔ̄t</i> a/	gòm ^a	
tìsε	tì sı d ^a	tìsım ^a	"give"
	or tìt ^a		

A perfective *tì* may appear before bound object pronouns, e.g. *tì f* "give you."

yèl ^ɛ	y <i>èt</i> a	y <i>èlım</i> a	"say"
wìk ^ε	<i>wìid</i> ^a <u>5.3.1</u>	wìkım ^a	"fetch water"
įāňk ^{ɛ/}	įāň'ad ^{a/}	jàňkım ^a	"leap, fly"
gīlıg ^{ε/}	gīn ^{na/}	gìlıgım ^a	"go around"
kēŋ ^{ε/}	kēn ^{na/}	kèm ^a	"go"
dèlım ^m	[<i>dīl^{la/}</i>]	dèlım ^{ma}	"lean (of a person)"

 $D\dot{\epsilon}l\iota m^{m}$ is used as inchoative to $d\bar{\epsilon}l^{|a|}$ "be leaning (of a person)"; compare $g\dot{\upsilon}l^{\epsilon}$ ipfv $g\dot{\upsilon}n^{na}$ "suspend" beside the stance verb $g\dot{\upsilon}l^{|a|}$ "be hanging."

Only two dual-aspect verbs are irregular in the actual flexional suffixes taken:

kē+	kēt ^{a/}	k <i></i> el ^a	"let, allow"
kēň+	kēn ^{a/}	k <i>èm</i> a	"come"

10.2 Single-aspect

The remaining 10% of verbs are **single-aspect**, with just one finite form, which is always imperfective. Each single-aspect verb is either **dynamic**, behaving like the imperfective of a dual-aspect verb, or **stative** <u>19.2</u>; transitive stative verbs typically express relationships, while intransitives have predicative adjectival meanings.

Morphologically, there are three major groups of single-aspect verbs; the morphological division correlates only to a limited extent with meaning.

Six stative single-aspect verbs consist of bare stems alone:

mī'+	"know"	<i>z</i> ῑ'+	"not know"
bè+	"be somewhere, exist"	kā'ẹ+	"not be" ($\leftarrow *kag\iota)$
tūň'e	"be able" <u>22.2.1</u>	nờŋ٤	"love"

Uniquely among single-aspect verbs, $n \partial g^{\epsilon}$ has a m^{a} -imperative $n \partial g m^{a}$, used when the verb word carries the tone overlay of independency marking. Unlike perfectives, these forms are never followed by particle $y\bar{a}^{+}$ <u>19.6.2.1</u>. The Pattern LO verbs $b\dot{\epsilon}^{+}$ and $n\partial g^{\epsilon}$ have M tone before liaison-word pronouns and are followed by M spreading even when not subject to the tone overlay of independency marking <u>7.3</u>.

	Ѝ nóŋ.	"I love him." (e.g. in reply to a question)
not	*À nóŋ yā	specifically stated to be impossible by WK

Mit ka Zugsob tumtum a one noŋ zaba.Mìtkà Zūg-sóbtúm-tūmá ónìnòŋ zábāa+ø.NEG.LET.IMP and head-EMPTY.AN work-worker:SG COP REL.AN love conflict:PL NEG."Let not a servant of the Lord be someone who loves fights." (2 Tim 2:24, 1996)

Kà ò nóŋī f. "And she loves you."

The agent noun $n \partial \eta d^a$ has Pattern L instead of the expected O. It is the only Pattern L 4-mora stem which is not a *m*-stem and does not show H on the 3rd mora.

Ò nòŋıd kā'e. "There's nobody who loves him." WK

The majority of single-aspect verbs have the suffix *- y^a . Nawdm has many imperfective-only verbs of parallel structure, like *jehra* ipfv "*être debout*" = Kusaal $zi'e^{ya}$, where Nawdm r and Kusaal y both represent Proto-Oti-Volta *l. With only one aspect, these verbs have not undergone the extensive levelling which has made dualaspect - d^a into a unitary flexion. In particular, when *y has assimilated to a preceding root-final consonant, resulting in nn mm ll or r(r), the cluster is carried over into

Verb flexion

deverbal nominals, or introduced by analogy into cognate adjectives even when the adjectives are primary. The cluster *nn* then behaves exactly like *nn* derived from **nd*, but *ll* r(r) are subject to further assimilation just like single *l* r <u>5.4</u>.

Dynamic verbs with unassimilated *y* mostly express **stances**:

īgι ^{ya/}	"be kneeling"	dīgı ^{ya/}	"be lying down"
vābı ^{ya/}	"be prone"	làbı ^{ya}	"crouch in hiding"
tàbı ^{ya}	"be stuck to"	zì'e ^{ya}	"be standing still"
zìň'i ^{ya}	"be sitting"	tī i ^{ya/}	"be leaning (object)"
<i>g</i> ɔ̄'e ^{ya/} WK	"have neck extended"	wà'e ^{ya}	"travel to"

Statives include transitive and intransitive types:

à <u>ẹ</u> ňª	"be something/somehov	V''	
sū'e ^{ya/}	"own"	sɔ̃ň'e ^{ya/}	"be better than"
tōe ^{a/}	"be bitter"	vūę ^{a/}	"be alive"

Stance verbs with unassimilated y have derived inchoative and causative dualaspect verbs in n and l <u>12.1.1</u>. They make perfective gerunds, and have agent nouns, deverbal adjectives and instrument nouns with the formant d like dual-aspect verbs. Some informants inflect these verbs with the ipfv suffix $-d^a$ to express *habitual* meaning; others use the ipfv of the derived assume-stance verb instead:

	Ò zìň'i nē.	"She's sitting down." WK KT
	Ò pū zíň'idā.	"She doesn't sit down" WK
but	Ò pū zíň'inìdā.	"She doesn't sit down." KT
	Ò vàbı nē.	"He's lying prone."
	Ò pū vābıdá.	"He doesn't lie prone." WK
but	Ò pū vábınìdā.	"He doesn't lie prone." KT
	Ò dìgı nē.	"She's lying down."
	Ò pū dīgıdá.	"She doesn't lie down" WK
	Lì zì'ə nē.	"It's standing up."
	Lì pū zí'ıdā.	"It (a defective tripod) doesn't stand up." WK
	Lì tì'i nē.	"It's leaning against something."
	Lì tì'id.	"It can be leant against something." WK
	Lì pū tr'iyá.	"It's not leaning against something."
	Lì pū tī idá.	"It's not for leaning against something." WK

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sīn ^{na/} gù/ ^{la} dɔ̄/ ^{la/}	"be silent" "be hanging" "accompany"	dēl ^{la/} gōl ^{la/} zāňl ^{la/}	KT	"be leaning (person)" "have neck extended "carry in one's hands"
gūr ^{a/}	"guard"	tèňr ^a		"remember"
sùr ^a	"have head bowed"	gɔ̄r ^{a/}	DK	"have neck extended"

Dynamic single-aspect verbs in *nn mm ll r(r)* include stance verbs and others:

They make imperfective gerunds; in these and in agent nouns, deverbal adjectives and instrument nouns, the stem is in $nn mm \parallel r(r)$ and d is omitted. Similarly, they do not have distinct continuous, habitual or inchoative forms.

Stative verbs in *nn mm ll r(r)* again include transitive and intransitive types:

nēn ^{na/}	"envy"	vèn ^{na}	"be beautiful"
wēn ^{na/}	"resemble"	kpī əm ^{ma/}	"be strong"
kpēɛňm ^{ma/}	"be older than"	zùlım ^{ma}	"be deep"
sòm ^{ma}	"be good"	gīm ^{ma/}	"be short"
yàlım ^{ma}	"be wide"	zēm ^{ma/}	"be equal to"
tàdım ^{ma}	"be weak"	wā'am ^{ma/}	"be long, tall"
v <i></i> čňl ^{la}	"be beautiful"	lāl ^{la/}	"be far from"
tūl ^{la/}	"be hot"	mɔ̄rª/	"have"
tār ^{a/}	"have"	dùr ^a	"be many"
kàr ^a	"be few"	nār ^{a/}	"be necessary"
pòňr ^a	"be near to"		

M-stems show single m in most sources after after epenthetic vowels and long root vowels <u>5.4</u>.

A number of stative verbs end in -*s*^a:

mì'is ^a	"be sour"	būgus ^{a/}	"be soft"
mā'as ^{a/}	"be cool"	tēbıs ^{a/}	"be heavy"
mālıs ^{a/}	"be sweet"	lābıs ^{a/}	"be wide"
ňyÈɛsª	"be self-confident"	kīs ^{a/}	"hate"

It is possible that *s* here represents $*ss \leftarrow *sy$ historically, but toneme allocation always treats the *s* as single.

There is one intransitive stative verb in $-d^a$: $p \ge d^a$ "be few, small."

Some dual-aspect-verb imperfective forms have become independent stative verbs, e.g. $b \dot{z} d^a$ "want, like" ($b \dot{z}^+$ "seek"), $z \dot{z} t^a$ "fear" ($z \dot{z}^+$ "run.")

11.1 Nouns from verbs

11.1.1 Perfective gerunds

Almost all verbs other than intransitive statives can form a **gerund**, a derived abstract noun which expresses the process, event or state described by the verb.

Gerunds from dual-aspect and many dynamic single-aspect verbs are formed by adding noun class suffixes to the verb stem. Gerunds from other single-aspect verbs are based on derived stems $\underline{12.2.1.4}$.

Gerunds may be used as abstract *count* nouns describing particular instances of the activity of the verb, and may then have plurals 15.2.1.

The Tone Patterns of all regularly formed gerunds are predictable 6.5.

Dual-aspect 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 opaque forms, with the usual $-g^{2}$ replaced by $-r^{\epsilon}$ after stems ending in underlying *g.

 -b⁵ but -r^ε as final part of a compound -r^ε -g⁵
<i>kōub^{ɔ/}</i>
dūgub ^{o/}
dū'ab ^o
kādıb ^o
pīlıb ^o
kpārīb ^o
bāsıb ^o
sōp ^{ɔ/}
lōp ^{ɔ/}
kīm ^{mɔ}
wūm ^{mo}

2-mora *n*-stems do not assimilate $*nb \rightarrow mm$: bun^{ϵ} "reap", gerund $bunb^{\circ}$.

yùug ^ɛ	"delay"	yùugur ^ɛ
n5k ^{ε/}	"take"	nōkír ^ɛ
nìŋ ^ɛ	"doing"	nìŋır ^ɛ
gbāň'e ^{+/}	"grab"	gbáň'ar ^ɛ
dī e+/	"get"	dí'ər ^ɛ
dūe+/	"rise"	dúər ^ɛ
gàad ^ɛ	"(sur)pass"	gàadvg ^o
lìəb ^ɛ	"become"	lìəbug ^o
dīgıl ^{ɛ/}	"lay down"	dīgılúg ⁵
yāar ^{ε/}	"scatter"	yāarúg ^o
sīgιs ^{ε/}	"lower"	sīgısúg ^o
dàm ^m	"shake"	$dammug^{\circ}$ (thus with all <i>mm</i> -stems <u>10.1</u>)

3-mora *n*-stems never assimilate $*ng \rightarrow \eta\eta$:

dìgιn ^ε	"lie down"	dìgınvg ⁵
zìň'in ^ε	"sit down"	zìň'invg ^o

3-mora *m*-stems assimilate $*mg \rightarrow \eta\eta$ optionally:

<i>tวิวm^{m/}</i>	"depart, disappear"	tວ໌ງງ ^ວ	or <i>tɔ̄ɔmúg</i> ɔ
sàñ'am ^m	"destroy"	sàň'טŋ ^ɔ	or <i>sàň'amʋg</i> ɔ
kàrım ^m	"read"	kàrvŋ ⁵	or <i>kàrımug</i> ɔ

4-mora stems in -sim -lim follow the rule and use $-g^{2}$ (always assimilating), but stems in *-gim drop the -m- and use $-r^{\epsilon}$:

sìilım ^m	"cite proverbs"	sìilúŋ ^ɔ
<i>zàaทรเm</i> ^m	"dream"	zàaňsúŋ ^ɔ
<i>wàŋເm</i> ^m	"waste away"	wàŋır ^ɛ
<i>lāŋím</i> m	"wander"	lāŋír ^ɛ
zàkım ^m	"itch"	zàkır ^ɛ

2-mora stems regularly use $-r^{\varepsilon}$ instead of $-b^{\circ}$ in compounds:

pu̯'à-dīเr ^ɛ	"marriage"	nīn-kúùr ^ɛ	"murder"
dā-núùr ^ɛ	"beer-drinking"	mò-pīl ^{lε}	"grass roof"
fū-yέὲr ^ε	"shirt-wearing" WK		

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Irregular perfective gerunds are rare with stems of three or four morae. A few have plural-as-singular forms <u>15.2.1</u>; $y\bar{i}s^{\epsilon}$ "make go/come out" has $y\bar{i}s(b^{\circ})$, like the alternate form $y\bar{i}s^{\epsilon}$ with $y\bar{i}s(b^{\circ})$. However, almost 20% of 2-mora-stem verbs in KED use suffixes other than b° . Most irregular 2-mora stem verbs have regular gerunds:

tìs ^ε	"give"	tīsıb ⁵
kē+	"let"	kēɛbɔ/
gὺl ^ε	"suspend"	<i>g</i> บิเbว

Few segmentally irregular gerunds are also tonally irregular. However, forms with the suffix $-g^{2}$ are Pattern L from Pattern LO verbs unless there are variants with g^{a} or s^{ε} showing that the word really belongs to $g^{a}|s^{\varepsilon}$ with LF remodelling <u>8.3.2</u>.

Many 2-mora stem verbs with irregular gerunds have stems ending in m or b, where the regular formation would have produced ambiguous SFs <u>8.1</u>.

lì+	"fall"	līig ^a
zī+	"carry on head"	zīid ^{ɛ/}
bèň'+	"fall ill"	bēň'ɛs ^ɛ
kēň+	"come"	kēn ^{nε/}
zò+	"run"	<i>zūa</i> + also <i>zɔ̃ɔg</i> ɔ
vū+	"make noise"	vūug ^{ɔ/}
pįāň' ^a	"speak"	pi̯àu̯ňk ^ɔ
bùdε	"plant"	<i>būdıg</i> ª also <i>būdug</i> ⁵
yÈl ^ɛ	"say, tell"	yὲlʊg ^ɔ (cf Mooré yèele; ?? *yiə → yε)
kūl ^ε	"go home"	kūlıg ^{a/} also kūlvg ^{ɔ/}
tàňs ^ɛ	"shout"	tàňsvg ^o
sว <i>ั</i> ทร ^ะ	"converse"	sóňsìg ^a
ḡวร ^ะ	"look"	gósìg ^a
sòsε	"pray, beg"	sōsıg ^a
kīr ^ε	"hurry"	kìkírùg ^ɔ or kīrıb ^{ɔ/}
lὲb ^ε	"return"	lēbıg ^a
tὲb ^ε	"carry in both hands"	tēbıg ^a
kàňb ^ɛ	"scorch"	kāňbır ^ɛ
<i></i> ͻňb ^ε	"chew"	<u> Эňbır^є</u>
lūb ^ε	"buck"	lūbır ^{ɛ/}
zàb ^ε	"fight"	zàbır ^ɛ
tὲňb ^ε	"tremble"	tèňbug ^o
tùm ^m	"work"	tōvma+
tùm ^m	"send"	tìtōmιs ^ε
wùm ^m	"hear"	wōm ^{mɔ} or wòmmʋg ^ɔ <u>12.2.1.4</u>

Dynamic single-aspect verbs in $-y^a$ where the y is not assimilated form perfective gerunds from the root using various noun classes:

zìň'i ^{ya}	"be sitting"	zīň'ig	^a also	"place", regu	ılar g ^a s ^ε class
zì'e ^{ya}	"be standing"	zī a+	KED	<i>zī`əg</i> a (very	irreg <u>5.6</u>) DK KT
dīgı ^{ya/}	"be lying"	dīk ^{a/}	KT	dīgır ^{ɛ/}	WK
īgι ^{ya/}	"be kneeling"	īk ^{a/}	KT	īgιr ^{ε/}	WK
vābı ^{ya/}	"be lying prone"	vāp ^{ɔ/}	KT	vābır ^{ɛ/}	WK
tī'i ^{ya/}	"be leaning"	tī ib ^{ɔ/}	(of an	object)	

 $G\dot{\upsilon}l^{|a|}$ "be hanging" uses $g\bar{\upsilon}l\iota b^{2}$, from the cognate dual-aspect verb $g\dot{\upsilon}l^{\varepsilon}$, and the stative $p\dot{\Sigma}nr^{a}$ "be near" has $p\bar{\Sigma}nr\iota b^{2}$, probably from an otherwise unused dual-aspect * $p\dot{\Sigma}nd^{\varepsilon}$ with r for d by analogy. Stative $k\bar{\imath}s^{a/}$ "hate" has the gerund $k(s\dot{\upsilon}g^{2})$.

Other single-aspect verbs have imperfective gerunds <u>12.2.1.4</u>.

11.1.2 Concrete nouns

When there is a perfective gerund with regular noun class membership, other nouns with the same stem but different class suffixes have **concrete** senses, such as the product of the action, instrument used, or place at which the action occurs.

ēεňbír ^ε	"(physical) foundation"	<i>Ē</i> εňbúg ^ͻ	"laying a foundation"
dūk ^{ɔ/}	"cooking pot"	dūgub ^{ɔ/}	"cooking"
dà'a=	"market"	dā'ab ^o	"buying"
kūk ^a	"chair"	kūgub ^o	"resting on something"
zūg - kūgυr ^ε	"pillow"		
sųāk ^{a/}	"hiding place"	sū'ab ^{ɔ/}	"hiding"
sɔ̄bır ^{ɛ/}	"piece of writing"	sōp ^{ɔ/}	"writing, orthography"
kūt ^ε	"iron, nail"	kūdvb ⁵	"working iron"
<i>kùөรเm</i> ^m	"merchandise"	kùøsvg ^o	"selling"
pèbısım ^m	"wind"	pèbısvg ^{>}	"blowing of the wind; wind"

 $V\bar{a}bir^{\epsilon}/l\bar{a}bir^{\epsilon}/d\bar{i}gir^{\epsilon}/\bar{i}gir^{\epsilon}/$, used by WK as gerunds, are used by KT as concrete nouns meaning "place for lying prone" etc, contrasting with the gerunds $v\bar{a}p^{\prime}$ etc.

Three concrete deverbal nouns, from $pib_{\ell}l^{\epsilon}$ "cover", $zanb_{\ell}l^{\epsilon}$ "tattoo", $maal^{\epsilon}$ "sacrifice" show single -*n*- in place of -*l*-:

<i>pīb</i> ιn ^{nε}	pībına+	pìbın-	"covering"
<i>zā</i> nัbเn ^{nɛ}	zāňbına+	zàňbın-	"tattoo" (NT "sign")
māan ^{nɛ}	māana+	màan-	"sacrifice"

11.1.2

My informants definitely had single -n- in these words, but this is probably a secondary simplification of *nn <u>5.4</u>. Toende, like Mooré, has Pattern L for these words: $z\hat{a}b(n, m\hat{a}an$. As nn is the regular reflex of *ld, these forms may be derivatives with *d in its instrument-noun sense <u>12.2.1.3</u>; cf $t\bar{u}edur^{\varepsilon}$ "mortar", from $t\underline{u}\hat{a}^{+}$ "grind in a mortar." Tone Pattern O is consistent with this.

It is exceptional for regularly formed gerunds to acquire concrete meaning, but a clearcut example is $d\bar{\iota} b^{2}$ "food."

11.2 Nominals from nominals

The partial association of noun class and meaning <u>8.1</u> can be exploited to change the meaning of a stem. Examples include the names of ethnic groups, which belong to the $a|b^a$ or $g^a|s^{\epsilon}$ classes, their languages, which belong to the $-l^{\epsilon}$ subclass of $r^{\epsilon}|a^{+}|a^{+}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a^{-}|a$

<i>wɛɛd</i> ^a "hunter" <i>wɛ́og</i> ⁵ "dee	p bush"
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Some names of liquids take $-d^{\epsilon}$ rather than $-m^{m}$ <u>15.2.1</u>; hence also

sīiňf^{ɔ/} "bee" sīiňd^{ɛ/} "honey"

Names of trees are almost all $g^{a}|s^{\varepsilon}$ class, and their fruits $r^{\varepsilon}|a^{+}$ or $g^{\flat}|d^{\varepsilon}$ 29.5.

The strong association of the m^m class with abstracts can be used to convert adjective stems to abstract nouns; less commonly, the sg suffix $-g^{2}$ serves in the same way. When there are derived stative verbs, these nouns somewhat resemble gerunds, and can, for example, be preceded by combining forms as generic arguments <u>15.6.1</u>. However, they cannot be used in the immediate-future construction with $b^{2}2d^{a}$ "want" <u>19.3.4</u>, and unlike imperfective gerunds, which show the expected Tone Patterns for gerunds <u>6.5</u>, they show the same tone pattern as the adjective.

Examples of abstract nouns formed from adjective stems with m^m :

<i>vōm</i> ^{m/}	"life"	sùm ^m	"goodness"
pว்วdเm ^m	"scarcity"	vÈnnım ^m	"beauty"
vÈňllım ^m	"beauty"	būgusím ^m	"softness"
tēbısím ^m	"weight"	<i>mā'asím^m</i>	"coolness, damp"
<i>mālısím</i> ^m	"sweetness"	lābısím ^m	"width"
pìəlım ^m	"brightness"	tītā'am ^m	"multitude"
kūdım ^m	"old times"		

From *ňyɛɛsíŋ*^a "self-confident" is derived *ňyɛɛsım*^m "self-confidence."

The suffix $-g^{2}$ is used to make abstract nouns when the sg adjective form also has $-g^{2}$; the abstract noun form is identical:

lāllúg ⁵	"distance"	zēmmúg ^o	"equality"
kpī oŋ ^ɔ	"hardness, strength"	yàluŋ ^ɔ	"width"
mì'isvg ^o	"sourness"	tōɔgɔ	"bitterness"
<i>zùluŋ</i> ว	"depth"	<i>tūvlúg</i> ^ɔ or <i>tūllím</i> ^m	"heat"

Some stems referring to people form abstract nouns with $-m^m$ or $-g^2$:

gbáňyà'a ⁼	"lazy person"	\rightarrow	gbáňyà'am ^m	"laziness"
dàmà'a ⁼	"liar"	\rightarrow	dàmà'am ^m	"lying"
sāan ^{a/}	"guest"	\rightarrow	sávŋ ^ɔ	"hospitality"
<i>kpēɛňm</i> ^m	"elder"	\rightarrow	<i>kp</i> ēoňŋ ^ɔ	"eldership"
sɔ̄e̯ňª	"witch"	\rightarrow	sวิวทัg ^ว	"witchcraft"

Cf also $z\dot{v}ed^{\epsilon}$ "friendship" from $z\dot{v}a^{+}$ "friend." The m^{m} class suffix with adjective stems often creates manner adverbs:

pāalím ^m	"recently"	bāaňlím ^m	"quietly"
<i>zāalím^m</i>	"emptily"		

So too $n \hat{\epsilon} \epsilon m^m$ "for free", from $n \hat{\epsilon} \epsilon r^{\epsilon}$ "empty."

Several adjective stems form manner-adverbs with an ending $-ga^+$, i.e $g^a|s^{\varepsilon}$ class sg with apocope-blocking <u>5.1.3</u>:

sòŋā+/	"well; very much"	mā'asígā ^{+/}	"coolly"
tūvlígā+/	"hotly"	gīŋa+	"shortly"
būgusígā+/	"softly"	sàalíŋā+/	"smoothly"
ňyὲɛsíŋā+/	"self-confidently"		

Cf also *yīigá*⁺ "firstly" <u>15.4.2.3</u>.

12 Derivational suffixes

The statement of underlying open-class word structure made in 5.2 implies that roots are only of the shapes CV(V)(C), so that any stem consonant which does not immediately follow the root vowel is not part of the root; neither is any consonant following a *long* root vowel unless the root shows $CVC\sim CVVC$ allomorphy.

For simplicity, all such consonants will be called "derivational suffixes", though there may not always be parallel stems lacking the suffix or with different suffixes. Nevertheless, many such consonants are clearly identifiable as derivational. Regular highly productive suffixing processes derive agent nouns, deverbal adjectives and instrument nouns from verbs, and there are several less systematic processes deriving nominals from other nominals. Cognate stems make it possible to recognise many suffixes involved in verb derivation from roots; there are clear patterns, but no completely consistent correlations of suffix and meaning.

The derivational suffixes are $g \le n \mid d \mid m$, along with b and r in just a handful of words. The suffix n may represent historical */ $d \le 4$.

 $g \ s \ n \ b \ r$ never follow another derivational suffix. g and s cause a preceding CVVC to become CVC, and a preceding oral \Im to become glottalised.

I follows another suffix only as part of the combination *Im*.

d is very productive in the formation of deverbal nouns and adjectives; it often deletes a preceding suffix or is itself deleted.

No stem has more than three derivational suffixes, or more than five morae apart from prefixes. All four-mora verb stems have m as the second suffix, and all five-mora stems are formed with lm.

The rules for consonant assimilation differ slightly from the rules operative in flexion, probably because they are less subject to analogical remodelling.

For Tone Patterns in derivation see 6.5.

12.1 Verbs

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 in dual-aspect verbs CVVCm only occurs as CVV root + sim or lim, never CVVC root + m; some stative verbs have stems in CVVmm.

12.1.1 Assume-stance verbs

Stance verbs have derived dual-aspect verbs in $-n^{\epsilon}$ signifying "assume the stance" and in $-l^{\epsilon}$ "make assume the stance"; all the $-n^{\epsilon}$ verbs are Pattern LO regardless, but the $-l^{\epsilon}$ verbs have the same Pattern as the base stance verb.

Stance verb		Assume-stance	Make-assume-stance
dīgı ^{ya/}	"be lying"	dìgın ^ɛ	dīgıl ^{ɛ/}
vābı ^{ya/}	"be lying prone"	vàbιn ^ε	vābıl ^{ɛ/}
īgι ^{ya/}	"be kneeling"	ìgιn ^ε	īgι l ^{ε/}
làbı ^{ya}	"be crouching hidden	n" <i>làbιn</i> ε	làbıl ^ɛ
zìň'i ^{ya}	"be sitting"	zìň'in ^ε	zìň'il ^ɛ
zì'e ^{ya}	"be standing"	zì'ən²	zì'əl ^ɛ
tī i ^{ya/}	"be leaning" (of thing	g) tì'in^ε	tī il ^{ɛ/}
gɔ̄'e ^{ya/}	"be looking up" WK	gờ'ɔn ^ε	
sùr ^a	"have bowed head"	sùn ^{nɛ}	sùn ^{nε} sic
-	"cover oneself"	lìgın ^ɛ	lìgıl ^ε
-	"perch" (of bird)	zùθn ^ε	zùθl ^ε
-	"perch" (of bird)	yà'an ^ɛ	yà'al ^ɛ

The resultative perfective of $z\dot{u}e^+$ is used for "be perching":

Níiŋ	lā zúo nē.	"The bird is perching." KT
Bird:so	G ART perch FOC.	

Nawdm has exactly parallel formations, e.g. *jehra* ipfv "*être debout*", *jehnt* pfv "*se mettre debout*", *jehlg* pfv, *jehla* ipfv "*poser verticalement*".

Other derivational relationships involving stance verbs are seen in

gùl ^{la}	"be suspended"	gùl ^ɛ	gùl ^ɛ
tàbı ^{ya}	"be stuck to"	tàb ^ε	tàbıl ^ɛ
dēl ^{la/}	"be leaning" (person)	dèlım ^m	

12.1.2 Causatives

-s- is a common causative suffix:

kpèň'+	"enter"	kpὲň'ɛsɛ	"make enter"
nìe+	"appear"	nèɛsɛ	"reveal"
уī ⁺	"go/come out"	y <i>īis^{ɛ/}</i> or y <i>īs^ɛ</i>	"make go/come out"
dì+	"eat"	dìιs ^ε	"feed"
nū+	"drink"	nūlıs ^{ɛ/}	"make drink"; also <i>nūlıg^{ε/}</i>

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sīgε	"go down"	sīgιs ^{ε/}	"lower"
lὲb ^ε	"return"	lèbıs ^ɛ	"make return; answer"
mu̯'àª	"suck" (of a baby)	mὺ'as ^ε	"give to suck"
[Mooré <i>tá</i>	"arrive"]	tā'as ^{ε/}	"help to travel, walk"
zēm ^{ma/}	"be equal"	zēmιs ^{ε/}	"make equal"
kpìig ^ε	"go out (fire)"	kpìis ^ε	"quench"

-I- has been seen above as the causative suffix for stance verb roots. It is also found with other roots with location-related meanings:

ňyá'aŋ ^a	"behind"	ňyā'al ^{ɛ/}	"leave behind"
gēog ^o	"space between legs"	gēɛl ^{ɛ/}	"put between legs" Tones <i>sic</i>
līk ^a	"darkness"	lìgıl ^ɛ	"cover up"
bāň'+	"ride"	bāň'al ^{ε/}	"put on a horse/bicycle etc"
gū'+	"guard"	gū'ul ^{ε/}	"set someone on guard"
уÈ ⁺	"dress oneself"	yÈɛlɛ	"dress another person"

Verbs derived with -g- from nominal roots are usually patientive ambitransitives but may have separate causatives in -/- :

mā'e ^{+/}	"get cool"	mā'al ^{ε/}	"make cool"
pūň'e ^{+/}	"rot"	pɔ̄ň'ɔl ^{ɛ/}	"cause to rot"
nìe+	"appear"	nèɛlɛ	"reveal"
mā'e ^{+/}	"get cool, wet"	mā'al ^{ɛ/}	"make cool, wet"
wū'טg ^{ɛ/}	"get wet"	wū'ט ^{וצ/}	"make wet"

There is no obvious reason for the choice of suffix in

zàb ^ε	"fight"	zàbıl ^ɛ	"cause to fight"
dỵ'à ^a	"bear, beget"	dὺ'al ^ε	"make interest (of a loan)"

-g- forms causatives in a few verbs:

dɔ̃l ^{la/}	"accompany"	dวֿlıg ^{ε/}	"make accompany"
gōr ^{a/}	"look up" DK	gɔ̄dιg ^{ε/}	"make look up" DK
tèňr ^a	"remember"	tìeň+	"bring to mind, remind"
yùul ^ɛ	"swing" intransitive	yùlıg ^ɛ	"swing" transitive
kò+	"break" intransitive	kờ'ɔgε	"break" ambitransitive
nū+	"drink"	nūlιg ^{ε/}	"make drink"; also <i>nūlιs^{ε/}</i>

12.1.3 Reverse action

-g- attached to dynamic-verb roots implies reversal:

yè+	"dress oneself"	у <i></i> еg ^ε	"undress oneself"
pìd ^ɛ	"put (hat etc) on"	pìdιgε	"take (hat etc) off"
pìl ^ɛ	"cover"	pìlıg ^ε	"uncover"
<i>l5</i> +	"tie up"	l5dιg ^{ε/}	"untie"
уò+	"close"	yɔ̀'ɔgɛ	"open"
<i>ὲňd</i> ε	"block up"	ὲňdιg ^ε	"unblock"
yà'al ^ε	"hang up"	yàk ^ε	"unhang"
pà'al ^ɛ	"put on top"	pàkε	"take off top"
pìbıl ^ɛ	"cover up"	pìbıg ^ɛ	"uncover"
tàbı ^{ya}	"be stuck to"	tàbıg ^ɛ	"unstick, get unstuck"
là'asɛ	"gather together"	lāk ^{ε/}	"open" (eye, book); tone <i>sic</i>
		cf <i>lák</i> è	(Mooré) "un-stick together"

Possibly a reversal sense also underlies

lìəb ^ε	"become"	lὲbιg ^ε	"turn over"
fāň+	"rob, snatch"	fāeň+/	"save" ?? for "snatch back"

Reversive -g- is a peculiarity of the Western group within Oti-Volta; the other groups show alveolar suffixes: Moba $l\bar{o}\bar{o}n'$ "close" $l\bar{o}\bar{o}d$ "open", Byali byá "close" byērá "open", Nawdm riw pfv "close" rawdg pfv rawda ipfv "open." Proto-Bantu had -v/- and -vk-, perhaps respectively transitive and intransitive; an alveolar variant may have been disfavoured in Western Oti-Volta because of the adoption of -da as the regular imperfective flexion for dynamic verbs.

12.1.4 Plural action

-*s*- may have a pluractional sense:

kò+	"break"	kờ'ɔs ^ε	"break several times"
tòň+	"shoot"	tòň'ɔs ^ε	"hunt"
pìəb ^ɛ	"blow (flute etc)"	pèbıs ^ɛ	"blow (wind)"
làbı ^{ya}	"crouch in hiding"	làbıs ^ɛ	"walk stealthily"
vūe ^{a/}	"be alive"	νū'υsε/	"breathe, rest"
įāňk ^{ε/}	"fly, jump"	įāň'as ^{ℓ/}	"leap, jump repeatedly"
yā'e ^{+/}	"open mouth"	yā'as ^{ε/}	"open repeatedly" WK
dī e+/	"receive"	dī'əs٤/	"receive (many things)"
gū'+	"guard"	gū'us ^{ε/}	"watch out; guard (many)"

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-d- appears with a pluractional sense in

 $k\bar{j}d\iota g^{\epsilon}$ "slaughter one animal" $k\bar{j}t^{\epsilon}$ "slaughter several animals"

This suffix is perhaps historically connected with the *d of the ipfv suffix *-da, by way of the distinctively habitual sense seen in stance verbs <u>10.2</u>.

12.1.5 Denominal verbs

12.1.5.1 Single aspect

Intransitive stative verbs are mostly derived from adjectives or humanreference nouns. Some transitive stative verbs are also denominal.

Many stative verbs are formed with $-y^a$, like dynamic single-aspect verbs. Even when the adjective is primary, it may show segmental remodelling on the verbal forms with *y. S-stems show no sign of *y synchronically, and *m*-stems have lost gemination except after short root vowels for many speakers.

This *y formant differs in tonal behaviour from *y and *d in dynamic verbs <u>6.5</u>. Primary nominals thus show a characteristic Tone Pattern correspondence with the verbs: Pattern L nominals correspond to Pattern LO verbs but Pattern H and Pattern O both correspond to Pattern H verbs. Historically, the all-M pattern of verbs corresponding to Pattern O nominals was also Pattern O, and this is still reflected in the tonemes of e.g. $kp\bar{r} \partial m^{ma/}$ "be strong" $kp\bar{\varepsilon}\epsilon\bar{n}m^{ma/}$ "be older than", but the LF-final toneme is now always H; similarly, the original Pattern L type now changes to all-M in the irrealis mood just like dynamic Pattern LO verbs.

L	vÈnnıg ^a	"beautiful"	vÈn ^{na}	"be beautiful"
	vÈňllıg ^a	"beautiful"	vÈňl ^{la}	"be beautiful"
	zùluŋ ⁵	"deep"	zùlım ^{ma}	"be deep"
	p55dıg ^a	"small"	pòɔd ^a	"be few, small"
	mì'isug ⁵	"sour"	mì'is ^a	"be sour"
	sùŋ ⁵	"good"	sùm ^{ma}	"be good"
	yàluŋ ⁵	"wide"	yàlım ^{ma}	"be wide"
Η	būgusír ^ɛ	"soft"	būgus ^{a/}	"be soft"
	vūr ^{ɛ/}	"alive"	vū́e ^{a/}	"be alive"
	mā'asír ^ɛ	"cool"	mā'as ^{a/}	"be cool"
	tĒbısír ^ɛ	"heavy"	tĒbıs ^{a/}	"be heavy"
	mālısír ^ɛ	"sweet"	mālıs ^{a/}	"be sweet"
	lābısír ^ɛ	"wide"	lābıs ^{a/}	"be wide"
	zĒmmúg ^ɔ	"equal"	zĒm ^{ma/}	"be equal to"
	lāllúg ^ɔ	"far"	lāl ^{la/}	"be far from"

tōɔgɔ	"bitter"	tōẹª/	"be bitter"
gīŋ ^a	"short"	gīm ^{ma/}	"be short"
kpī'oŋ ^ɔ	"strong"	kpī əm ^{ma/}	"be strong"
<i>kpēɛňm</i> ^m	"elder"	kpēɛňm ^{ma/}	"be older than"
wēnnır ^ɛ	"resembling"	wēn ^{na/}	"resemble"

More complex stem changes occur in

tūvlúg ⁵	"hot"	tūl ^{la/}	"be hot"
ňy <i></i> esíŋ ^a	"self-confident"	<i>ňỳɛɛs</i> a	"be self-confident"
wɔ̄k ^{ɔ/}	"long, tall"	wā'am ^{a/}	"be long, tall"

12.1.5.2 Dual aspect

- g -	attached to n	nominal/adjectival	roots has the	meaning '	"make/become	":
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ňyɔ̄'ɔsɛ/	"smoke"	ňyū'e+/	"set alight"
ňwīig ^{a/}	"rope"	ňwīig ^{ε/}	"make a rope"
tādım ^{m/}	"weak person"	tàdιg ^ε	"become weak"
kpì'a ⁺	"neighbour"	kpì'e ⁺	"approach"
zūør ^ɛ	"hill"	zùe+	"get higher, more"
À-Tūl ^{lε}	"Breech-Delivered" 29.2	tùlιg ^ε	"invert"
mā'asír ^ε	"cool, wet"	mā'e+/	"get cool, wet"
būgvsír ^ɛ	"soft"	būk ^{ε/}	"soften"
tēbisír ^ɛ	"heavy"	tēbιg ^{ε/}	"get/make heavy"
gīŋ ^a	"short"	gìŋ ^ε	"scrimp"
<i>kpī</i> 'oŋ ^ɔ	"strong"	kpὲ'ŋ ^ε	"strengthen"
νūr ^{ε/}	"alive"	<i>vū</i> ' <i>ug</i> ٤/	"make/come alive"
pòɔdıg ^a	"few"	<i>p</i> ວ່'ວg ^ε	"diminish, belittle"
pìəlıg ^a	"white"	pèlıg ^ɛ	"whiten"
sābılíg ^a	"black"	sɔ̄bιg ^{ε/}	"blacken"
nīn-múa+	"concentration"	mù'e+	"redden, become intense"
kūdug ⁵	"old"	kùdιgε	"shrivel up, dry out, age"
<i>sùŋ</i> ວ	"good"	sùŋ ^ɛ	"help"
tūvlúg ⁵	"hot"	tūlιg ^{ε/}	"heat up"
mì'isvg ⁵	"sour"	mì'ig ^ε	"turn sour"
zùlטŋ ^כ	"deep"	zùlιg ^ε	"deepen"
lāllúg ⁵	"far"	lālıg ^{ε/}	"get to be far, make far"
màuٍk ^ɔ	"crumpled up"	màk ^ε	"crumple up"
dēɛŋª	"first"	dèŋ ^ɛ	"precede"

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Derivational suffixes

nèɛrɛ	"clear, empty"	nìe+	"appear"
sɔ̃ň'e ^{ya/}	"be better than"	sūň'e+/	"become better than" WK

With the addition of *-m* as a second derivational suffix:

wàỵŋ ^ɔ	"wasted"	wàŋເm ^m	"waste away"

-lum- derives verbs from noun roots, meaning "act as ..." or "make/become ...":

pu̯'āª	"woman"	pù'alım ^m	"cook"
pòň'ɔr ^ɛ	"cripple"	pɔ̀ň'ɔlım ^m	"cripple, get crippled"
gìk ^a	"dumb"	gìgılım ^m	"become dumb"
wàbır ^ɛ	"lame"	wàbılım ^m	"make, go lame"
<i>g</i> ū'טs ^ɛ	"semi-ripe things"	<i>gò'olım</i> ^m	"become semi-ripe"
būgud ^a	"client of diviner"	bùgulım ^m	"cast lots"
		cf bùk ε	"cast lots"

Miscellaneous denominal dual-aspect verbs formed with s m b are seen in

	zuà+	"friend"	zùθs ^ε	"befriend"
	nēɛrɛ/	"millstone"	<i>ทธิธ</i> ฑ ^{m/}	"grind with a millstone"
	yā'ad ^ε	"clay"	yà'ab ^ε	"mould clay"
cf	yàge	(Mooré) "make pottery"		

12.1.6 Miscellaneous cases

-*m*- derives some preverbs <u>19.7.2</u>:

	lèb ^ɛ	"return"	lèm	"again"
cf	là'as [€]	"gather together"	là'am	"together"
	dèŋ ^ɛ	"go first"	dÈŋım	"first"
cf	malig	(Toende) "do again"	màlıgım	"again"

It has no obvious meaning in $k \ge n = k \ge n \le \ell$ -g- occurs with no clear meaning in

sīň+	"rub"	sūeň+/	"anoint"
nɔ̄bɛ	"get fat"	nɔ̄bιg ^{ε/}	"grow" (child, plant)
nā+	"join"	nāe+/	"finish"; compare
			Hausa <i>gamàa</i> "join, finish"

-r- appears in

<i>kāab^{ε/}</i> "offer, invite"	kābιr ^{ε/}	"ask for admission"
	cf <i>kábıs</i>	Toende id
[no simplex]	sūgυr ^{ε/}	"forbear, be patient with"

Both words appear frequently in pan-regional set formulae <u>28</u> and may well be loanwords. They may be back-formations from the nouns $k\bar{a}b\iota r\ell^+$ and $s\bar{u}gvr\dot{v}^+$, where $r\ell/rv$ possibly originated in the equivalent of $r^{\epsilon}|a^+$ class singular flexions <u>8.5</u>.

12.2 Nominals

12.2.1 From verbs

The derivational processes described below are very productive; agent noun formation in particular is almost flexional in its regularity and generality, though this is less true of deverbal adjective formation. Deverbal noun and adjective formation generally shows more analogical levelling than derivational processes elsewhere, in keeping with the strong Kusaal tendency to regularity and transparency in verb morphology.

The Tone Patterns of deverbal nouns and adjectives are predictable <u>6.5</u>.

12.2.1.1 Agent nouns

Agent nouns can be freely made from almost all verbs which can be used in direct commands. Informants readily supply isolated forms on demand, but in conversation and texts they usually occur as second elements of compounds. All belong to the $a|b^a$ class, although those derived from *II-* or r(r)-stem single-aspect verbs may also show $r^{\varepsilon}|a^+$ class forms <u>8.3.1</u>. Despite their regularity of formation, agent nouns often develop specialised meanings, as will be seen in the examples. The name "agent noun" is not altogether felicitous; as with English derivatives in "-er", the formation may be found with verbs whose subject is not an agent: agent nouns can even be created from stative verbs if they are usable in direct commands.

The formant of agent nouns and habitual adjectives is the derivational suffix -d. It is probably historically related to the -d- of the imperfective flexion $-d^a$, but the tonal effects differ, and derivational -d shows much less regularity in its mode of attachment; agent nouns show more levelling and regularisation than habitual adjectives. These variations arise from a tendency to limit stem length, resulting in deletion of either -d itself or the suffix preceding it. The absence or presence of the suffix affects the Tone Pattern in forms derived from Pattern LO verbs <u>6.5</u>.

Most dual-aspect verbs have an agent noun with a singular form segmentally identical with the imperfective. For tones see 6.5. If there are alternate forms, the less "regular" form appears as the agent noun.

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kū+	"kill"	kūvd ^{a/}	"killer"
mè+	"build"	mēɛdª	"builder"
dì+	"eat"	dīt ^a	"eater"
gɔ̄sɛ	"look"	gōt ^{a/}	"seer, prophet"
dūg ^ε	"cook"	dūgud ^{a/}	"cook"
dỵ'à ^a	"bear, beget"	dū'ad ^a	"elder relation"
kàd ^ε	"drive away"	saríyà-kāt ^a	"judge"
sɔ̄bε	"write"	รวิbเd ^{a/}	"writer"
bùn ^ɛ	"reap"	būn ^{na}	"reaper"
tùm ^m	"work"	tùm-tūm ^{na}	"worker"
kìm ^m	"tend flock"	kòňb-kīm ^{na}	"herdsman, shepherd"
kpàr ^ɛ	"lock"	kpārīd ^a	"lock-er"
gbīs ^ε	"sleep"	gbīsıd ^{a/}	"sleeper"
sjàk ^ε	"believe"	sįākıd ^a	"believer"
įāňk ^{ε/}	"jump, fly"	įāň'ad ^{a∕}	"flier"
sùŋ ^ε	"help"	รบิŋเd ^a	"helper"
bàŋ ^ɛ	"understand"	bāŋıd ^a	"wise man"
kēŋ ^{ε/}	"go"	kēn ^{na/}	"traveller"
gàad ^ε	"pass"	tùøn-gāt ^a	"leader"
mɔ̄ɔl ^{ɛ/}	"proclaim"	mวิวl-mว์ว้ท ^{na}	"proclaimer"
màal ^ɛ	"sacrifice"	màal-māan ^{na}	"sacrificer"
pà'al ^ɛ	"teach"	pā'an ^{na}	"teacher"
sūgυr ^{ε/}	"forbear"	sūgvríd ^a	"forgiver"
<i>yū</i> 'טm ^{m/}	"sing"	yōum-yú'ùm ^{na}	"singer"
		pl yōom-yó'òmnıb ^a	
sàň'am ^m	"spoil"	pu̯'à-sāň'am ^{na}	"adulterer"
		pl pu̯'à-sāň'amıdıbª	

Pattern H fusion verbs, which delete the H toneme of the stem in the imperfective 6.3.1, show the same form for the agent noun:

nāe ^{+/}	"finish"	nāad ^{a/}	"someone who doesn't give up easily" WK
dī e+/	"receive"	dī əd ^{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
		faangid	NT/KB <u>14</u>

sīgıs ^{ɛ/}	"lower"	sīgıs ^{a/}	"lowerer"
		pl <i>sīgısídìb</i> a	
kùθs ^ε	"sell"	kùøs ^a	"seller"
		pl <i>kūøsıdıb</i> a	
ρὺ'υs ^ε	"worship"	pù'us ^a	"worshipper"
		pl <i>pūˈʊsɪdɪb</i> a	
tὺ'as ^ε	"talk"	tù'as-tù'as ^a	"talker"
		pl <i>tù'as-tū'asıdıb</i> a	
dī'əs ^{ɛ/}	"receive"	nō-dí'àsa	"chief's spokesman"
		pl <i>nɔ̄-dí</i> 'əsìdıb ^a	("linguist")

3-mora stems in -*s* consistently drop the -*d* in the sg and cb:

Some 2-mora stems also irregularly drop the -*d* in the sg and cb:

zàbε	"fight"	zàb-zàb ^a	"warrior"
		gbān-záb ^a	"leather-worker"
tìsε	"give"	tìs ^a	"giver"
sòsε	"beg"	sòs ^a	"beggar"

Stems in *-mm*- form reduplicated agent nouns with *nàm^a* plurals:

dàm ^m	"shake"	dàm-dàm ^{ma}	"shaker"

The *nn*-stem $s \dot{u} n^{n\epsilon}$ "bow the head" has an agent noun stem in -*nn*-, but the tonemes show retention of the -*d*- formant:

sùn ^{nε}	"bow head"	sūn ^{na}	"deep thinker, close
		pl <i>sūnnıb</i> a	observer" WK
		cb <i>sùn-</i>	(cf ipfv <i>sùnnıd</i> 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 -g-:

yādıg ^{ε∕}	"scatter"	yāt ^{a/}	technical term for one
			participant in a
			housebuilding ritual

Various irregular formations in my materials include:

tēk ^{ε/}	"pull"	ňwī-ték ^a	"rope-puller"
		pl <i>ňwī-tékìdıb</i> a	
nòŋ ^ɛ	"love"	nòŋıd ^a	"lover"; tones irreg
tì'əb ^ε	"heal"	tī'∂b ^a	"healer"; tones irreg

For 4-mora stems: KT has no agent nouns; WK drops the final -m- and proceeds as for 3-mora stems:

sìilım ^m	"cite proverbs"	sīin ^{na}	"speaker of proverbs"
		pl <i>sīinnıb</i> a	
pò'alım ^m	"harm"	pū'an ^{na}	"harmer"
<i>zàaňsเm</i> ^m	"dream"	zàaňs ^a	"dreamer"
		pl <i>zāaňsıdıb</i> a	

Single-aspect verbs with unassimilated *y*, and the bare-stem type, add -*d*-:

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
<i>z</i> ī'+	"not know"	zī'ıd ^{a/}	"ignorant person"
sū'e ^{ya/}	"own"	รบิ'บd ^{a/}	"owner"
sɔ̃ň'e ^{ya/}	"be better than"	sɔ̃ň'ɔd ^{a/} pl sɔ̃ň'ɔb ^{a/}	<u>8.3.1</u>
dīgı ^{ya/}	"be lying down"	dīgıd ^{a/}	"lier-down"
īg ι ^{ya/}	"be kneeling"	īgıd ^{a/}	"kneeler"
vābi ^{ya/}	"be lying prone"	vābıd ^{a/}	"lier prone"
làbı ^{ya}	"be crouching"	lābıd ^a	"croucher in hiding"
à <u>ẹ</u> ňª	"be something"	āaňd ^a	"someone who
			continually <i>is</i>
			something" <i>sic</i> WK

Stems in *nn ll r(r)* drop -*d* throughout. Those in *ll r(r)* may use $r^{\varepsilon}|a^{+}$ class suffixes, coinciding in form with habitual adjectives <u>8.3.1</u>.

"be silent"	nīn-sín ^{na}	"silent person"
"envy"	nīn-nén ^{na}	"envious person"
"be with"	ňyà'an-dòl ^{la}	"disciple" (irreg. tone)
C	or <i>ňyà'an-d</i> ɔ̀l ^{lε}	
"be holding"	nō-záňl ^{la}	"holder of hens"
C	or <i>n5-záňl^{lε}</i>	
"be leaning"	nīn-dźl ^{la}	"person prone to lean"
	"envy" "be with" "be holding" o	"envy" $n\bar{l}n-n\epsilon n^{na}$ "be with" $n\bar{y}a'an-d\dot{z}l^{la}$ or $n\bar{y}a'an-d\dot{z}l^{l\epsilon}$ "be holding" $n\bar{z}-zanl^{la}$ or $n\bar{z}-zanl^{la}$

mɔ̄r ^{a/}	"have"	bù-mɔ̄rª/	"owner of goats"
		or <i>bù-mɔ̄r</i> ε/	
tār ^{a/}	"have"	bù-tār ^{a/}	"owner of goats"
		or <i>bù-tār^{ε/}</i>	

The simplification to single *s r* leads to analogical formations with *-d-* in

kīs ^{a/}	"hate"	kīs ^{a/} or kīsıd ^{a/}	"hater"
tèňr ^a	"remember"	tēňrıd ^a	"rememberer"
gūr ^{a/}	"be on guard"	gūrıd ^{a/}	"guard"
		zà'-nō-gúr ^a	"gatekeeper"

12.2.1.2 Deverbal adjectives

12.2.1.2.1 Habitual

In principle these adjectives have the same stem as the agent noun, but they drop the -*d* formant more readily, probably because they are not made as freely and are correspondingly not as far along the axis from derivational to flexional.

The sense may be active or passive, essentially "habitually connected with the verbal action", like the range of meaning of an English gerund as a noun premodifier. It is not usual for a habitual adjective to have a past passive sense like an English past participle, though examples occur, e.g $s\bar{u}m$ - $d\acute{v}gvda^+$ "cooked groundnuts" WK, ziiŋdvgida = zíiŋ-dúgvda^+ "cooked fish" (Lk 24:42), beside the more usual sense in ni'im dvgida = $n\bar{m}$ -dúgvda^+ "meat for cooking" (1 Samuel 2:15.)

When used without a preceding noun cb, habitual adjective forms have the meaning of agent nouns: $k\bar{v}vd(r^{\epsilon} \text{ pl } k\bar{v}vda^{+} \text{ "killer"} = k\bar{v}vd^{a/} \text{ pl } k\bar{v}vd(b^{a})$. However, with a preceding cb the meanings differ: $pu'a - k\bar{v}vd^{a/}$ "woman-killer, killer of women" vs $pu'a - k\bar{v}vd(r^{\epsilon})$ "woman killer, murderous woman." Accordingly, deverbal adjectives will be cited with a preceding cb.

With dual-aspect verbs, 2-mora stems all retain the *d:

gòň+ là'+	"hunt" "laugh"	pu̯'à-gɔ̄ɔňdır ^ɛ pu̯'à-lā'adır ^ɛ	"prostitute" "woman prone to laughter/ woman to be laughed at"
ňyē+	"see"	būn-ňyétìr ^ɛ	"visible object"
kųā+	"hoe"	nā'-dá-kūødír ^ɛ	"ox for ploughing"
yὲ ⁺	"don clothes"	fū-yέεdìr ^ε	"shirt for wearing" WK
		fū-yέεdùg ^ɔ	KT
kū+	"kill"	tì-kōvdím ^m	"poison" ("killing medicine")
dỵ'à ^a	"bear/beget"	tɛ̀ŋ-dū̄'adıgª	"native land"
dūgε	"cook"	sūm-dúgvdà+	"cooked groundnuts" WK

sīgε	"descend"	yī-sígıdìr ^ɛ	"lodging-house"
sỵ'ā ^a	"hide"	yēl-sú'adìr ^ɛ	"confidential matter"
òňb ^ε	"chew"	būn- <i>źňb</i> ıdà+	"solid food"
bùn ^ɛ	"reap"	bōn-búnnìr ^ε	"thing for reaping"
tùm ^m	"work"	bōn-túmmìr ^ε	"useful thing"
vūl ^ε	"swallow"	tì-vōnním ^m	"oral medication"
gbīs ^ε	"sleep"	pu̯'à-gbīsıdír ^ɛ	"woman always sleeping"

3-mora stems in $*g \operatorname{drop} -d$ in all cases except where the *g derivational suffix is deleted in the imperfective, whether regularly or otherwise <u>10.1</u>. The dropping of -d is thus much more consistent than in agent nouns.

gīlıg ^{ε/}	"go around"	pu̯'à-gīnnígª	"prostitute"
sūeň+/	"anoint"	kpā-sɔ́ɔňdìm ^m	"anointing oil"
tūlιg ^{ε/}	"heat up"	bōn-túlıgìr ^ɛ	"heater, thing for heating"
pèlıg ^ɛ	"whiten"	būn-pέlıgìr ^ε	"whitening thing, whitener"
yādıg ^{ε/}	"scatter"	būn-yátìr ^ɛ	"scattering thing" (cf yāt ^{a/})
įāňk ^{ε/}	"fly, jump"	būn-į́áň'adìr ^ɛ	"flying creature"
pàk ^ε	"surprise"	yēl-pákìr ^ɛ	"disaster"
tēk ^{ε/}	"pull"	ňwī-tékìr ^ɛ	"rope for pulling with"
<i>kēŋ^{ɛ/}</i>	"go"	bùŋ-kēnnír ^ɛ	"donkey that doesn't sit still"
sòŋ ^ε	"help"	būn-súŋìr ^ɛ	"helpful thing"
nòŋ ^ɛ	"love"	bì-nòŋιr ^ε	"beloved child"

3-mora stems in -*m* retain the -*d*, forming the consonant cluster -*mm*-:

sàň'am ^m	"destroy"	bù-sāň'ammır ^ɛ	"scapegoat" WK

3-mora stems in -s all drop the -d:

pèlıs ^ɛ	"sharpen"	būn-pέlısìr ^ε	"sharpening thing"
kùθs ^ε	"sell"	būn-kúøsìr ^ɛ	"item for sale"

4-mora stems (all from KT) drop -*d* (whereas agent nouns drop stem-final -*m*):

sìilım ^m	"cite proverbs"	būn-síilúŋ ^ɔ	"thing relating to proverbs"
pù'alım ^m	"harm"	nīn-pú'alìŋ ^a	"harmful person"
		pu̯'à-pù'alíŋª	"harmful woman"
<i>zàaทัรเm</i> ^m	"dream"	nīn-záaňsùŋ ^ɔ	"dreamy person"
		pu̯'à-zàaňsúŋ ^ɔ	"dreamy woman"

dīgı ^{ya/}	"be lying"	bùŋ-dīgıdír ^ɛ	"donkey that lies down a lot"
vābı ^{ya/}	"be prone"	bùŋ-vābιdír ^ε	"donkey always lying prone"
zìň'i ^{ya}	"be sitting"	kūg-zíň'idìr ^ε	"stone for sitting on"
			(i.e. not a <i>būgur^ɛ</i> WK)
zāňl ^{la/}	"be holding"	nō-záňl ^{lε}	"hen for holding"
dēl ^{la/}	"be leaning"	nīn-dέl ^{lε}	"person you can lean on" WK
		kùg-dĒl ^{lɛ/}	"chair for leaning on"
gùl ^{la}	"be hanging"	būn-gύl ^{lε}	"thing for suspending"

Dynamic single-aspect verbs show the same stem as the agent noun:

12.2.1.2.2 Resultative

Resultative adjectives are only derived from verbs which can use the perfective form in a resultative sense <u>19.2.2</u>; it is not clear how productive the formation is. Almost all such verbs are either intransitive or patientive ambitransitive <u>19.8.1</u>, 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 passives, like "eaten.". The formant -*lum*- either deletes a preceding derivational suffix or is added only to roots; for the flexion see <u>9</u>.

kpì+	"die"	kpìilúŋ ^ɔ	"dead"
gēň+	"get tired"	gēɛňlúŋ ^ɔ	"tired"
pè'ɛlɛ	"fill"	pè'ɛlúŋɔ	"full"
kò+	"break"	kòɔlúŋ ^ɔ	"broken"
yè ⁺	"wear"	yÈɛlúŋ ^ɔ	"worn" (of a shirt)
уò+	"close"	y`olúŋ ^o	"closed"
pὺ'alım ^m	"harm"	pù'alúŋ ^ɔ	"damaged"
àeň+	"tear"	àaňlúŋ ^ɔ	"torn"

12.2.1.3 Instrument nouns

Instrument nouns can be created freely by adding -m to habitual-adjective stems in d t or s. All are $g^a|s^{\varepsilon}$ class. Meanings may overlap with those of agent nouns.

kū+	"kill"	kōvdíŋ ^a	"thing for killing with"
l5+	"tie"	si̯à-lɔ̄ɔdíŋª	"belt" ("waist-tying thing")
dūgε	"cook"	dūgvdíŋ ^a	"cooking utensil"
sɔ̄bε	"write"	sɔ̄bıdíŋª	"writing implement"
kpàr ^ε	"lock"	kpārıdıŋ ^a	"thing for locking"
ňwà'e+	"cut wood"	ňwā'adıŋ ^a	"axe"
pīe+/	"wash self"	pīədíŋ ^a	"thing for washing oneself"

sù+	"bathe"	รบิบdเŋ ^a	"sponge"
ḡวร ^ะ	"look"	nīn-gótìŋ ^a	"mirror"
		nīn-gótìs ^ɛ	"spectacles" [<i>nīn-</i> "eye"]
bùdε	"plant"	būtıŋ ^a <u>2.2</u>	"cup" (originally "seed cup")
pīəs ^{ɛ/}	"clean"	pīəsíŋ ^a	"cleaning implement"
kùθs ^ε	"sell"	<i>kū</i> өรเŋ ^a	"professional salesperson"
dā'e+/	"push"	dā'adíŋ ^a	"pusher (person or thing)"
zìň'i ^{ya}	"be sitting"	zīň'idıŋ ^a	"thing for sitting on"

12.2.1.4 Imperfective gerunds

Dynamic single-aspect verbs in $-y^a$, where y is not assimilated, make perfective gerunds, as do a few others <u>11.1.1</u>; intransitive stative verbs usually lack gerunds altogether. Other single-aspect verbs usually make m^m -class gerunds by adding derivational $-l_{l}m$ - after root vowels and -m- after nn ll r(r):

$m\bar{n}^{n+}$ "know" $m\bar{n}il(m^m)$ $z\bar{\iota}^{\prime+}$ "not know" $z\bar{\iota}^{\prime}l(m^m)$ $ae\bar{n}^a$ "be something" $aa\bar{n}l(m^m)$ be^{+} "be somewhere" $bel(m^m)$ [short vowel sic] $k\bar{a}'e^+$ "not be" $k\bar{a}'al(m^m)$ $w\bar{v}n^{na/}$ "resemble" $w\bar{v}n(m^m)$ [tones show this is deverbal] $s\bar{n}^{na/}$ "be silent" $s\bar{n}n(m^m)$ $n\bar{v}n^{na/}$ "envy" $n\bar{v}n(m^m)$ $d\bar{z}l^{ a }$ "accompany" $d\bar{z}ll(m^m)$ $z\bar{a}nl^{ a/}$ "hold in the hand" $z\bar{a}nl(m^m)$ $d\bar{z}l^{ a/}$ "be leaning (of person)" $d\bar{e}llog^2$ or $d\bar{e}ll(m^m)$ $m\bar{z}r^{a/}$ "have" $m\bar{z}r(m^m)$ $t\bar{a}r^{a/}$ "be necessary" $n\bar{a}r(m^m)$ $g\bar{u}r^{a/}$ "guard" $g\bar{u}r(m^m)$	sū'e ^{ya/}	"own" gerund	: <i>sōˈʋlím^m</i> cf <i>soˈolimkan</i> Mt 12:25, 1996
$\dot{a} e \check{n}^a$ "be something" $\dot{a} a \check{n} I (m^m)$ $b \dot{\epsilon}^+$ "be somewhere" $b \dot{\epsilon} I (m^m) [short vowel sic]$ $k \ddot{a} ' e^+$ "not be" $k \ddot{a} ' a I (m^m)$ $w \bar{\epsilon} n^{na/}$ "resemble" $w \bar{\epsilon} n n (m^m) [tones show this is deverbal]$ $s \bar{n} n^{na/}$ "be silent" $s \bar{n} n (m^m)$ $n \bar{\epsilon} n^{na/}$ "envy" $n \bar{\epsilon} n n (m^m)$ $d \bar{j} I^{la/}$ "hold in the hand" $z \bar{a} n I (m^m)$ $d \bar{\epsilon} I^{la/}$ "be leaning (of person)" $d \bar{\epsilon} I l (s g^2)$ or $d \bar{\epsilon} I (m^m)$ $m \bar{\sigma} r^{a/}$ "have" $m \bar{\sigma} r (m^m)$ $n \bar{a} r^{a/}$ "be necessary" $n \bar{a} r (m^m)$	<i>m</i> ī ⁺	"know"	mrilím ^m
$b\dot{\epsilon}^+$ "be somewhere" $b\dot{\epsilon}l(m^m [short vowel sic]$ $k\bar{a}'e^+$ "not be" $k\bar{a}'al(m^m$ $w\bar{\epsilon}n^{na/}$ "resemble" $w\bar{\epsilon}nn(m^m [tones show this is deverbal]$ $s\bar{n}n^{na/}$ "be silent" $s\bar{n}n(m^m)$ $n\bar{\epsilon}n^{na/}$ "envy" $n\bar{\epsilon}nn(m^m)$ $d\bar{j}^{ a/}$ "accompany" $d\bar{j}l(m^m)$ $d\bar{s}l^{ a/}$ "hold in the hand" $z\bar{a}nll(m^m)$ $d\bar{\epsilon}l^{ a/}$ "be leaning (of person)" $d\bar{\epsilon}llúg^2$ or $d\bar{\epsilon}ll(m^m)$ $m\bar{j}r^{a/}$ "have" $m\bar{j}r(m^m)$ $n\bar{a}r^{a/}$ "be necessary" $n\bar{a}r(m^m)$	zī'+	"not know"	zī'ılím ^m
$k\bar{a}'e^+$ "not be" $k\bar{a}'al(m^m)$ $w\bar{\epsilon}n^{na/}$ "resemble" $w\bar{\epsilon}nn(m^m)$ [tones show this is deverbal] $s\bar{n}n^{na/}$ "be silent" $s\bar{n}n(m^m)$ $n\bar{\epsilon}n^{na/}$ "envy" $n\bar{\epsilon}nn(m^m)$ $d\bar{j} a/$ "accompany" $d\bar{j}l(m^m)$ $z\bar{a}n a/$ "hold in the hand" $z\bar{a}nl(m^m)$ $d\bar{\epsilon}l^{ a/}$ "be leaning (of person)" $d\bar{\epsilon}llúg^2$ or $d\bar{\epsilon}ll(m^m)$ $m\bar{j}r^{a/}$ "have" $m\bar{j}r(m^m)$ $t\bar{a}r^{a/}$ "have" $n\bar{a}r(m^m)$ $n\bar{a}r^{a/}$ "be necessary" $n\bar{a}r(m^m)$	à <u>e</u> ň ^a	"be something"	àaňlím ^m
$w\bar{\epsilon}n^{na/}$ "resemble" $w\bar{\epsilon}nn(m^m)$ [tones show this is deverbal] $s\bar{n}n^{na/}$ "be silent" $s\bar{n}n(m^m)$ $n\bar{\epsilon}n^{na/}$ "envy" $n\bar{\epsilon}nn(m^m)$ $d\bar{j} ^{la/}$ "accompany" $d\bar{j}l(m^m)$ $z\bar{a}n ^{la/}$ "hold in the hand" $z\bar{a}nl(m^m)$ $d\bar{\epsilon} ^{la/}$ "be leaning (of person)" $d\bar{\epsilon}llog^{\circ}$ or $d\bar{\epsilon}ll(m^m)$ $m\bar{\sigma}r^{a/}$ "have" $m\bar{\sigma}r(m^m)$ $t\bar{a}r^{a/}$ "have" $t\bar{a}r(m^m)$ $n\bar{a}r^{a/}$ "be necessary" $n\bar{a}r(m^m)$	bè+	"be somewhere"	<i>bèlím</i> ^m [short vowel <i>sic</i>]
$s\bar{n}n^{na/}$ "be silent" $s\bar{n}n(m^m)$ $n\bar{\epsilon}n^{na/}$ "envy" $n\bar{\epsilon}nn(m^m)$ $d\bar{j} ^{la/}$ "accompany" $d\bar{j}l(m^m)$ $z\bar{a}nl^{la/}$ "hold in the hand" $z\bar{a}nl(m^m)$ $d\bar{\epsilon}l^{la/}$ "be leaning (of person)" $d\bar{\epsilon}ll\delta g^{\circ}$ or $d\bar{\epsilon}ll(m^m)$ $m\bar{\sigma}r^{a/}$ "have" $m\bar{\sigma}r(m^m)$ $t\bar{a}r^{a/}$ "have" $t\bar{a}r(m^m)$ $n\bar{a}r^{a/}$ "be necessary" $n\bar{a}r(m^m)$	kā'e+	"not be"	kā'alím ^m
$n\bar{\epsilon}n^{na/}$ "envy" $n\bar{\epsilon}nn(m^m)$ $d\bar{\jmath} ^{la/}$ "accompany" $d\bar{\jmath}l(m^m)$ $z\bar{a}n ^{la/}$ "hold in the hand" $z\bar{a}nl(m^m)$ $d\bar{\epsilon} ^{la/}$ "be leaning (of person)" $d\bar{\epsilon}ll\delta g^{\circ}$ or $d\bar{\epsilon}ll(m^m)$ $m\bar{\jmath}r^{a/}$ "have" $m\bar{\jmath}r(m^m)$ $t\bar{a}r^{a/}$ "have" $t\bar{a}r(m^m)$ $n\bar{a}r^{a/}$ "be necessary" $n\bar{a}r(m^m)$	wēn ^{na/}	"resemble"	<i>wɛ̄nním</i> ^m [tones show this is <i>deverbal</i>]
$d\bar{\jmath} ^{la/}$ "accompany" $d\bar{\jmath}ll(m^m)$ $z\bar{a}\breve{n} ^{la/}$ "hold in the hand" $z\bar{a}\breve{n}ll(m^m)$ $d\bar{z} ^{la/}$ "be leaning (of person)" $d\bar{z}ll\delta g^{\Im}$ or $d\bar{z}ll(m^m)$ $m\bar{\jmath}r^{a/}$ "have" $m\bar{\jmath}r(m^m)$ $t\bar{a}r^{a/}$ "have" $t\bar{a}r(m^m)$ $n\bar{a}r^{a/}$ "be necessary" $n\bar{a}r(m^m)$	sīn ^{na/}	"be silent"	sīnním ^m
$z\bar{a}\breve{n}I^{ a/}$ "hold in the hand" $z\bar{a}\breve{n}II(m^m)$ $d\bar{\epsilon}I^{ a/}$ "be leaning (of person)" $d\bar{\epsilon}II\dot{\nu}g^{\circ}$ or $d\bar{\epsilon}II(m^m)$ $m\bar{\sigma}r^{a/}$ "have" $m\bar{\sigma}r(m^m)$ $t\bar{a}r^{a/}$ "have" $t\bar{a}r(m^m)$ $n\bar{a}r^{a/}$ "be necessary" $n\bar{a}r(m^m)$	nēn ^{na/}	"envy"	nēnním ^m
$d\bar{z}l^{ a }$ "be leaning (of person)" $d\bar{z}ll \dot{v} g^{\circ}$ or $d\bar{z}ll \dot{m}^{m}$ $m \bar{z} r^{a }$ "have" $m \bar{z} r \dot{m}^{m}$ $t \bar{a} r^{a }$ "have" $t \bar{a} r \dot{m}^{m}$ $n \bar{a} r^{a }$ "be necessary" $n \bar{a} r \dot{m}^{m}$	dɔ̃l ^{la/}	"accompany"	dōllím ^m
$m\bar{z}r^{a/}$ "have" $m\bar{z}r(m^m)$ $t\bar{a}r^{a/}$ "have" $t\bar{a}r(m^m)$ $n\bar{a}r^{a/}$ "be necessary" $n\bar{a}r(m^m)$	zāňl ^{la/}	"hold in the hand"	zāňllím ^m
tār ^{a/} "have" tārím ^m nār ^{a/} "be necessary" nārím ^m	dēl ^{la/}	"be leaning (of person)	' <i>dēllúg^o</i> or <i>dēllím^m</i>
nār ^{a/} "be necessary" nārím ^m	mɔ̄r ^{a/}	"have"	<i>mɔ̄rím^m</i>
5	tār ^{a/}	"have"	tārím ^m
<i>gūr^{a/} "guard" gūrím^m</i>	nār ^{a/}	"be necessary"	nārím ^m
	gūr ^{a/}	"guard"	gūrím ^m

These forms obey the tonal rules for gerund formation 6.5. The third-mora L tone confirms that they are *m*-stems 6.2.2.

Stative verbs derived from imperfectives of dual-aspect verbs $\underline{19.2.3}$ also form imperfective gerunds; the tonemes show that these are three-mora, and not *m*-stems:

bòɔdım ^m	"will" (Pattern L, unlike <i>bɔ̄ɔdır</i> ^ɛ "desirable")
gว้วทัdเm ^m	"wandering" (<i>gòň</i> + "hunt")
zòtım ^m	"fear" [<i>À zót nē</i> "I'm afraid."]

The gerund *wommvg* of $w\dot{v}m^m$ "hear" (written *wumug* before 2016, but read with -*mm*- in the 1996 audio NT) perhaps represents **wvmdvgp*. A number of deverbal abstract nouns from 3-mora verb stems in -*s*- appear in the m^m class and resemble gerunds in tone. They too are probably imperfective gerund forms: for the dropping of the -*d*- formant compare agent nouns and deverbal adjectives.

pὺ'ʊsɛ	"greet, thank"	pטׁ'טsเm ^m	"worship"
	(or <i>pù'usug^o</i>	
kū+	"kill"	<i>ทเิท-kúบร</i> เ้m ^m	"murderousness"
yวิlเs ^{ɛ/}	"untie"	yɔ̄lısím ^m	"freedom"

Unequivocal imperfective gerund forms with -m- derived from almost all agentive verbs occur as predependents of the bound noun

 $-t\bar{a}a^{=}$ $-t\bar{a}as^{\epsilon}$ $-t\bar{a}$ - or $-t\bar{a}$ - "companion in ..."

For dynamic single-aspect verbs with stems in -II - nn - r(r), and all stative verbs with deverbal gerunds, the forms are identical to the usual imperfective gerunds:

mī'+	"know"	mī'ilím-tāa ⁼	"partner in knowledge"
<i>z</i> ῑ'+	"not know"	zī'ılím-tāa=	"partner in ignorance"
bè+	"exist"	bèlím-tāa ⁼	"partner in existence" WK
dɔ̃l ^{la/}	"be with"	dɔ̄llím-tāa ⁼	"fellow-companion"

For the irregular stative verb $n \partial \eta^{\epsilon}$ WK has two forms with different nuances:

nòŋ٤	"love"		nòŋılím-tāa=	"fellow liker"
		or	nòŋıdím-tāa ⁼	"fellow lover"

Dual-aspect verbs add -m- to the habitual adjective stem, but with gerund Tone Patterns:

mè+	"build"	mɛ̀ɛdím-tāa=	"fellow-builder"
dì+	"eat"	dìtím-tāa=	"messmate"
pū+	"share"	pūvdím-tāa ⁼	"fellow-sharer"
kpèň'+	"enter"	kp <i>èň'ɛdím-tāa</i> =	"fellow-resident"
zàbε	"fight"	zàbıdím-tāa=	"opponent"
dūg ^ε	"cook"	dūgudím-tāa ⁼	"fellow-cook"
fāň+	"snatch"	fāaňdím-tāa ⁼	"fellow-robber"
tùm ^m	"work"	tùmmím-tāa ⁼	"co-worker"

ρὺ'υs ^ε	"worship"	pù'ʊsím-tāa=	"fellow-worshipper"
dìıs ^ɛ	"feed"	dìısím-tāa=	"fellow-feeder"
sùŋ ^ɛ	"help"	sòŋím-tāa ⁼	"fellow-helper"
	or	sòŋıdím-tāa=	
si̯àk ^ɛ	"agree"	si̯àkím-tāa=	"fellow in agreement"

Stance verbs may use *-dim-* or *-lim-* or *-nim-*; *-lim-* and *-nim-* forms may really belong to the derived assume-stance/make-assume-stance verbs <u>12.1.1</u>:

īg ι ^{ya/}	"be kneeling"		īgılím-tāa=	"fellow-kneeler"
		or	īgıdím-tāa=	"fellow-kneeler" WK
zìň'i ^{ya}	"be sitting"		zìň'ilím-tāa ⁼	"fellow-sitter"
		or	zìň'idím-tāa=	"fellow-sitter" WK
vābı ^{ya/}	"lie prone"		vābılím-tāa ⁼	"fellow lier-prone"
		or	vābıdím-tāa ⁼	"fellow lier-prone" WK
làbı ^{ya}	"be crouched"		làbılím-tāa=	"fellow croucher in hiding"
zì'e ^{ya}	"be stood"		zì'əlím-tāa ⁼	"fellow-stander"
		or	zì'ədím-tāa ⁼	"fellow-stander" WK
dīgı ^{ya/}	"be lying"		dīgılím-tāa ⁼	"fellow-lier"
		or	dìgıním-tāa ⁼	"fellow-lier" WK

12.2.1.5 Other deverbal nominals

-s- appears in a few concrete nouns derived from verbs:

dīgı ^{ya/}	"be lying down"	dīgısá ⁺	"lairs"
dū+	"go up"	dūvsá+	"steps"

-m- derives nouns from verbal roots in

zò+	"run"	<i>z</i> ɔ̄ɔm ^{mε}	"refugee"
kpì+	"die"	kpī im ^{m/}	"corpse"

-d- appears as an instrument noun formant instead of the usual -dim- in

tuà+	"grind in a mortar"	tūødır ^ɛ	"mortar"
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See also on $p\bar{b}ln^{n\epsilon}$ "covering" etc, where the *n* may represent */*d* <u>11.1.2</u>.

-b- derives nouns from verbal roots in

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kpì+	"die"	kpìibıg ^a	"orphan"
dà'+	"buy"	dà'abır ^ɛ	"slave"

This -b may be connected with the stem of $b\bar{i}ig^a$ "child"; cf Gulimancéma *kpebíga* "orphan", *kpé* "die", *bíga* "child". It is conceivable that $l\bar{\iota}\iota b\iota r^{\epsilon}$ "twin" is a similar formation from Proto-Oti-Volta **li* "two" with an aberrant reflex of **l*; cf Buli *yībīk*, Gulimancéma *lébíli id*. Sàlıbı r^{ϵ} "bridle" and kɔ̀lıbı r^{ϵ} "bottle" are not analysable.

12.2.2 From nominals

-s- and -l- form adjectives from roots which are probably primarily adjectival:

mā'e+/	"cool down"	mā'asír ^ɛ	"cold, wet"
būk ^{ε/}	"weaken"	būgvsír ^ɛ	"soft"
tēbιg ^{ε/}	"get heavy"	tēbısír ^ɛ	"heavy"
mì'ig ^ε	"get sour"	mì'isvg ^{>}	"sour"
sɔ̄bɛ	"get dark"	sābılíg ^a	"black"

-**d**- features in a number of nouns with no evident derivational meaning, such as $y\bar{u}gvd\iota r^{\epsilon}$ "hedgehog", $l\bar{a}'af^{2}$ "cowrie" pl $l\bar{i}g\iota d\iota^{+}$ "money", $p\dot{v}gvd\iota b^{a}$ "father's sister." It can form abstract nouns from human-reference words (examples from KB, Naden):

pu̯'à-sādιr ^{ε/}	"young woman"	pu'asatim	"girlhood, virginity"
būn-kúdùg ^o	"old man"	bunkuttim	"old age"
gɛdvg	"fool"	gɛtim	"folly"
pùkòɔňr ^ɛ	"widow"	pukɔntim	"widowhood"
bā'-bîìg ^a	"brother"	ba'abiidvg	"brotherhood"

-m- appears in both concrete nouns, mostly with human reference, and abstracts:

bī a+	"bad"	<i>bī</i> 'əm ^m	"enemy"
tàdιg ^ε	"become weak"	tādım ^{m/}	"weak person"
áňsìb ^a	"mother's brother"	āňsíŋ ^a	"sister's child"
yáab ^a	"grandparent"	yáaŋ ^a	"grandchild"
*yāágbā		*yāágmgā	
νúθr ^ε	"red kapok fruit"	vúøŋ ^a	"red kapok"
*vūégrī		*vūégmgā	
bì'isır ^ɛ	"breast"	bì'isím ^m	"milk"
nà'ab ^a	"chief"	nā'am ^m	"chiefship"
zɔ̄lʊgɔ/	"fool"	zɔ̄lιmís ^ε	"foolishness"

Derivational suffixes

Abstract $-m(s^{\epsilon}$ forms seem always to have H toneme; cf $b\dot{u}dim(s^{\epsilon}$ "confusion", where, however, the -m- is part of the verb stem $b\dot{u}dim^{m}$ "get confused"; cf also

tādım ^{m/}	"weak person"	tàdımís ^ε	"weakness"

Added to existing adjectival stems, -*m*- produces no change of meaning:

ňyżɛs ^a	"be self-confident"	ňy <i></i> esíŋ ^a	"self-confident"
v <i></i> čňllıg ^a	"beautiful"	v <i>èňllíŋ^a</i>	"beautiful"
mālısíg ^a	"pleasant"	mālısíŋ ^a	"pleasant"
lāllúg ^{>}	"distant"	lāllíŋ ^a	"distant"
nār ^{a/}	"be necessary"	nàruŋ ^ɔ	"necessary"
wɔ̄kɔ/	"long, tall"	wā'am ^{a/}	"be long, tall"

-*m*- is seen in a good many unanalysable 3-mora nominal stems, such as the nouns $y\bar{v}g\dot{v}m^{n\epsilon}$ "camel" (ultimately from Berber), $gb\bar{\iota}gm^{n\epsilon}$ "lion", $z\dot{\iota}m^{m\epsilon}$ "tongue, $a\check{n}rv\eta^{\circ}$ "boat", and the adjectives $z\dot{u}lv\eta^{\circ}$ "deep", $\check{n}y\bar{a}l\dot{v}\eta^{\circ}$ "wonderful", $y\dot{a}lv\eta^{\circ}$ "wide."

-*I*- and -*Ium*- derive abstract nouns from nouns and adjectives. The suffix -*Ium*- is the only derivational suffix before which *CVVC* roots do not become *CVC* <u>5.3.2</u>, and it can follow a preceding derivational suffix, creating five-mora stems. The stems of these abstract nouns are not themselves used as adjectives.

dāỵ+	"man"	dàalım ^m	"masculinity"
pỵ'ā ^a	"woman"	pò'alım ^m	"femininity"
bīig ^a	"child"	bìilím ^m	"childhood"
tītā'al ^{lε}	"proud person"	tītā'alım ^m	"pride"
gīŋ ^a	"short"	gīiňlím ^m	"shortness"
wōk ^{ɔ/}	"long, tall"	wā'alím ^m	"tallness"
sāan ^{a/}	"guest, stranger"	sáannìm ^m	"strangerhood"
tīráàn ^a	"neighbour"	<i>tīráànnım</i> ^m	"neighbourliness"
gīŋ ^a	"short"	<i>gīŋılím</i> m	"shortness"

13 Derivational prefixes

13.1 Nouns and adjectives

Many noun stems, and one or two adjectives and adverbs, have an element preceding the root which is not the combining form of any noun. Such elements will be called **noun prefixes**. No finite verb form has a prefix.

Noun prefixes usually have no identifiable individual meanings. Even where parallel stems without prefixes or with different prefixes exist, there are no regular processes relating the various forms (contrast the manner-adverb prefix \dot{a} - and the number prefixes.) However, noun prefixes are common in particular semantic fields, such as with nouns referring to small animals, reptiles and insects.

Most noun prefixes fall into just a few phonological types, with limited possibilities for vowel distinctions and for tones. Segmentally, they are mostly of the shape CV(n), where V shows only the three-way *a* ι *v* vowel distinction of affix vowels; the ι/v distinction itself and realisations as [i] or [u] are predictable <u>5.2</u>. There is also a complex reduplicated type CVsin or CVlin. Stems with noun prefixes usually lack derivational suffixes. Prefixes have either M or L tonemes throughout, and they differ from cbs in their tonal effects on following elements <u>6.2.4</u>.

The distinction between noun prefixes and combining forms is not absolute, and a few prefixes clearly originated as cbs, sometimes with phonological simplifications. Other prefixes are related to verbal negative particles. Nevertheless, cbs and noun prefixes are distinct in principle, and most cases readily distinguishable in practice. Thus, an element is a combining form if it is part of a noun paradigm, if it ends in a consonant other than a nasal, if it has a vowel other than short *a ι v* without glottalisation or contrastive nasalisation, or if it has M toneme and is followed by L spreading affecting singular and plural forms. On the other hand, an element is a noun prefix if it is formed by reduplication of the stem-initial consonant, or if it has M toneme and is not followed by L spreading affecting singular and plural forms.

Complicating the issue are many stems with elements preceding the final root which do not fit into the common segmental prefix patterns, though behaving tonally as prefixes. Most are **loanwords**, but not all: many names of ethnic groups and of Kusaasi clans are of this type <u>14</u>.

For the personifier particle as part of some common nouns referring to living creatures see <u>15.5</u>; it is not a prefix but a right-bound particle.

13.1.1 Reduplication-prefixes

The simplest type of noun prefix copies the initial *C* of the root, followed by a vowel which is ι by default, but v after labials, labiodentals and labiovelars; v replaces ι before root u/v/2 and ι replaces v before root $i/\iota/\varepsilon$. No cases occur with voiced stops or voiced fricatives.

kùkɔ̄r ^{ε/}	"voice"	kùkòm ^{mε}	"leper"
kìkàŋ ^a	"fig tree"	kìkīrıg ^{a/}	"tutelary spirit"
k[p]ùkpàrıg ^a	"palm tree"	kpīkpīn ^{na/}	"merchant"
tītā'ar ^ε	"big"	tàtàl ^{lɛ}	"palm of hand"
pīpīrıg ^{a/}	"desert"	sìsì'əm ^m	"wind"
lìlāalíŋ ^a	"swallow"	mìmīilím ^m	"sweetness"
mìmīilúg ⁵	"sweetness"		
kpàkūr ^{ɛ/}	"tortoise" (anomalous prefix vowel)		
tìtūmιs ^ε	"sending" (<i>tòm</i> ^m "send")		
fūfūm ^{mɛ}	"envy"; "stye" (believed to result from envy)		
zà-sìsɔ̄bır ^{ɛ/}	"evening" (<i>zà-</i> cb of <i>zàam</i> ^m "evening" <i>, sɔ̄b</i> ^ε "get dark")		

More complex is a similar type with a final nasal consonant; voiced stops and fricatives do occur with this type:

dùndùug ⁵ bìmbìm ^{mɛ} kìnkàŋ ^a zīnzāᡅŋ ^{5/} nɔ̄b-púmpàᡅŋ ⁵	"cobra" "altar" "fig" "bat" "foot"	dìndēog ^{ɔ/} bòmbàrıg ^a tīntōňríg ^a sīnsáaň ⁼	"chameleon" "ant" "mole" a kind of tiny ant
gùngūm ^{mε} zùnzòŋ ^a pùmpɔ̄ɔgɔ	"kapok material" ("blind" (<i>zū</i> 'øm ^{m/} " "housefly" (<i>tàmpū</i>		t")

An even more complex type follows the reduplicated *CV* with *-sun* or *-lun*:

kpìsınkpìl ^{lɛ}	"fist"	tàsıntàl ^{lɛ}	"palm of hand"
vòlınvùuňl ^{lɛ}	"mason wasp"		
		×	
sīlınsíùňg ⁵	"spider" pl <i>sīlınsî</i> i	ňd ^ɛ	
sīlınsíùg ⁵	"ghost" pl <i>sīlınsîis</i>	ε	
zīlınzíòg ⁵	"unknown" cf <i>zī</i> '+	"not know"	

wàsınwàl ^{lɛ}	a parasitic gall on trees,
	called "mistletoe" in local English
nēsınnēog ^{ɔ/}	"envious person" cf <i>nēn^{na/}</i> "envy" WK
	others "centipede" = WK <i>nà'-nɛ̄sınnɛ̄og</i> ɔ/

13.1.2 Da(n) ba(n) sa(n)

dàyūug ^{ɔ/}	"rat"	dàwān ^{nɛ/}	"pigeon"
dàtìỵŋ ⁵	"right hand"	dàgɔ̀bıg ^a	"left hand"
bàlàŋır ^ɛ	"hat"	bàlàar ^ɛ	"stick, staff"
sākárùg ⁵	"fox"		

dàyáam ^{ma}	"woman's parent-in-law"
dàwàlıg ^a	"hot, humid period just before the rainy season"
dàtāa=	"enemy" cf <i>nìn-tāa</i> = "co-wife", Ghanaian "rival"
dàmà'a ⁼	"liar" cf <i>mà</i> ' ⁺ "lie"
dàkīig ^a	"sibling-in-law via wife"
dādúk ^o	a kind of large pot, cf <i>dōk</i> ɔ́/ "pot"
bānāa ⁼	traditional long-sleeved smock
bālērvg ^{ɔ/}	"ugly" cf <i>lēr^ɛ "</i> get ugly"
bàyēog ^{ɔ/}	"betrayer of secrets" cf $y\bar{\varepsilon}\varepsilon^{\varepsilon/}$ "betray a secret"
sàbùa ⁺	"lover, girlfriend" ? bɔ̀ɔdª "want, love"
sāmán ^{nɛ}	clear space in front of a <i>zàk</i> ^a "compound"

Prefixes of the form *Can*- with initial consonants other than $d \ b \ s$ are best classified with the unanalysable residue of complex stems including loanwords <u>14</u>:

dànkòŋ ^ɔ	"measles"	sāngúnnìr ^ɛ	"millipede"
zànkù'ar ^ɛ	"jackal"	Zàngbèog ⁵	"Hausa person"
màngávŋ ^ɔ	"crab"	làngávŋ ^ɔ	"crab"
nānzū'us ^{ε/}	"pepper"		

The interesting word $nay \overline{i} g^a$ "thief" is written $na'ay i \overline{i} g$ in NT/KB as if it were a compound with the cb $n\overline{a}'$ - "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 $nay i \overline{i} g$ -nama, though there is an analogical $g^a|s^{\epsilon}$ pl $nay \overline{i} s^{\epsilon}$ as well; there is also a derived abstract noun $nay \overline{i} g m^m$ "thievery." The Farefare cognate of $nay \overline{i} g^a$ is nay i ga, pl nay i gba or nay i gsi; Dagbani has nay i ya pl nay i ysi and also tay i ya id.

13.1.3 *Pū kù(n)*

In some words these prefixes have a negative meaning, and they are then presumably connected with the verb negative particles $p\bar{o} \ k\dot{v}$:

kùndὺ'ar ^ε	"barren woman"; cf <i>du̯</i> 'à ^a "bear, beget"
nīn-pū-nān ^{na/}	"disrespectful person"; cf <i>nān</i> ^ε "love, respect"
tùb-pū-wúmnìb ^a	"deaf people" (Rom 11:7) cf $t\dot{v}bvr^{\epsilon}$ "ear", $w\dot{v}m^{m}$ "hear."

However, most cases are not analysable:

kùndùŋ ^a	"jackal"	gūmpūzēr ^{ɛ/}	"duck"
dāmpūsāar ^ɛ	"stick"		
bān-kúsél ^{le}	"lizard" ? firs	t element connected	with <i>bàŋ</i> a
	"agama lizar	d", but the tones are	unexpected.

13.1.4 Stranded combining forms

Some original cbs have become partly bleached of their original meaning and/or simplified phonologically, and then detached from their regular paradigms after being ousted by new cbs based on analogy with sg forms $\underline{8.2}$.

nìn	"body"	is accepted by WK as cb of <i>nīŋ^a nīis^ɛ</i> [= Mooré <i>yĩnga</i>] word is rare; as a noun prefix cf		oré <i>yı̈́nga</i>] but the	
		nìn-gbīŋ ^{ɔ/} nìn-tāa ⁼		"human skin; bod "co-wife"	y"
dà "man"				o by forms segment e <i>dà-</i> form is seen i	ally remodelled on sg n
				"son, boy" "son, bachelor" ^E below	
рù	"woman"	cf pự 'ā ^a "woman"	cb <i>pu</i> 'a	à Identifiable in e	.g.
		pùkòɔňr ^ɛ		"widow" Mooré p <i>ùgkôoré</i> Mooré p <i>ùgsádà</i> Kusaal pự'à-sādư	"young woman"

170		Derivational prefixes 13.2	
р <i>ū</i> -	"farm"	cf <i>pɔ̃ɔɡɔ</i> / "field, farm", pl <i>pɔ̃tɛ̃/</i> , regular cb <i>pɔ̃-</i> ; Mooré <i>púugò</i> pl <i>pútò</i> Tonally, this <i>pū</i> - behaves as a M prefix, not a cb <u>6.2.4</u> .	
		pūkpāad ^{a/}	"farmer" (= $kp\bar{a}ad^{a/}id$)
nà'	"chief"(?)	appears before a numb	er of nouns signifying animals and insects:
		nà'-nɛ̄sınnɛ̄og ^{ɔ/} cf nɛ̄sınnɛ̄og ^{ɔ/} nà'-zòm ^{mɛ} nà'-dàwān ^{nɛ/}	"centipede" WK "envious person" WK; others: "centipede" "locust" "pigeon" = dàwān ^{nε/}

The "chief" cb perhaps relates to traditional folklore; cf $\dot{a}-k\bar{j}ra-d(\dot{a}m^{ma})$ "praying mantis" ("hyena's parent-in-law") and animal and bird names which incorporate the personifier particle <u>15.5</u> like $\dot{a}-d\dot{a}al\dot{u}g^{2}$ "stork", $\dot{a}-g\dot{a}\dot{u}ng^{2}$ "pied crow", $\dot{a}-m\dot{u}s^{\epsilon}$ "cat."

13.2 Adverbs

The manner-adverb prefix \dot{a} - appears before some stems which are also followed by apocope-blocking <u>16.4</u>:

àmēŋá+	"truly"	àsīda+	"truly"
àníŋà ⁺	"promptly"		

The same prefix is also seen in a number of proadverbs and in the locative $\partial g \mathcal{I}^{|\epsilon}$ "upwards" <u>16.3</u>. Forms with this prefix are all liaison words. The prefix is followed by M spreading. Unlike the number prefix ∂ -, it does not cause a preceding LF-final vowel mora to appear as -a <u>7.2.1</u>.

13.3 Number words

In all uses, the numbers 2 to 9 begin with an inseparable number prefix. Forms with number prefixes are all liaison words 7.2.

The number prefixes represent **fossilised noun class agreement prefixes**. With the collapse of noun-class based grammatical gender <u>8.1</u> in favour of a system of natural gender <u>15.2.2</u> the old ${}^{a}|b^{a}$ class agreement pronouns \dot{o} $b\dot{a}$ have been generalised for animate while the old $r^{\varepsilon}|a^{+}$ class singular pronoun $l\dot{l}$ 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 $r^{\varepsilon}|a^{+}$ class, with the old plural pronoun ηa still extant in older materials for inanimate plural (Olawsky 1999.) Number words originally agreed with the counted noun using a prefix similar to the corresponding plural pronoun, and the \dot{a} - of the numbers 2-9, $\dot{a}yi'^+$ "two", $\dot{a}t\dot{a}\ddot{n}'^+$ "three" etc used as quantifiers <u>15.4.2.1</u> represents original *ŋa-.

Because of this origin from * ηa -, the \dot{a} - number prefix, unlike all other aparticles and prefixes, causes a preceding LF-final vowel following a consonant to
appear as -a rather than - ι 7.2.1. This same \dot{a} - is also seen in $\dot{a}l\dot{a}^+$ "how many?"
contrasting with $\dot{a}l\dot{a}^+$ "thus", which has manner-adverb \dot{a} -:

Pɛ̀ɛdá_ àlá	+ø?	"How many baskets?"
Basket:PL NUM:how.ma	ny cq?	
nìŋເ_ 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 bàyźpż <u>ę</u>	"you seven"
bà bàyí'	"they two"

The forms of the number words 2-9 used for counting <u>15.4.2.2</u> represent the old m^m class agreement, in the "abstract" sense of $m^m \underline{8.1}$:

λtáň'	"three"	(in counting)
<i>ìnāas</i>	"four"	(in counting)
'nnū	"five"	(in counting)

Compare Nawdm $mt\acute{a}h$ "three" $mn\grave{a}\grave{a}$ "four" $mn\grave{u}$ "five" etc in counting. When referring to a specific noun, Nawdm numbers have a prefix agreeing with the noun class: $n\acute{a}b\grave{a}t\acute{a}h$ "three people"; m marks the abstract/mass class cognate to the Kusaal m^m class (Fiedler 2012.)

The number prefix $b\dot{v}$ - appears in various adverbial number words <u>15.4.2.4</u>. It probably represents either an old b^{2} or m^{m} class agreement.

àbùyí'+	"twice"
àbùtáň'+	"three times"
àbùnāasí+	"four times"
bùpīiga+	"ten times"
nōɔrím bùtáň'+	"three times"

vs

14 Unsegmentable complex stems

Numerous words in Kusaal (including the very name of the language, $K\bar{\upsilon}s\dot{a}\dot{a}l^{\varepsilon}$) have stems which are more complex structurally than the ordinary unprefixed type but are simply unanalysable units. Tonally, they usually resemble forms with noun prefixes, but examples occur with an initial H toneme. Segmentally, they may contain unusual consonant clusters. Most are identifiable as loanwords, but by no means all. Many names of ethnic groups and clans fall into this category.

Examples of such complex stems are *Kūsáàs*^ε "Kusaasi", *Ňwāmpūrıs*^{ε/} "Mamprussi", *Kùtām*^{ma/} the name of WK's clan; *gbáňyà*'a⁼ "lazy person" (*gonya*'am "idleness" 1976 NT), cf Dagbani *gbinyaɣli* "laziness."

14.1 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 <u>8.6</u>. Analogy usually causes the initial \dot{a} - of loanwords like $\dot{a}raz\acute{a}n\dot{a}^+$ "heaven" and $\dot{a}raz\dot{a}k^a$ "riches" to be treated tonally as fixed-L <u>7.3</u>.

Most identifiable loanwords in Kusaal come from **Hausa**, the largest African language after Arabic by number of first-language speakers, used by millions more as a lingua franca in the savanna zone of West Africa. Although there are many ethnic *Hàusàawaa* in the Kusaasi area, especially in Bawku, the language which has influenced Kusaal is the *Gaanancii* lingua franca; though mutually intelligible with Kano Hausa, *Gaanancii* among other differences lacks not only grammatical but even natural gender, uses [z] for $[d_3]$, monophthongises diphthongs, and drops the distinction between glottalic consonants and their plain counterparts.

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 distribution.

Among nouns borrowed from Hausa are $d\bar{a}k\dot{a}^+$ "box", Hausa $\dot{a}dak\dot{a}a$ (ultimately from Portuguese *arca*); $g\bar{a}dv^+$ "bed", Hausa *gadoo*; $k\dot{\epsilon}\epsilon k\dot{\epsilon}^+$ "bicycle", Hausa $k\dot{e}ek\dot{e}$; $b\dot{a}kp\dot{a}e^+$ "week", from Hausa *bakwài* "seven", also used for "week" in *Gaanancii*.

Identifiable verb loanwords are much less common. They are subject to the usual constraints on possible Kusaal verb shapes <u>12.1</u>, e.g. $daam^m$ "disturb, trouble", Hausa daamaa; $b\dot{v}g^{\epsilon}$ "get drunk", Hausa $b\dot{u}gu$, literally "get thoroughly beaten", a Hausa idiom.

Several function words are loans, probably from Hausa: ἀsέε "except", Hausa sai; kōυ "or", Hausa koo; báa "not a...", Hausa bâa.

Loanwords with clear Hausa counterparts did not necessarily originate in Hausa, itself a great borrower of words. Some such words appear in many languages of the Sahel and Savanna. e.g. $h\bar{a}l(^+$ "until", Hausa *har*, Kikara Songhay *hál*ì, possibly from Arabic $\sim \hbar atta$: (Heath 2005.) With *làbu*^{ya} "be crouching behind something", Hausa *labèe* "crouch behind something or lean against wall to eavesdrop", Kikara Songhay *lá:bú* "hide behind or under something", the close match of form and highly specific meaning is striking; if the Kusaal word is a loan, it may owe its single-aspect flexion and dual-aspect assume-stance and make-assume-stance derivatives to analogy with $v\bar{a}bt$ "^{ya/}"be lying prone."

Wide geographical distribution need not rule out Hausa origin or transmission, however: loans from Hausa have travelled far in West Africa, with an entry point into Songhay via the Zarma and Kaado languages of Niger.

Words from **Arabic** are frequent throughout the languages of the Sahel and Savanna; thus, among many others: Kusaal *láafiya*⁺, Hausa *laafiyàa*, Mooré *làafí*, Kikara Songhay ?àlà:fíyà "health", Arabic العافية ?al-ʕa:fiya "(the) wellness"; Kusaal àrazàk^a, Hausa arzìkii, Mooré àrzɛ́ká "riches", Kikara Songhay ?árzúkù "good luck", Arabic الرزق ?ar-rizq "(the) livelihood" pl ارزاق ?arza:q; àrazánà⁺ "heaven, sky", Hausa àljannàa, Mooré àrzấnà, Kikara Songhay ?àljánnà "heaven, paradise", Arabic الجنة ?alfanna "(the) garden, paradise"; Kusaal yàddā^{+/} (yàdā WK) "assent", Hausa yàrda (verb) "consent", Kikara Songhay yárrɛ̀ "consent", probably from the Arabic يرضى yard^ça:, 3sg masculine ipfv of رضى ?ad^ciya "be satisfied"; Kusaal Tàláatà⁺, Hausa Tàlaatàa, Arabic الغرائي ?aθ-θala:θa:? "Tuesday."

It is likely that Arabic words have mostly entered Kusaal via Hausa. However, some Kusaal forms clearly resemble **Mooré** rather than Hausa. Many Mossi people are found in the Kusaasi area, and many Kusaasi themselves speak Mooré well; they often attribute local or individual peculiarities of Kusaal speech to Mooré influence. Arabic words have reached Mooré from several other West African languages widely used by Muslims, including Dyula and the Songhay languages.

Thus màlįāk^{a/} "angel" (always malek in NT versions prior to 2016) is derived from the Arabic ملاك mal?ak. The vocalism suggests transmission via Mooré màlékà, and the word is usually found in Christian materials, which would be consistent with this pathway (see below.) The forms clearly do not match Hausa màlaa'ikàa, which is from the Arabic plural ملائكة mala:?ika. A similar case in the realm of religion is Sūtáanà⁺ "Satan", matching Mooré Sutãana rather than Hausa shàidân, which is a learned borrowing of the Arabic شيطان

Christian missionary work among the Kusaasi began in Haute Volta (now Burkina Faso) and used Mooré materials, leading to some borrowing and calquing. One word revealed as a loan by its phonology is $W(nn\dot{a}'am^m (WK) W(n\dot{a}'am^m (always$ Wina'am NT/KB) "God." It is common in Christian materials; the Creator of traditional $religion often appears simply as <math>W\bar{\iota}n^{n\epsilon/}$ in proverbs etc. $W(nn\dot{a}'am$ looks analysable as a compound of $w\bar{\iota}n^{n\epsilon/}$ "god" and the stem of $n\dot{a}'ab^a$ "chief" or $n\bar{a}'am^m$ "chieftaincy", but the tones should then have been Win-ná'àm, and the prevalence of the form Winà'am with single -n- likewise shows that the form is not in fact a synchronic compound in Agolle Kusaal. Direct borrowing of the corresponding Mooré word $W\tilde{e}nnà\acute{a}m$ would not account for the glottalised -a'a-; the immediate source of the loan is probably **Toende Kusaal**. Niggli's materials have Winā'am, with a tonal fall like the Agolle Winà'am, and always with single n, probably reflecting consistent loss of consonant gemination in Toende everywhere except before LF affix vowels <u>5.2</u>.

The word *faangid* "saviour" in the NT/KB is read [$f\tilde{a}:g^{j}id$] by my informants; preservation of *g* in this position <u>5.6</u> is exceptional in my Agolle Kusaal data, the only other cases being *faangir* "salvation" and the gerund $z\vec{i} \Rightarrow g^{a}$ of $z\vec{i}'e^{ya}$ "be standing" used by DK KT instead of $z\vec{i}'a^{+}$. The expected agent noun from $f\vec{a}e\vec{n}^{+/}$ "save" is $f\vec{a}a\vec{n}d^{a/}$, presumably avoided as identical to the agent noun of $f\vec{a}\vec{n}^{+}$ "rob, snatch", found in NT/KB as *faand* "robber." WK has $f\vec{a}a\vec{n}d^{a/}$ as the agent noun for both verbs, and specifically confirms that the word has *both* meanings in his idiolect.

In Toende Kusaal, *g is deleted word-finally after all long vowels (bii "child" = $b\bar{i}ig^a$, $b\bar{v}\bar{v}$ "goat" = $b\bar{v}vg^a$), but is otherwise retained by many speakers (Niggli 2012):

páa	" <i>arriver</i> " (Agolle <i>pāe</i> ⁺ "reach")
Õ bv paage.	"Il n'est pas arrivé." (Agolle Ò pū pāée.)

Niggli's dictionary has both *fãagıt* and *fãat* for "saviour", with *fãat* also glossed as "robber." Thus *faangid* too is probably a loan from Toende Kusaal.

Winà'am fāaňgid fāaňgir appear in the actual speech of many Agolle Kusaasi, and are accordingly used in this grammar in transliterating Bible verses. NT versions prior to 2016 also used the Toende forms *aaruŋ* (Toende *ãaròŋ*) for *àňrvŋ* "boat", and *malek* (Toende *màlék*, Mooré *màlékà*) for *màlįāk* "angel", but KB has *anrvŋ* and *maliak* throughout, matching the usage of my informants and of the audio 1996 version.

One clear **Mampruli** loanword is WK's $k\bar{i}ib\dot{v}^+$ cb $k\bar{i}ib$ - "soap", which he uses instead of Kusaal $k\bar{\iota}'\iota b^{\prime\prime}$. The length and quality of the vowels identify the source as Mampruli *kyiibu*: contrast Farefare $k\dot{\iota}'\dot{\iota}b\dot{\prime}$, Dagbani *chibo*. Other words with singulars ending in $-\iota^+$ or $-\upsilon^+$ also probably originated as loans from Mampruli or Mooré <u>8.5</u>.

Farefare has certainly influenced Nabit and perhaps also Toende Kusaal, but I have no examples of Farefare loanwords in Agolle Kusaal.

Loanwords ultimately from **Songhay** languages include *bòrkìn*^a "honest person", Mooré *bùrkĩná* "free, noble", Dagbani *bilchina* "free, not slave", cf Kikara Songhay *bòrkĭn* "noble (caste)" and *bàuŋv*, used only in *kpɛ̀ň*' *bàuŋv* "get circumcised" (*kpɛ̀ň*'⁺ "enter"), Mooré *kề bãongó id*, cf Kikara Songhay *bàŋgù* "pool, spring", *à húró bàŋgù* "he entered the pool", i.e. "he was circumcised."

Loans from **Twi/Fante** ("Akan"), the major lingua franca of southern Ghana, include $k\bar{c}d\dot{v}^+$ "banana", Twi *kwadu*; $s\bar{a}af\iota^+$ (?tones) "lock, key", Twi $saf\tilde{e}$ "key" (from Portuguese *chave*); $b\bar{v}r\iota y\dot{a}^+$ "Christmas", Twi *bronya* (itself of unclear origin.) A few loans from **English** are found. Loanwords which are sufficiently naturalised that they are used by speakers unfamiliar with English have often undergone considerable changes: $\partial \dot{\rho} \partial r^{\epsilon}$ "aeroplane", perhaps a back-formation from [alopt]m] taken as a locative $\partial \dot{\rho} \partial r \bar{r} \cdot n^{\epsilon/}$; $d\mu' \dot{a} t \dot{a}^+$ "doctor" (cf Dagbani $d \dot{\rho} \chi t \dot{\epsilon}$ id); $t \dot{\rho} k \dot{a} e^+$ "torch" (from "torchlight"); $l \dot{\rho} r^{\epsilon}$ "car, lorry" (often borrowed even in Francophone Africa: cf Mooré *lór*è, Nawdm *lòćr*.) *Pootim* (Jeremiah 20:10), 1976 NT *pootum* "complain about officially" 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: l5ya "cars", not *l5ya.

Several words of English origin have probably been transmitted via Hausa: $k \acute{z}t \acute{v}^+$ "court", Hausa $koot \acute{u}$; $s \acute{z}g \acute{a}$ " soldier", Hausa $sooj \acute{a}$; $t \acute{\varepsilon} \acute{\varepsilon} \acute{v} \acute{v}^{\epsilon}$ "table", Hausa $teeb \acute{u}r$; $w \ddot{a} d \acute{a}^+$ "law", Hausa $ood \acute{a}$, from English "order", with Kusaal sg $w \ddot{a} d \iota r^{\epsilon}$ cb $w \ddot{a} d$ - created by back-formation.

A clear **French** loan in Agolle Kusaal is lamp5 (i.e. l'impôt) "tax", as in lamp5 $dl'as^a$ "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 $kastat^{a/}$ "witness, testimony", Mooré kastatot "testimony, proof", as in kastatot statistic statistic ("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 cachete "he seals." Mooré kastot and Farefare kastot 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

15 Noun phrases

15.1 Structure

A nominal phrase may be either a noun phrase (NP) or an adverbial phrase (AdvP.) A noun phrase has a noun, pronoun or quantifier as head. If present, the **article** $|\bar{a}^{+}|$ occurs last in a NP. (For the sole exception, see <u>19.10</u>.)

Unbound dependent NPs may precede the head recursively. Some pronouns have specialised rôles as NP heads; otherwise the meanings correspond to the wide range expressed in English by genitives or NP complements with "of", e.g.

dāu lā bútìŋ	"the man's cup" ("cup of the man")
sālıma bútìŋ	"a gold cup" ("cup of gold")

Predependents with specific or countable-generic reference are **determiners** (answering "which?"), as are the article, dependent pronouns, quantifiers or AdvPs following the NP head; other dependents are **modifiers** (answering "what kind of?")

Relative clauses 24.3 are also NPs.

As is characteristic of Oti-Volta, **compounding** is pervasive in NP structure where most languages use uncompounded constructions. Kusaal compounds fall into two basic types, depending on whether the combining form is head or dependent. Compounding is the regular construction for head nouns with following adjectives and dependent pronouns:

būvg ^a	"goat"	bù-pìəlıg ^a	"white goat"
bù-kàŋā+/	"this goat"	bù-pìəl-kàŋā+ [/]	"this white goat"

Compounds with non-referential cbs as *dependents* are also common:

	nà'ab lā wíd-zūur	"the chief's horse-tail"
vs	nà'ab lā wíàf zūʊr	"the chief's horse's tail"

Regardless of which element precedes, the last stem shows the noun class suffixes which mark number for the head. Preceding stems appear as combining forms, typically bare stems which have undergone apocope, though analogical remodelling is common, and regular with some stem types <u>8.2</u>. Compounding is so productive that the cb is a regular part of noun and adjective flexion <u>8.1</u>.

For the tone sandhi rules which affect the component following the combining form see 7.3 7.4. They are not sensitive to whether the cb is head or dependent.

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Compounds may have compound components, most often as a result of the addition of an adjective or dependent pronoun to an existing compound, where the binding of the new element is weaker than that within the existing compound:

[bù-pìəl-]kàŋā	"this [white goat]"
[nīn-wók-]pìəlıg	"white [tall person]"
[zà'-nɔ̄-]píəlìg	"white gate" ("white [compound-mouth]")

A compound may appear as generic argument to a following deverbal noun:

[zà'-nɔ̄-]gúr	"gate-keeper"
[[zà'-nɔ̄-]gúr-]kàŋā	"this [gate-keeper]"

Noun-adjective compounds can be used as bahuvrihi adjectives <u>15.7.1.3</u>:

nīf-ňyáuk	"one eye"
bù-[nīf-ňyáu̯k]	"[one-eyed] goat"
nōb-wók	"long leg"
kùg-[nɔ̄b-wɔ́k]	"[long-legged] stool"

Bahuvrihis can appear as complements of $\partial e n$ ^a "be something":

Kòg-kàŋā á nɛ̃ nɔ̃b-wók. "This chair is long-legged." WK Chair-demst.sg cop foc leg-long:sg.

Compounds may contain uncompounded elements within their structure. Predependent NPs as modifiers <u>15.6.2</u> bind tighter than the link between cb generic arguments and deverbal nouns:

ānzúrıfà nē sālıma lá'àd	"silver and gold goods"
[ānzúrɪfà lá'-]māan	"silversmith" ("[silver goods]-maker")
[ānzúrıfà nē sālıma lá'-]māan	"silver- and goldsmith"

Otherwise, cbs are bound tighter to following than preceding words, except that determiners of all kinds 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]"
sālıma [zá'-nɔ̄ɔr]	"golden gate" ("golden [compound-mouth]")
zūgó-n [níf-gbáỵŋ]	"upper eyelid" ("upper [eye-skin]")

Noun phrases

Adjective cbs can only be used before another adjective or a dependent pronoun, so when a noun-adjective compound is used as a generic argument it must adopt a sg or pl form:

	[fū-zɛ́ňdà] kùəs	"seller of red (i.e. dyed) cloth"
not	*fū-zćň'-kùøs	

Coordination is characteristically a feature of NPs, but also found in AdvPs. The particles for "or" are bεε or kov. Here the two are synonymous; the only place where they consistently have different senses is in the formation of polar questions. 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 kōv dāu lā kōv bà wōsa child:sg ART or man:sg ART or 3PL all "The man, or the child, or both" WK

The particle for "and" for NPs and AdvPs is $n\bar{\epsilon}$. This $n\bar{\epsilon}$ is fundamentally the same word as the preposition "with"; the linker adjuncts $b\bar{\epsilon}\epsilon$ and $k\bar{\nu}\nu$ can be used in a parallel way. $N\bar{\epsilon}$ links nominal words and phrases, but no clauses other than (previously nominalised) \dot{n} -clauses. It is not possible to omit coordinating particles in a series of three or more items, or to use $n\bar{\epsilon}$ to join two words with the same referent:

À-Wĩn né À-Būgur né À-Nà'ab	"Awini, Abugri and Anaba"
du̯'átà nɛ̄ ná'àb	"a doctor and a chief"
	(necessarily two different people)

Coordinated heads may not share determiners:

m ba'abiis nε m saamnama
m bā'-bîis nέ m sàam-nàmā +ø
1sg father-child:PL with 1sg father-PL VOC
"my siblings and [my] fathers!" (Acts 7:2)

pu'ālānēdāulā"the woman and the man"woman:sg ART with man:sg ART

An exception is $y\bar{i}ig\dot{a}^+$ "firstly" used as a predependent for "first" <u>15.6.3</u>:

yiiga saŋgbauŋ nɛ teŋgbauŋ nɛ atɛuk yīigá sàŋ-gbàu̯ŋ nɛ̄ tɛ́ŋ-gbàu̯ŋ nɛ́ àtìu̯k firstly heaven-skin:sg with earth-skin:sg with sea:sg "the former heaven and earth and sea" (Rev 21:1)

Coordinated heads may share modifiers:

Kūsáàl sólımà nē síilímà Kusaal story:PL with proverb:PL	"Kusaasi stories and proverbs"
<i>Kūsáàs kúèb nē yīr</i> Kusaasi:PL hoeing with house:sg	"Kusaasi agriculture and housing"
<i>sālıma bútiıs nē díısímà</i> gold cup:PL with spoon:PL	"gold cups and spoons" ("all of them gold", KT)

However, KT WK both agreed that *sālıma lá'àd nē būtus* must mean "gold goods and [not gold] cups", WK offering the correction

sālīma	a lá'àd	nέ	ò	būtus	"gold goods and (gold) cups" V	VK
gold	item:PL	with	3AN	cup:pl		

where \dot{o} refers to $s\bar{a}lima$. (See <u>15.2.2</u> on the unexpected gender of the pronoun.) The difference from $s\bar{a}lima \ b\acute{v}tiis \ n\bar{e} \ d(is(ma)$ (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 $s\bar{a}lima \ b\acute{v}tiis \ n\bar{e} \ [s\bar{a}lima] \ d(is(ma) \ "gold \ cups \ and \ [gold] \ spoons" (I am grateful to Tony Naden for this suggestion.)$

Coordinated heads may even occur before an adjective:

Ka m nyε saŋgbauŋ nε teŋgbaung paal.
Kà m ňyε sáŋ-gbàuŋ- nε téŋ-gbàuŋ-páal
And 1sg see heaven-skin- with earth-skin-new:sg.
"And I saw a new heaven and a new earth." (Rev 21:1)

However, cbs as *dependents* may not be coordinated:

*[bɛ̄ŋíd nɛ̄ kī] kúès

not possible for "seller of *bɛ̄ŋ(d nɛ̄ kī*" (beanleaf-and-millet, a conceptual unity like "fish and chips", "lox and bagels.")

Dependent NPs or AdvPs can naturally include coordinated components:

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o nya'andɔlib pii nɛ yi ò ňyà'an-dɔ̀llıb pīi nɛ̄ yí' 3AN after-follower:PL ten with two	"his twelve disciples" (Mt 26:20)	
dự'átà nẽ ná'àb lā lóyà doctor:sg with chief:sg art car:pl	"Doctor's and the chief's cars"	
<i>sālıma nē ānzúrıfà lá</i> 'àd gold with silver item:pL	"gold and silver goods"	

The last two examples, like their English translations, are ambiguous; they can, but need not, be taken as representing ellipsis of the first of two repeated heads within a coordination of two parallel dependent + head NPs:

	dự'átà (lóyà) nẽ ná'àb lā lóyà	"[Doctor's cars] and [the chief's cars]"
	sālıma (lá'àd) nē ānzúrıfà lá'àd	"[gold goods] and [silver goods]"
cf	[dụ̯'átà nɛ̄ ná'àb lā] lóyà	"the cars of [Doctor-and-the-chief]"
	[sālıma nē ānzúrıfà] lá'àd	"[gold-and-silver] goods"

Elliptical interpretations are sometimes impossible. As dependent cbs cannot be coordinated and $n\bar{\epsilon}$ cannot join NPs with the same reference, this is the case with

ānzúrıfà	'nĒ	sālīma	a lá'-māan	"silver- and goldsmith"
silver	with	gold	item-maker:sg	

cf *ānzúrıfà lá'- nē sālıma lá'-māan (impossible) ānzúrıfà lá'-māan nē sālıma lá'-māan (necessarily two different people)

NPs can also be combined by **apposition**. For apposition of locatives see <u>16.3</u>; for uncompounded relatives <u>24.3.3</u>.

NPs may precede personal names in apposition:

na'ab Agrippa	"King Agrippa." (Acts	25:13)
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Li pu nar ye fu di fu ba'abiig po'a Herodiase. Lì pū nār yć fừ dí fừ bā'-bíìg pự'á Herodiase ⁺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 lèbis yē, Ēɛň, ò zuà À-Sībigi n kābiríd.
 ...cat reply that, Yes, 3an friend:sg pers-termite:sg cat ask.admission:IPFV.
 "...replying that, Yes, it was his friend Termite asking for admission." KSS p12

The fact that the personifier-particle allomorph \dot{a} - is not omitted in these cases shows that the relationship is not dependent-head <u>15.5</u>.

Personal pronouns in apposition use free forms 27.5:

Man Paul []	pu'usidi ya.	"I, Paul greet you." (2 Thess 3:17)
Mān Paul []	pú'ʊsìdī yá.	
1sg Paul	greet:IPFV 2PL.OB.	

Apposition is to be distinguished from cases where a preceding head has no combining form, as with quantifiers, or coordinated structures, and also from cases of segmental remodelling of cbs <u>8.2</u>. The 1996 NT regularly replaces the initial cb of a number of compounds in the 1976 NT with a form written like a singular:

Nonaar Paal	for <i>Nonapaal</i>	Nō-ná-pāal	"New Testament"
Siig Suŋ	for <i>Sisuŋ</i>	Sì-sùŋ	"Holy Spirit"

Siig Suŋ in the 1996 NT audio version is read as Siig-sin (Siig-sin with M spreading) or Si-sin, not Siig-sin; similar cases in my informants' speech confirm that this reflects segmental remodelling of cbs, not replacement of compounding by apposition: lannig-kana "this squirrel", dap-bamma "these men" (both WK.)

SB showed a much greater tendency to produce segmental sg forms before dependent pronouns and even adjectives than my other informants.

15.2 Noun phrase categories

15.2.1 Number

Number is a category only of nouns, pronouns and quantifiers. Agreement is confined to pronouns; VPs show no agreement. However, in a compound of a noun with a following adjective or dependent pronoun, it is the dependent which inflects to show the number of the head noun cb $\underline{15.7}$.

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, as with gerunds referring to individual events or actions:

<i>zวิวg</i> ว	z̄ɔsɛ		"race"
bū' o súg ^o	bū'esá+	bū' o s-	"question"
zàaňsúŋ ^ɔ	zàaňsímà+	zàaňsúŋ-	"dream"

Typical underived mass nouns belong to the b^{2} and m^{m} noun classes, which do not have paired sg/pl suffixes, but gerunds of 3-mora stem verbs regularly show sg r^{ϵ} or g^{2} suffixes, and a number of words referring to uncountables or abstracts are formally plural, but construed as singular:

bāň'as ^ɛ	bàň'-	"disease"
ňyō'ɔsɛ/	ňyɔ̄'-	"smoke"
tàdımís ^ɛ		"weakness"
zɔlιmís ^ε		"foolishness"
mĒt ^{ɛ/}	<i>m</i> ε̄t- <u>8.2</u>	"pus"
kūt ^ε	kùt- <u>8.2</u>	"iron"
zùəd ^ɛ		"friendship"
būud ^ɛ		"innocence"
sīiňd ^{ɛ/}		"honey"
nīn-pύὺd ^ε		"pus"
wāad ^{ɛ/}		"cold weather"
sūň-pέὲn ^{nɛ}		"anger"
kỵ'à-nūud ^{ε/}		"thirst"
sālīma+	sàlım-	"gold"
sìda ⁺	sìd-	"truth"

 $K\bar{u}t^{\varepsilon}$ is also "nail"; the original sg $k\bar{u}dvg^{\circ}$ appears in the name \dot{A} - $K\bar{u}dvg^{\circ}$ 29.2. So too with a number of irregularly formed deverbal abstract nouns:

	gēɛňmís ^ɛ	"madness"	←	gēɛňm ^{m/}	"madden, go mad"
	bùdımís ^ɛ	"confusion"	←	bùdım ^m	"confuse"
	tìtūmιs ^ε	"sending"	←	tùm ^m	"send"
	zīid ^{ε/}	"carrying on head"	←	zī+	"carry on head"
	νūud ^{ε/}	"noise"	←	vū+	"make a noise"
	kēn ^{nε/}	"arrival"	←	kēň+	"come"
	pį̀àň'ad ^ε	"speech"	←	pįāň' ^a	"speak" (irreg. tones)
[sg	pįàuňk ^o	"word"]			
	dì'əma+	"festival"	←	dì'əm ^m	"play, not be serious"
	tōʊma+	"work"	←	tùm ^m	"work"
[sg	<i>tōυm</i> ^{mε}	"deed"]			
	tēň'ɛsá+	"thought"	cf	tēň'ɛsá yīnní	"one thought"
				(Acts 4:32)	

A single object may be referred to by a plural naming its components:

	dà-pūvdá+	dà-pūvdá nàmª	"cross"
cf	dà-pūvdír ^ɛ	dà-pūvdá+	"cross-piece"

A Kusaal plural may just happen to correspond to an English mass noun:

lāuk ^o	lā'ad ^ɛ	là'-	"piece of goods"
lā'af ^o	līgıdı+	là'- or lìg-	"cowrie" pl "money"

The count/mass distinction is significant in the choice of quantifiers <u>15.4.1</u> and when plurals are formed with nam^a <u>8.4</u>, and it affects the meaning of constructions with preceding NPs as dependents <u>15.6.2</u>.

Mass nouns can be used in count senses (as in English): *dāam nám* "beers." Some count nouns also have mass senses:

fūug dóòg	"tent" (cloth hut): <i>fūug</i> "item of clothing, shirt"
dàad bún-nám	"wooden things": <i>dàad</i> "pieces of wood"

Manner-adverbs resemble mass nouns syntactically. Mass nouns may occur as manner adverbs, as may count nouns used in senses where number is irrelevant:

Ì κέŋ	nōbá.	"I went on foot." SB
1sg go	leg:pl.	WK corrected to <i>À kéŋ nē nɔ̄bá (nē</i> "with")

15.2.2 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 nĒ náaf.	attempted "It is a cow."
3AN COP FOC COW:SG.	

Nevertheless, written sources often use animate pronouns for higher animals:

Ka wief ya'a sigi li ni, li zuluŋ na paae **o** salibir. Kà wìəf yá' sīgí lì nī, lì zùluŋ ná pāe ò sàlıbır. 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) Bung ya'a bood ye o lubuf, fu po nyeti **o** tubaa. Bùŋ yá' bòɔd yé ò lūbú f, fù pō ňyɛtí ò tùbāa ⁺ø. Donkey:sg if want that 3AN throw.off 2SG.OB, 2SG NEG.IND See:IPFV 3AN ear:PL NEG. "If a donkey wants to throw you off, you don't see his ears." KSS p44 (i.e. "If there's a will, there's a way.")

In stories where animals speak, they are naturally assigned animate gender. When body parts are metaphorically represented as having opinions in this NT passage, they have animate gender:

Nobir ya'a yɛlin ye, "Man ka' nu'ug la zug, m ka' niŋgbiŋ la nii," lin ku nyaŋi kɛ ka o ka' niŋgbiŋ la nii. Nóbìr yá' yɛ̀lī-n yɛ̄, Mán kā' nú'ùg lā zúg, m̀ kā' nín-gbīŋ lā Leg:sg if say-DP that JAN:NZ NEG.BE hand:SG ART upon, 1SG NEG.BE body-skin:SG ART níu +ø, līn kú ňyāŋı ø kɛ́ kà ò kā' nín-gbīŋ lā níu +ø. LOC NEG, DEM.INAN NEG.IRR prevail CAT cause and JAN NEG.BE body-skin:SG ART LOC NEG. "If a leg said, 'Because I am not a hand, I am not in the body', that could not cause it not to be in the body." (1 Cor 12:15)

Babies may be counted as animate or inanimate gender:

Ò/Lì à nɛ bí-līa. "He/she/it is a baby." 3AN/3INAN COP FOC child-baby:sg.

Trees, animate in the traditional world view, may have animate gender:

Tiig wela bigisid **on** a si'em. Tìıg wélà bìgısıd ón àň sī'əm. Tree:sg fruit:PL show:IPFV 3AN:NZ COP INDF.ADV. "The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

but Tiig wela bigisid lin a tisi'a.
 Tiig wélà bigisid lín àň tí-sī'a.
 Tree:sg fruit:pL show:IMPF 3INAN:NZ COP tree-INDF.INAN.
 "The fruit of the tree shows what tree it is." (Mt 12:33, 1996)

The relevant distinction is thus whether the referent is being regarded as a "person"; if first or second person pronouns might apply, the gender is "animate."

A specific human/non-human distinction appears in morphology, in that the $a|b^a$ noun class has exclusively human reference. Elsewhere, any such distinction is

essentially lexical, as with the division between $n\bar{n}$ - "person" and $b\bar{o}n$ - "thing" as "dummy" cbs with adjectives. The availability of human-reference nouns in particular as adjectives <u>15.7.1.4</u> reflects the fact that nouns referring to people are generally either descriptive or labels for rôles, unless they are unique identifiers.

There has been a change over the past decades in the alignment of gender and number. The current system distinguishes animate/inanimate in the singular with no gender distinction in the plural. In older sources like the 1976 NT (as in older Dagbani) inanimate pronoun forms used as heads, like demonstrative $n\bar{\epsilon}^{+/}$, are used indifferently for sg or pl, occasionally with nam^a plurals to avoid ambiguity. However, even the 1976 NT always uses the animate plurals $bamm\bar{a}^{+/}ban^{\varepsilon}s\bar{s}aba^{+}$ of the *dependent* pronouns for inanimate, and my informants use the animate plural forms of all pronouns freely for both genders both as dependents and heads:

Bà à nε̄ kūgá. "They are stones." 3PL COP FOC stone:PL.

In my informants' unselfconscious utterances animate pronouns often appear for expected inanimates:

Nīf-káŋā, 5n sáň'àm nē. Eye-demst.sg, 3an.cntr spoil foc. "This eye, it's spoilt." KT (Overheard)

 \dot{M} $p\bar{v}$ $ny\bar{\epsilon}\cdot \dot{o}-o$ $+ \phi$. "I can't find it [a stethoscope]" (Overheard) 1SG NEG.IND SEE-3AN.OB NEG.

sālıma lá'àd nέ ò būtιιs "gold stuff and (gold) cups" WK gold item:PL with 3AN cup:PL

Speakers correct the gender to inanimate if their attention is drawn to it. The dummy subject pronoun "it" is always li, never o.

The inanimate sg pronoun subject li is not changed to animate o to agree with an animate complement of $\partial e n^a$ "be something":

Li anε Zugsɔb la. "It is the Lord." (Jn 21:7) Lì à nε̄ Zūg-sɔ́b lā. 3INAN COP FOC head-EMPTY.AN ART.

15.2.3 Person

Person is a category confined to personal pronouns. VPs show no agreement with any argument (on plural commands see 21.3.) There are 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.
Bòŋ yá' bòɔd yé ò lūbú f, fù pū ňyētí ò tùbāa +ø.
Donkey:sg if want that 3AN throw.off 2SG.OB, 2SG NEG.IND see:IPFV 3AN ear:PL NEG.
"If a donkey wants to throw you off, you don't see his ears." KSS p44

The 3rd Person plural is used as a non-specific "they" for turning passive constructions actively, much as in English:

Bà yòɔdī f súŋàa +ø?
3PL pay:IPFV 25G.OB good:ADV PQ?
"Are you well paid?" "Do they [never mentioned] pay you well?" SB

This construction has become grammaticalised so far that in *n*-catenation, the object can be construed as the grammatical subject 22.1, e.g.

Diib wusa nari ba di."All foods may be eaten." (Rom 14:20)Dī ub wusa nári ø bà dí.Food all must CAT 3PL eat.

There are formal means of distinguishing different third persons by the use of pronoun ellipsis 20.2.2 and logophoric use of the free pronouns 25.2.

15.3 Pronouns

15.3.1 Personal

	Rigl	nt-bound	Left-bound	Free	Subject+ <i>ì</i>
Sg	1st	'n	m ^a	<i>mān</i> SF <i>mánē</i> LF	mán
	2nd	fù	f	<i>fūn</i> SF <i>fúnē</i> LF	fún
	3rd an	<mark>ò</mark> [ʊ]	0 [ʊ]	ōn ^ε	́э́п
	3rd inan	lì or <mark>d</mark> ì	<i>l</i> (+	<i>līn^ɛ</i> or <i>dīn^ɛ</i>	lín or dín
Pl	1st 2nd 3rd	tì yà bà	tı+ ya+ ba+	tīnám ^a yānám ^a bān ^ε	tīnámì_ø yānámì_ø bán

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The alternate form $m\bar{a}m$ also occurs for 1st sg in any rôle. The bound forms are non-contrastive; they are all liaison words <u>7.2</u>. The left-bound pronouns are used for VP objects, right-bound for all other rôles. They are **never dependent**: in e.g. \dot{m} $b\bar{l}ig$ "my child", \dot{m} is the head of its own NP, and it is *this NP* which is the predependent of $b\bar{l}ig$ "child", exactly like $n\dot{a}$ ab $l\bar{a}$ "the chief" in $n\dot{a}$ ab $l\bar{a}$ $b\hat{l}g$ "the chief's child." There are **no possessive pronouns** in Kusaal.

The "+ \dot{n} " forms are used as subjects in \dot{n} -clauses <u>24.1</u>. The 2pl subject has a form ^{ya} used *after* imperatives <u>21.3</u> with the allomorph -*n*(- before liaison <u>7.2.3</u>.

Free forms may be used for cbs before relative pronouns:

Fvn kanε buoli fv mɛŋ	"You who call yourself (Rom 2:17)
Fōn-kánì bùəlı fò mēŋ	
2SG-REL.SG call 2SG self	

My informants only have *I*- forms for 3sg inanimate; all sources have *I*- for the bound object pronoun.

Kusaal has no honorific usages of plural for singular or 3rd person for 2nd.

Toende Kusaal has \tilde{v} for δ ; the original form was probably $*\eta m v$, with later $*\eta m \to *\eta$ before the rounded vowel. Toende has *ton nam* for *tīnám yānám*; the *nam* of the Agolle forms is presumably the element seen in the pluraliser *nàm*^a.

Long Short	Animate sg òŋā ^{+/} òn ^ɛ	Inanimate s Iìnā ^{+/} Iìn ^ɛ	sg far far	Plural bàmmā ^{+/} bàn ^ɛ
Long Short		nē'ŋá+ nē'+/	near near	nē'-nám ^a NT
Long Short	kàŋā ^{+/} kàn ^ε	kàŋā ^{+/} kàn ^ɛ		

15.3.2 Demonstrative

Note the tone difference between ว*̀n^ɛ lìn^ɛ bàn^ɛ* and free 3rd person pronouns. The *kà*-series is based on an obsolete *g^a|s^ɛ* class pronoun *kà*. My informants

use these forms for animate reference as well as inanimate, but NT prefers $\partial \eta \bar{a}^{+/} \partial n^{\epsilon}$.

The "short" series are used for discourse deixis. They also appear as interrogatives in the sense "which?":

tèŋ-kàn lā ná'àb

"the king of that country" (from a story)

Lìnɛ?	"Which one?"
Nīf-kán <i>è</i> ?	"Which eye?"
Nīn-kánè?	"Which person?"

Much their commonest use is as the basis of **relative pronouns** <u>24.3.2</u>.

The "long" series are used for spatio-temporal deixis. They do not distinguish near and far except with sg inanimate heads; elsewhere, "that" can be specified by following the demonstrative with $|\bar{a}^{+/}$ and "this" by a following $\check{n}w\dot{a}^{+}$ (cf French $|\dot{a}$ and ci.) This use of $|\bar{a}^{+/}$ as deictic is enabled by the fact that demonstratives automatically make the NP definite <u>15.7.5</u>.

sān-káŋā	"at this/that time"
dàu̯-kàŋā sáàm	"this/that man's father"
dàu̯-kàŋā lā sáàm	"that man's father"
dàu̯-kàŋā ňwá sáàm	"this man's father"

 $\hat{J}\eta\bar{a}^{+/}$ lì $n\bar{a}^{+}$ $n\bar{\epsilon}'\eta\dot{a}^{+}$ $n\bar{\epsilon}'^{+/}$ appear only as NP heads, and $\hat{J}n^{\epsilon}$ lì n^{ϵ} cannot follow a cb; however, $b\dot{a}mm\bar{a}^{+/}$ $b\dot{a}n^{\epsilon}$ can be used either uncompounded or after a cb.

 $K an^{\epsilon} k an \bar{a}^{+/}$ are only used as dependent pronouns, and if the head is a noun or noun-adjective compound it must be a cb (sometimes remodelled on the sg.) $K an^{\epsilon}$ may also follow a free personal pronoun, and $arak \delta n'$ "one", but no other quantifiers.

du̯'átà lā lźr-kàŋā	"this car of the doctor's"
bù-kàŋā lā	"that goat"
nō-píàl-kàŋā	"this white hen"
fūn-kánì bùəl	"you who call"

15.3.3 Indefinite

Animate sg	Inanimate sg	Plural
sī'+	sī əla	sīəba+
sī a+	sī a+	

Note that the vowel is *not* glottalised in the plural.

 $S\bar{j}'+s\bar{i}'\partial a'' s\bar{i}\partial ba''$ may be used as heads or dependents, and may follow cbs: $s\bar{i}'a''$ can only follow cbs, as a dependent. For NT WK, but not KT, $s\bar{i}'a''$ is much commoner than $s\bar{i}'\partial a''$ used as a dependent. WK feels that for people $s\bar{i}'a''$ is pejorative; NT occasionally has $s\bar{j}''$ for inanimate: $t\epsilon\eta-s\bar{j}'$ "a certain land." For indefinite pronouns in relative clauses see 24.3.1.

The sense is "some, someone, something", "a certain", indefinite but specific:

"a certain child of yours"

2PL child-indf.an

The meaning is often contrastive, "another, a different" (cf Hausa *wani*, which has very similar usage: Jaggar p314.)

ka man ti ye m sig la, ka sɔ' pun dɛŋi sig sa.
kà mán tì yế m̀ sīg lā,
and 1sg:Nz after say 1sg descend ART,
kà sɔ̄' pún dɛ̀ŋı ø sīg sá.
and INDF.AN already before CAT descend thither.
"when I'm then about to go down, someone else goes down first." (Jn 5:7)

Mεεri onε an Magdalen nε Μεεri sɔ' Meeri śnì àň Magdalen nε̄ Meeri sɔ̄' Mary REL.AN COP Magdalen with Mary INDF.AN "Mary who was Magdalen and another Mary" (Mt 28:1)

Winnig mor o mɛŋ vɛnlim, ka nwadig mɛ mor vɛnlim si'a. Wìnnig mór ò mēŋ vɛ́ňllìm kà ňwādıg mɛ́ mɔ̄r vɛ́ňllìm-sī'a. Sun:sg have ʒan 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 tī f tí-sī'a. 1SG IRR give 2SG.OB medicine-INDF.INAN. "I'll give you a different medicine." WK

The indefinite pronouns can be used to introduce new information:

Dàu-sɔ̄' dāa bέ ... "There was a certain man ..." Man-INDEAN TNS EXIST ...

but this is likely to mean "There was another man ..."; it is commoner just to use an indefinite NP:

Dāỵdāa bέ ..."Once there was a man ..."Man:sg τNS EXIST ...

*S*5[']/*s*[¬]*əl mέ-kàma* means "anyone, anything, everyone, everything":

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O niŋid si'el mɛkama sʊ'uŋa. Ò nìŋıd sī'əl mɛ́-kàma súŋā. 3AN do:IPFV INDF.INAN also-whatever good:ADV. "He does everything well." (Mk 7:37)

In negative clauses the indefinites mean "(not) ... anything", "(not) ... anybody":

Ka so' kudin ku len nyee li ya'asa.
Kà sɔ̄' kūdım kú lēm ňyéɛ 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)

S5'kā'e+ø."There's nobody there."INDF.AN NEG.BE NEG.

 \dot{M} $p\bar{v}$ $y\dot{\epsilon}l$ $s\bar{r}$ ∂la $+\phi$. "I didn't say anything." 1SG NEG.IND SAY INDF.INAN NEG.

15.3.4 Interrogative

Animate		Inanimate	
àn <i>á'</i> àn ^ɛ	"who?"	b5+	"what?"

Plurals with $n \grave{a} m^a$ may be used if a specifically plural answer is being sought. B5 kimm "what exactly?" with the ideophone kimm is common in KB <u>30.1</u>. The initial \grave{a} - of $\grave{a} n 5' \grave{c} n^{\epsilon}$ behaves like the manner-adverb prefix in liaison <u>7.2.1</u>:

```
... keŋ tisi anɔ'ɔnɛ? "to go to whom?" (1 Samuel 6:20)
... kēŋ_ø tísì_ànɔ́'ɔnὲ +ø?
... go cʌr give who co?
```

 $B\bar{2}^+$ can be used after a cb as a dependent interrogative "what?":

nā'-bź	"what cow?" WK DK
	(<i>náaf bó</i> can only mean "What, of a cow's?")
bù-bɔ̄	"what goat?"
dā-bó	"what beer?"

The compound $b\dot{}-b\bar{u}ud\iota^+$ "what kind of?" can also be used as a dependent:

Note the idiom:

 $F\dot{o}$ á $n\bar{\varepsilon}$ $b\dot{o}$ - $b\dot{u}ud\iota$ + ϕ ?"What tribe do you belong to?"2SG COP FOC what sortCQ?

B>- can be used as a predependent, querying a description: "what sort of ...?"

Fò tóm bó-tòuma +*ø*? "What kind of work do you do?" 2SG work: IPFV what-work cq?

Bo yir ka ya na me' n tis mane? Bò-yír kà yà ná mē n tís mánè ⁺ø? What-house:sg and 2PL IRR build CAT give 1SG.CNTR CQ? "What kind of house will you build for me?" (Acts 7:49, 1996)

15.3.5 Reciprocal

Tāaba⁺ "one another" appears as *tāab* clause-medially for some speakers. It can be used after a cb, meaning "fellow-": *ò tùm-tùm-tāaba* "his fellow-workers."

Examples of the pronoun use:

Sòŋımī ø tāaba. Help:IMP 2PL.SUB each.other.	"Help one another."
Tì <i>yúùg nē tāaba.</i> 1P∟delay with each.other.	"It's been a long time." KT

 $Ba d \dot{2}l$ $n\bar{\varepsilon}$ $t\bar{a}aba.$ "They went together." ($d\bar{2}l^{la}/$ "accompany")3PL follow with each.other.

15.3.6 Reflexive

 $M\bar{\epsilon}\eta^{a/}$ "self" always has a predependent. It is used indifferently for sg/pl: $\dot{m} m\bar{\epsilon}\eta$ "myself", $y\dot{a} m\bar{\epsilon}\eta$ "yourselves."

nà'ab	lā	mέŋ	"the chief himself"
chief:se	6 ART	self	

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"Self" forms must be used for complements referring to the clause subject:

Ì ňwέ'ε	ɛ_m mĒŋ.	"I hit myself."
1sg hit	1sg self.	not *Ѝ ňwé'ɛ m or *Ѝ ňwé' mān.

Kusaal resembles English, as opposed to French, in using a pronoun possessor with body parts acted on by their owner, e.g.

Ba pv piesidi ba nu'us wvv lin nar si'em la ka ditta. Bà pv pīəsídí bà nú'ùs wvv lín nār sī'əm lá kà dítā ⁺ø. 3PL NEG.IND clean:IPFV 3PL hand:PL like 3INAN:NZ be.proper INDF.ADV ART and eat:IPFV NEG. "They don't wash their hands properly before they eat." (Mt 15:1)

Where ordinary pronouns would be permissible, using $m\bar{\epsilon}\eta$ implies contrast:

À píə m̄ mĒŋ	nú'ùs.	"I washed my own hands."
1SG wash 1SG self	hand:pl.	

Fù mĒŋ kūu	bí-lìaa	+ø?	"Yourself or the baby?"
2SG self or	child-baby:se	G CQ?	("Which of you needs the doctor?")

See also <u>15.7.3</u> on $am\bar{\epsilon}\eta\dot{a}^+$ "really, truly" as a modifier "genuine, real"; cf the adjective $m\bar{\epsilon}\eta(r^{\epsilon}$ seen in $y\bar{\epsilon}l-m\epsilon\eta(r^{\epsilon})$ "truth" ("genuine matter.")

15.3.7 Dummy head *s5b*

S5b^a is a dummy head for a preceding NP or AdvP dependent; it specifies number and gender but is otherwise semantically empty.

Animate	sg	sīb ^a	pl	dìm ^a
Inanimate	sg/pl	<u>dìn^{nε}</u>		

NP predependent constructions have their usual meanings 15.6.2:

mān dín ^{nε}	"my one, mine"
À-Wīn dím	"Awini's family"

2SG.CNTR speak: IPFV FOC 1PL.CNTR EMPTY.INAN. ("We can't speak your language but ...") "You're speaking ours."

pù-pìəlım sób ^a		
pl p ò-pìəlım dím^a	"holy person" (<i>pù</i>	<i>-pìəlım^m</i> "holiness")
dūnıya ní dìn ^{nɛ}	"earthly one" (1 (Cor 15:44)
Bòk dím	"Bawku people"	
yīigá sɔ̄b ^a	"first (person)"	beside y <i>īig-sób^a id</i>

Cb predependents occur in set expressions:

yī-sób ^a	pl <i>yī-sób-nàm</i> a	"householder"	(<i>yīr^{ε/}</i> "house")
yī-dím ^a		"members of the h	ousehold"
nīf-sób ^a		"miser"	(<i>nīf^{ɔ/}</i> "eye")
tàňp-sɔ̄b ^a		"warrior"	(<i>tāňp</i> ^ɔ "war")
zūg-sób ^a	pl <i>zūg-sób-nàm</i> a	"boss" NT "Lord"	$(z\bar{u}g^{\gamma})$ "head")

 $\dot{O}\,s\bar{\jmath}b^{a}/\bar{\jmath}n\,s\bar{\jmath}b^{a}$ mean "the person we were just talking about."

15.4 Quantifiers

15.4.1 Overview

Formally, quantifiers resemble noun sg or pl forms, frequently with apocopeblocking 5.1.3; most number words are also preceded by number prefixes.

Quantifiers can be classified as **count** or **mass** <u>15.2.1</u>, 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 bέdugū	"a lot of people"
	nīdıb bábıgā	"many people"
	kù'əm bέdugū	"a lot of water"
not	*kù'əm bábıgā	*"many water"

Mass quantifiers are

bèdvgū ^{+/}	"a lot"	pāmm LF pāmné	"a lot"
fīiň ⁼	"a little (liquid)"	bī əlá+	"a little"
พบิบ=	"all"	wūsa+	"all"

Count quantifiers include the number words, and also

bàbıgā+/	"many"	kàlıgā+/	"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 appear typically as determiners in NPs <u>15.7.2</u>, but like pronouns they may also be heads of NPs; they can pluralise with $n \dot{a} m^a$:

Pāmm ké nā.	"Many came."
Bèdugū ké nā.	"Many came."
Bèdugū lā ké nā.	"The crowd came"
Àyí' ké nā.	"Two came."
Àyí' lā ké nā.	"The two came."
màli̯āk-nám túsà pīiga nám	"tens of thousands of angels"

Àyí' námá_àyí' á nē nāasí. NUM:two PL NUM:two COP FOC four. "Two two's are four."

A quantifier head after a dependent NP is a **partitive** construction <u>15.6.2</u>. Quantifier heads may be followed by dependent pronouns; as quantifiers have no combining forms, there is no compounding:

Ka ti ye ti nye diib yaani moogin nwa diis nidib bedego bama nwa?
Kà tì yé tì ňyē dīıb yáa ní mɔɔɡʋ-n ňwá
And 3PL that 3PL find food where LOC grass:sG-LOC this
Ø dìıs nīdıb bédvgū bámmā ňwá +Ø?
CAT feed person:PL many DEMST.PL this CQ?
"Where are we going to find food in this wilderness to feed this crowd of people?" (Mt 15:33, 1996: KB nimbama nwa wusa "all these people")

15.4.2 Number words

15.4.2.1 Quantifiers

The numbers in their core rôle as quantifiers take the forms

1	yīnní+	10	pīiga+	100	kòbıgā=
2	àyí'+	20	<i>pīsí</i> + [pisi]	200	<i>kòbısí</i> + [kɔbɪsi]
3	àtáň'+	30	pīs táň'+	300	kòbıs táň'+
4	ànāasí+	40	pīs nāasí+	400	k <i>àbıs nāas</i> í+
5	ànū+	50	pīs nū+	500	kòbıs nū+
6	àyúəbù+	60	pīs yúøbù+	600	kòbıs yúøbù+
7	àyźpżę+	70	pīs yópòຼ+	700	kòbıs yópòẹ+
8	àníi ⁼	80	pīs níi ⁼	800	kòbıs níi ⁼
9	àwāẹ+	90	pīs wāe̯+	900	k <i>àbıs wā</i> e+

The quantified noun is normally plural, except with $y\bar{\iota}nn\ell^+$, but may be singular with units of measure: $y\bar{\imath}lvg\dot{a} \dot{a}t\dot{a}\ddot{n}'$ "¢600 [cedis]."

The forms for 1, 4, 6, 8, 10, and 100 show apocope-blocking <u>5.1.3</u>; the forms for 20 and 200 are not apocope-blocked but are combinations with the stem of $\frac{\partial y}{\partial t}$.

 $k \ge b i g \bar{a}^=$ has LF like the SF, not $*k \ge b i g \acute{a}a$, contrary to the usual rule for forms with apocope-blocking.

"Thousand" is a regular $r^{\epsilon}|a^+$ class noun, $t\bar{u}sir^{\epsilon/}$: $t\bar{u}s\dot{a} \dot{a}t\dot{a}n'$ "3000." "Half" is $p\bar{v}-s\dot{v}k^a$ pl $p\bar{v}-s\dot{v}g\dot{v}s^{\epsilon}$. Other numbers are formed with $n\bar{\epsilon}$ "with, and":

kòbıs táň' nē pīs yúebù nē nū "three hundred and sixty-five"

11 to 19 have the special contracted forms

pīi nē yīnní, pīi nē yí', pīi nē táň' ... pīi nē wāg (or pīi nā yīnní, pīi nā yí' ...)

The prefix \dot{a} - is omitted after $n\bar{\epsilon}$ "with", and sometimes also after focus- $n\bar{\epsilon}^{+/}$:

Lì à nɛ nāasí. / Lì à nɛ ànāasí. "They're four."

The forms $\partial y (\eta \bar{a}^{+/} \partial t \dot{a} \eta \bar{a}^{+/} mean$ "two, three exactly." If I have four children

Ѝ mór bīisá_ àtáň'.	"I have three children."
1SG have child:PL NUM:three.	is true, though misleading

but *Ṁ mór bīisá àtáŋā.* "I have exactly three children." is false.

Noun phrases

These forms can also be used after $n\bar{\epsilon}$ "and", as in $p\bar{i}i n\bar{\epsilon} ying\bar{a}$ "twelve exactly." They are exceptional in not permitting focus with the particle $n\bar{\epsilon}^{+/} 27.1.2.1$.

 $Y\bar{i}nni^+$ can also be construed with a preceding noun cb:

	kūg-yínnì+	"one stone" (L spreading <u>7.4</u>)
cf	kūgor yīnní+	"one stone" (no L spreading)

In Dagbani both "one" and "ten" can be used after a combining form, but Kusaal has only a few isolated forms like *dà-pīiga* "ten days".

After personal pronouns the number prefix is *bà*- instead of *à*- <u>13.3</u>: *tì bàtáň*' "we three", *yà bàyźpże* "you seven", *bà bàyí*' "they two."

15.4.2.2 Counting forms

1 to 9 have different forms used in counting, lacking apocope-blocking and using the number prefix \hbar - instead of \dot{a} - <u>13.3</u>.

1	yēóŋ or àràkóň'	6	<i>ì</i> уи́ <i>è</i> b
2	<i>ìyí</i> '	7	<i>̀πpòe្</i> [tone <i>sic</i>]
3	<i>ìtáň</i> '	8	'nníi
4	'nnāas	9	<i>'nwā</i> e
5	'nnū	continuing $p\bar{l}iga$, $p\bar{l}i n\bar{\epsilon} yl$ as with quantifiers	

Àràkóň' can also be used as a quantifier: *búvg àràkóň*' "one goat." The form *kōň'ɔkō* appears as a postposition <u>16.6</u>: *m̀ kōň'ɔkō* "by myself." In performing arithmetic the quantifier forms are used:

Àyí' námá_àyí' á nē nāasí. NUM:two PL NUM:two COP FOC four. "Two twos are four."

15.4.2.3 Adjectives and ordinals

	yīmmír ^ɛ	yīmmá+	yīm-	"single, alone"
e.g.	bì-yīmmír wāb-yímmìr		"only child" "solitary elephant"	

There are two words meaning "one of a pair": $n y a \mu k^2$ pl $n y a' a d^{\epsilon}$ is only used for eyes, while $y \bar{\iota} \mu \eta^{2/}$ pl $y \bar{\iota} n a^+$ is used for other normally paired body parts: $n \bar{\iota} b - y (\mu \eta^2)$ "one leg", $n \bar{\iota}' - y (\mu \eta^2)$ "one hand", $n \bar{\iota} f - n \bar{\iota} y a \mu k$ "one eye", $t b b - y \bar{\iota} \mu \eta$ "one ear."

dèɛŋ-

The only ordinal adjective is

dēɛŋª

or dēɛmis^ε or dēɛna⁺

dēɛňsɛ

.

"first"

as in sɔ̄b-dɛ́ɛ̀ŋ "first census" (Lk 2:2, 1976.)

"First" can also be expressed by $y\bar{i}ig\dot{a}^+$ "firstly" as a predependent:

linε da an yiiga dabisir līnı_____ø dá àň yīigá dàbısır. 3INAN.CNTR CAT TNS COP firstly day:sg. "That was the first day." (Genesis 1:5)

Other ordinal expressions can be created using $p \dot{a} a s^{\epsilon}$ or $p \dot{\epsilon}' \epsilon s^{\epsilon}$ "add up to":

dàu-kànι pɛ̀'ɛsa_ àyí' lā man-REL.SG add.up.to NUM:two ART "the second man" ("man who has added up to two")

lìnı pàasa àtáň' lā "the third one" REL.INAN add.up.to NUM:three ART

Another construction uses numbers as predependents before $d\bar{a}an^a$ "owner of ..."; such phrases are then themselves used either as NP heads or as determiners:

àyí' dāan lā	"the second one"
būvgá àtáň' dāan lā	"the third goat"

Yīigá dāan may be used for "first." In "*Kusaal Solima ne Siilima*" p35 ordinal forms used in counting "first, second, third ..." appear without apocope-blocking: *atan'-daan ... ka anaas-daan ... ka nu-daan ... ka yuob-daan ... ka poi-daan ... ka niidaan ... ka wai-daan ... ka piig-daan*, but my informants use the ordinary quantifier forms in this construction. Multiplicatives (answering *àbùlá*? "how many-fold?") are expressed

yīmmú ⁺	"straight away, at once"
àbùyí'+	"twice"
àbùtáň' ⁺	"three times"
àbùnāasí+	"four times"

and so on, with the same stems after the prefixes as for the quantifiers, up to

bùpīiga+	"ten times"
o o p n g a	

The \dot{a} - of these forms is not the number prefix but the manner-adverb formant, and a LF-final vowel mora before it is - ι not -a; its attachment only to 2-9 is presumably therefore analogical.

Answers to *nɔ̄ɔrá àlá* "how many times?" have forms of the pattern

	nōɔr yīnní+	"once"
	nɔ̄ɔrá àtáň'+	"three times"
or	nɔ̄ɔrím bùtáň'+	"three times" NT

This $n\bar{}_{}$ is not "mouth" (= Mooré $n\acute{o}$ or e) but corresponds to Mooré $n\acute{a}$ or e "times", homophonous with Mooré $n\acute{a}$ or e "leg"; cf Toende Kusaal $n\bar{}_{}$ ' $\bar{}_{}$ t = Agolle $n\acute{}_{}$ being". Original open and closed oo fall together when nasalised <u>3.2.2</u>. For the semantics cf Hausa sàu ukù "three times" sau "foot(print)." Niggli's dictionary gives Toende $n\acute{}_{}$ 't (tone sic) in the sense "fois" and even has noba ayi beside no'ot ayi "deux fois." Agolle $n\bar{}_{}$ times" does not have a glottalised vowel, however.

Distributives ("two by two" etc) are reduplicated forms without apocopeblocking; there is no L spreading on the second part except with 10, 100, 1000:

1 2 3 4 5 6 7 8	yīn yīn àyí' yí' àtáň' táň' ànāas nāas ànū nū àyúèb yúèb àyópòẹ póẹ àníi níi	10 20 30 40 50 60 70 80	pīi píìg pīsí pīsí pīs táň' táň' pīs nāas nāas pīs nū nū pīs yúèb yúèb pīs yópòẹ póẹ pīs níi níi	100 200 300 1000	kòbıg kóbìg kòbısí kóbısí or kòbıs yí' yí' kòbıs táň' táň' etc tūsır túsìr
8	àníi níi	80	pīs níi níi		
9	àwā <u>e</u> wā <u>e</u>	90	pīs wā <u>ę</u> wā <u>ę</u>		

Intermediate numbers are made by replacing the last part of the usual quantifier phrase with a distributive:

pīs nū nē nāas nāas	"by fifty-fours"
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The distributives can have a preceding NP as a dependent:

dābá àyópòẹ póẹ	"weekly" ("by sevens of days")

15.4.3 Proquantifiers

Quantifiers have corresponding proforms; the \dot{a} - is the *number* prefix, and induces preceding LF-final -*a* not - ι <u>7.2.1</u>.

Demonstrative	Indefinite	Interrogative
àlá ⁺	<i>sī</i> 'əm ^m	àlá ⁺
"so much/many"	"some amount"	"how much/many?"

15.5 Personifier particle

Indigenous Kusaasi personal names are always preceded by the personifier particle, which appears as \hat{A} - by default, but \hat{N} - before adjective stems, where \hat{N} - is a syllabic nasal assimilated to the point of articulation of a following consonant. The particle is a liaison word; the \hat{A} - allomorph, like the manner-adverb prefix \hat{a} -, is preceded by word-final - ι , not -a as with the number prefix.

Personal names do not take adjectives or the article, but may occur with other determiners. \hat{A} - is deleted after a predependent, but \hat{N} - remains.

Personal names can pluralise with *nàm*^a; such plurals can mean e.g. "more than one person called Awini"; Niggli's Toende Kusaal dictionary also gives the *cum suis* meaning: *Awınnam*: "Awin and his people. *Awinne et consort (les Awinne).*"

À-Wīn	"Awini"
tì Wīn	"our Awini"
Ѝ Wīn	"my Awini"
À-Wīn-káŋā	"this Awini"
À-Wīn nám	"Awinis"
Ň-Dāvg	"Ndago"
tì Ň-D āvg	"our Ndago"

Although the Kusaal Bible versions (unlike the Mooré Bible) use foreign names without the particle, *À*- normally appears before them in speech:

À-Mūusa	"Moses"
À-Yīisa	"Jesus"
À-Sīimóòn	"Simon"

For examples of Kusaasi names see <u>29.2</u>. NT has some personifications of abstractions: \dot{A} -Sàň'vŋ "Destruction." In stories where animals are characters, animal names take \dot{A} -:

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À-Bāa "Mr Dog"
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A number of animal and bird names incorporate the personifier particle as part of the common noun, without any implication of personification; among such nouns are \dot{a} - $d\dot{a}al\dot{v}\eta^{2}$ "stork" \dot{a} - $g\dot{a}\dot{v}ng^{2}$ "pied crow" \dot{a} - $k\bar{z}ra$ - $d\hat{a}m^{ma}$ "praying mantis" and the loanword \dot{a} - $m\dot{u}s^{\epsilon}$ "cat." Thus

à-dàalúŋ	"a stork"
<i>m̀/mān dáalúŋ</i> 1sg/1sg.cntr stork:sg	"my stork"
dāų lā dáalúŋ man:sg art stork:sg	"the man's stork"
Lì à n <i>é</i> à-dàalúŋ. 3INAN COP FOC PERS-stork:sg.	"It's a stork"
<i>À ňyź à-dàalúŋ.</i> 15g see pers-stork:sg.	"I've seen a stork."

The \dot{a} - allomorph is not elided after a predependent but is *replaced* by it, as shown by the M spreading affecting the stem. The fact that \dot{a} - thus effectively fills a predependent slot may reflect a historical origin in an indefinite third-person pronoun "someone", perhaps related to the Mooré 3sg pronoun $y\tilde{e}\sim a$.

A further similarity with personal pronouns appears when *verb phrases* are nominalised by the personifier particle, which then takes the place of a subject pronoun in the sense "someone who ...":

Atum sכ'	"Siloam" (Jn 9:7)
À-tùm sɔ̄'	("Someone sent someone")
PERS-Send INDF.AN	

Apυ-kpɛn'-baŋυ dimÀ-pūkpɛ́ň' bàµŋυdímPERS-NEG.IND enter circumcision EMPTY.PL"the Uncircumcised" (Eph 2:11)

This is common in proverbs and similar set expressions:

À-dāa yέl kā' tíımm ⁺ø. PERS-TNS say NEG.HAVE medicine NEG. "Did-say has no remedy." (No use crying over spilt milk.)

À-ňyē nē nīf sóň'ɔ___ À-wòm tòba. PERS-see with eye:sg be.better.than PERS-hear ear:PL "Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)

À-Kīdıgı ø Bū'əs pers-cross cat ask	"Crossed over and asked" (name of the constellation Orion.)
Apozotyel À-Pū-zót-yɛ̄l	"Doesn't-fear-trouble", character in KSS p35.
${\tt PERS-NEG.IND-run:IPFV-thing:SG}$	

The expected final LF in this expression, induced by the negative clitic paired with $p\bar{\nu}$, is seen only when the name is clause-final:

Apozotyel da ane o saam biig ma'aa.À-Pū-zót-yĒldá à né ò sàam bîig mà'aa.PERS-NEG.IND-run:IPFV-thing:SG TNS COP FOC 3AN father:SG child:SG only"Fears-nothing was his father's only child." KSS p35

 \dot{A} - can appear as a predependent of the subject of an entire clause, with the meaning "someone whose ...":

Bà kèn né À-nà kúu m̀ nūa yír, kà bà pū kén 3PL go:IPFV FOC PERS-IRR kill 1SG chicken:SG house:SG and 3PL NEG.IND go:IPFV À-nōɔs bé 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 bέ. "There are chickens."] Nominalisations with à- can pluralise with nàm^a:

À-zī' ø kpí nàm kpîd né kà téňbìd.
PERS-NEG.KNOW CAT die PL die:IPFV FOC and tremble:IPFV.
"Those who don't know death, are dying with a struggle." (Proverb) (i.e "It's a storm in a teacup.")

15.6 Dependents preceding the head

The head of a NP may be preceded by a dependent. Only one is permitted, but the resulting NP may itself recursively serve as the head of a NP with yet another predependent. Specific predependents precede generic, with cbs last:

Wínà'am [pú'vsùg [fúùg dɔ́ɔ̀g]] "tabernacle" (God's [worship [cloth hut]])

For the rules regarding L spreading after predependents see 7.4.

15.6.1 Combining forms

A combining form as a predependent is always generic and non-referential. Compounds with a predependent cb can be freely created, but resemble the compounds seen in other languages more closely than those with cb heads preceding adjectives and dependent pronouns. Specialised lexical meanings often occur with dependent cbs, rarely with head cbs before adjectives and never before pronouns.

If the head is a deverbal noun, it may be preceded by a combining form representing an **argument**, with count or mass meaning:

dā-núùr ^ɛ	"beer-drinking"	
gēl-kúès ^a	"egg-seller"	

With **agent nouns** from transitive verbs the cb usually represents an object. Agent nouns from intransitives may have an AdvP or indirect object cb complement. These compounds can be freely coined, and their meanings are generally transparent, but there are many idiomatic set expressions. Examples:

nīn-kúùd ^a	"murderer"
bù-kūvd ^{a/}	"goat-killer"
nō-kúùd ^a	"hen-killer"
pu̯'à-kūvd ^{a/}	"woman-killer"
n ɔ̄-zá ňl ^{lε}	"holder of hens"
wìd-kùøs ^a	"horse-seller"

bù-kùøs ^a	"goat-seller"
sàlım-kùøs ^a	"gold-seller"
dā-núùd ^a	"beer-drinker"
zīm-gbáň'àd ^a	"fisherman" ("fish-catcher")
nō-dí'àsª	"chief's spokesman" ("command-receiver")
tàn-mēɛdª	"builder" (<i>tān^{nɛ} "earth"</i>)
làmp5-dí'èsª	"tax collector" (French <i>l'impôt</i>)
gbàn-mī ⁻ id ^{a/}	"scribe" NT ("book-knower")
pu̯'à-sāň'am ^{ma}	"adulterer" ("woman-spoiler")
zà'-nō-gúr ^a	"gate-keeper" (<i>zà'-nɔ̄ɔr^{ε/}</i> "gate")
dà-kīəd ^a	"wood-cutter"
kòňb-kīm ^{na}	"herdsman" (<i>kòňb-</i> cb of <i>būn-kóňbùg^ɔ "animal"</i>)
bùl-sīgıd ^{a/}	"well-diver" (<i>bùlıg</i> ª "well")
tùən-gāt ^a	"leader" <i>(Ò gàad túèn</i> "He's gone ahead")
ňyà'an-dɔ̀l ^{la}	"disciple" (<i>ňyáˈaŋ</i> ª "behind" <i>, dɔ̃l^{la/}</i> "accompany")
pu̯'à-lā'adª	"laugher at women" WK
	(Ò là'ad pūʿ'ab "He laughs at women")

My informants freely create and cite agent nouns in isolation, but it is unusual in practice for agent nouns to appear "bare"; in my materials only *bāŋıd*^a "wise man", *siākıd*^a "believer", *sūŋıd*^a "helper", *fāaňd*^{a/} "robber", "Saviour" occur often. With monosyllabic agent nouns there is often a preceding cognate cb, sometimes an object, but often apparently just a reduplication of the agent noun stem:

màal-māan ^{na}	"sacrificer"
zī-zîìd ^a	"carrier-on-head"
tù'as-tù'as ^a	"talker"
zàb-zàb ^a	"warrior" (tone <i>sic</i>)
zòt-zōt ^a	"racer, athlete"
tùm-tūm ^{na}	"worker"

Cbs occur before deverbal **instrument nouns** in object or adverb senses:

si̯à-lɔ̄ɔdíŋª	"belt" (waist-tying thing)
nīn-gótìŋ ^a	"mirror" (eye-looking thing)
nīn-gótìs ^ɛ	"spectacles"

If the head is a **gerund**, a predependent cb may represent a subject or complement. For the $-r^{\varepsilon}$ (not $-b^{2}$) suffix of these 2-mora stem gerunds see <u>11.1.1</u>.

If the underlying verb is transitive, a predependent cb cannot be a subject. It is most often an object:

pu̯'à-dīır ^ɛ	"marriage" (<i>Ò dì pỵ</i> 'ā "He's married a wife")
nīn-kóùr ^ɛ	"murder"
dā-núùr ^ɛ	"beer-drinking"
Sāmán-píər ^ɛ	traditional New Year ("Courtyard Cleaning")
bùgúm-tɔ̄ɔňr ^ɛ	Fire Festival ("Fire Throwing")
nō-lóòr ^ɛ	"fasting" ("mouth-tying")
nō-póòr ^ɛ	"oath" (<i>p</i> 5 ⁺ "swear")
nō-náàr ^ɛ	"covenant" (<i>nā</i> ⁺ "join")
nīn-báàl-zɔ̄ɔrɛ	"pity" (<i>Ò zòt·ō nīn-báalìg.</i> "He has pity on him")

It may represent an AdvP:

mò-pīl ^{lɛ}	"grass roof" ("covering with grass")
kùm-vū'ugír ^ɛ	"resurrection"
	(<i>Ò vù'ug kūmı-n.</i> "He came alive from death.")

Although many of these are set forms, free creation of nonce-forms is possible:

fū-yέἐr ^ε "	shirt-wearing" WK
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Cbs as subjects are seen only with gerunds from intransitive or patientive ambitransitive verbs:

nōb-kóòr [€]	"breaking a leg" ($k\dot{2}^+$ is intransitive)
nū'-mźdìr ^ɛ	"swelling of the hand"
wìn-līir ^ɛ	"sunset" (<i>Wìnnıg lí yā.</i> "The sun has set/fallen.")
<i>รน</i> ิทั-รล์ทั'บ้ŋ ^ว	"sorrow" (<i>À sūňf sáň'àm nɛ̃.</i> "My heart is spoilt"
	= "I'm sad.")
sūň-péèn ^{nɛ}	"anger" (<i>À sūňf pέlìg nē.</i> "My heart is white.")

A dependent cb before a deadjectival abstract noun may have a sense much like an argument, corresponding to the subject of a related verb:

pù-pìəlım ^m	"holiness" ("inside-whiteness")	
sūň-kpí'òŋ ^ɔ	"boldness" ("heart-strength")	
sūň-má'asìm ^m	"joy" ("heart-coolness")	
	(<i>À sūňf má'e yā.</i> "I'm joyful.")	
nìn-tōllím ^m	"fever" ("body-heat")	
wīn-tóòg ^o	"ill fate" ("fate-bitterness")	

Before heads which are neither deverbal nor abstract nouns, a dependent cb has a very general quasi-adjectival sense. Such compounds are especially liable to develop specialised lexical meanings.

bì-fūug	"children's shirt" (i.e. suitable for children)
wìd-zūvr	"horsetail"
wāb-mɔ́ɔgū-n WK	"in elephant-bush, where there are elephants"
zà'-nɔ̄ɔr	"gate" ("compound-mouth")
mà-bīig	"sibling" ("child by [same] mother")
bā'-bíìg	"half-sibling" ("child by [same] father")
tèŋ-bīig	"native" ("child of a country")
nàsàa-sìlvg	"aeroplane" (European hawk) ILK

WK has the exceptional forms $n\acute{a}af-bi'is\acute{m}$ "cow's milk", $b\bar{v}vg-bi'is\acute{m}$ "goat's milk", where the dependent has singular form and tone, but the tone sandhi is that of a compound (note the lack of M spreading after $n\acute{a}af$ -.)

15.6.2 Noun phrases

Complete NPs as predependents play a rôle analogous to English genitives and NP complements with "of" (CGEL pp467ff, 441.) The range of meanings is similarly very wide, and dependent on the semantics of both head and dependent. Indefinite non-count predependent NPs function as modifiers, and definite and/or count NPs as determiners. Personal pronouns never function as determiners themselves, but they often head predependent NPs which do <u>2.3</u>.

Definite predependents do not automatically make a NP head definite <u>15.7.5</u>. For $m\bar{\epsilon}\eta^{a/}$ "self" and $s\bar{5}b^{a}$ as heads after predependents see <u>15.3.6</u> <u>15.3.7</u>.

If the head is a demonstrative, indefinite or interrogative pronoun or a quantifier, the construction with a predependent is **partitive**:

nīn-síəbà	"certain people"	sīəba	dependent
yà sɔ̄'	"some one among you"	s <i></i> 5'	head
nīdıb lā síəbà	"certain of the people"	sīəba	head
nīdıb síəbà	"certain ones among people"	sīəba	head
nīdıbá àyí'	"two people"	àyí'	dependent
nīdıbá àyí' lā	"the two people"	àyí'	dependent
nīdıb lá àyí'	"two of the people"	àyí'	head

The sense is also partitive if the head is a relative clause with an indefinite pronoun as relative:

Pa'alimi ti nidiba ayi' nwa fun gaŋ sɔ' Pà'alımī tí nīdıbá àyí' ňwá fún gāŋ sɔ̄' Teach:IMP 1PL.OB person:PL NUM:two this 2SG:NZ choose INDF.AN "Tell us which of these two people you have chosen" (Acts 1:24)

A partitive sense is not possible with other head types: e.g. *nīdıb lā g(gìs* must mean "the dumb ones *belonging* to the people", not "among the people" (WK.) Abstract indefinite NPs as predependents ascribe a quality to the head:

nā'am kúk	"throne" ("chieftaincy chair")
nā'am sú'ulìm	"kingdom" ("chieftaincy possession")
ρὺ'υѕυց dóòg	"temple" ("worship house")
tūlıgír bún	"heater" ("heating thing" = $b\bar{v}n-t\dot{v}l\iota g\dot{\iota}r^{\varepsilon}$)
dūgub dút	"cooking pots"
līgıdı túvmà	"expensive work" (<i>līgıdı</i> + "money")

There are sometimes alternate forms with cbs:

	tàňp-sɔ̄b ^a	"warrior"	(<i>tāňp</i> ^ɔ "war")
	pù-pìəl-sɔ̄bª	"holy person"	(Rom 3:10, 1996)
but	pù-pìəlım sób ^a	"holy person"	(Mt 10:41, 1996)
	pù-pìəl-tūvma+	"holy actions"	(Rom 6:13, 1996)
but	pò-pìəlım tóvmà+	"holy actions"	(Mt 5:10, 1996)

Language names may appear as abstract nouns describing an ethnic group:

Kūsáàl yír nē kūøb	"Kusaasi houses and agriculture"
Nàsāal búgóm	"electricity" ("European fire")

Concrete indefinite mass NPs as predependents express the material of which the head consists.

sālıma bútìŋ	"golden cup"
sālıma nē ānzúrıfà lá'àd	"gold and silver goods"

Count nouns may appear here in mass senses 15.2.1:

fūug dóòg	"tent" (cloth hut)
dàad bún-nám	"wooden things" (<i>dàvg</i> ⁵ "piece of wood")

Despite the presumably generic meaning, NP predependents of this type can be antecedents of anaphoric pronouns:

sālıma lá'àd né ò būtus "gold goods and [gold] cups" WK 15.1

This is not the case with cbs of mass nouns used as generic complements of deverbal nouns, as in *sàlum-kùes* "gold-seller", $d\bar{a}$ -núùd "beer-drinker"; for some discussion of non-referential NPs as antecedents in English see e.g. CGEL pp400ff, and p1458; though this is not stated, the restriction of anaphora to the same clause implied on p400 is not valid in English in the case of *generic* non-referential NPs.

An interesting case involving a concrete mass noun is the compound $k\underline{v}'\dot{a}$ - $\check{n}w\bar{n}ig$ "current" ("water" + "rope.") This perhaps represents "aquatic rope" in contrast to * $k\dot{u}'em \check{n}w\hat{n}g$ "a rope made of water", suggesting that the construction with unbound concrete mass predependents is limited to the specific sense "made of ..."

With count and/or definite heads, meanings include kin relations, body parts, and ownership:

m̀ bīig	"my child"
dāu lā bîig	"the man's child"
dāu lā bí <i>àr bìig náàf z</i> ùur	"the man's elder brother's child's cow's tail"
Kūsáàs wádà	"customs of the Kusaasi"

Nimbɛ'og yir na san'am. Nīn-bɛ́'og yír nà sāň'am. Person-bad:sg house:sg IRR spoil. "The house of a wicked person will be destroyed." (Proverbs 14:11)

A contrast with a non-referential predependent cb:

nà'ab lā wíàf zūur	"the chief's horse's tail" (the chief has a horse)
nà'ab lā wíd-zūur	"the chief's horse-tail" (the chief may not own a
	complete horse at all)

Dāan^a "owner of ..." (*nàm*^a pl) always has a predependent NP; this may represent a concrete possession, or if it is adverbial or has an abstract sense, it may ascribe a quality (as with Hausa *mài*, or Arabic ذو):

lór dáàn ^a	"car owner"
būvg dáàn ^a	"goat owner"
kù'əm dáàn ^a	"water owner"
tìəŋ dáàn ^a	"bearded man" Hausa mài geemùu

Zu-wok daan po gangid bugum.Zù-wōkdáànpūgáŋìdbúgúmm +ø.Tail-long:sg owner:sg NEG.IND step.over:IPFV fireNEG.Proverb: "One with a long tail doesn't step over a fire."(If you have family commitments you shouldn't take risks.) KSS p38

pù-pìəlım dáàn ^a	"holy person"
būgusígā dáàn ^a	"softly-softly sort of person" WK

See <u>15.4.2.3</u> on the use of $d\bar{a}an^a$ with numbers to make ordinal expressions. A cb predependent appears before $d\bar{a}an^a$ in a few set expressions:

yī-dáàn ^a	"householder" = yī-sɔ́b ^a (Hausa mài gidaa)
tèŋ-dāan ^a	(literally "land-owner"): traditional earth-priest

Before gerunds and other abstract nouns describing events or processes, NP predependents refer to *subjects*. Such constructions are themselves most often used as subjects or with postpositions.

Dāulākúlògdāa mālısím.Man:sg ART go.home:ger TNSbe.sweet 1sg.ob."The man's return home pleased me."

A generic object cb may also appear, and adjunct AdvPs or VP-final particles may follow the head:

ya antu'a morim koto ni ne taaba la yà àntu'à-mɔ̄rím kɔ́tù 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)

Ninsaal Biig la lɛbʋg la naNīn-sáàlBîglālɛ́bʋ̀glānāPerson-smooth:sgChild:sg ART return:ger ART hither"the return of the Son of Man" (Mt 24:27)

15.6.3 Adverbial phrases

Predependent AdvPs may not be proadverbs. Most such AdvPs are locative, or phrases with $y\bar{\epsilon}l\dot{a}^+$ "about" <u>16.6</u>, or involve the specialised head $d\bar{a}an^a$ <u>15.6.2</u>.

dūnıya ní nìn-gbīŋ	"earthly body"
kɔ̄lugu-n nɔ́-dáùg	"crayfish" ("in-the-river cock")
Bòk dím	"Bawku people"
dàtìỵŋ níf	"right eye"
dàgòbıg níf	"left eye"
zūgó-n níf-gbáỵŋ	"upper eyelid"
tɛ̄ŋเ-n níf-gbáu̯ŋ	"lower eyelid"

Ba da mor moogin bunkonbid nε ba buudi, yin bunkonbid nε ba buudi ...Bà dà mòr mōogu-n bún-kóňbìd né bà būudi, yín bún-kóňbìdBPL TNS have bush:sG-LOC thing-hair:PL and 3PL kind, house:sG:LOC thing-hair:PLné bà būudi...and 3PL kind ..."They took wild animals with their kind, tame animals with their kind ..."(Gen 7:14)

Kūsáàs kúèb nē yīr yélà gbàuŋ"A book about Kusaasi houses and agriculture"dàu-kàŋā lā yélà gbàuŋ"a book about that man" WK

 $Y\bar{i}ig\dot{a}^+$ "firstly" appears as a predependent meaning "first" <u>15.4.2.3</u>, e.g.

linε da an yiiga dabisir līnı_____ø dá àň yīigá dàbısır. 3INAN.CNTR CAT TNS COP firstly day:sg. "That was the first day." (Genesis 1:5)

15.7 Dependents following the head

Dependents follow a head noun in the order adjective(s), quantifier, dependent pronoun or AdvP, article or $\breve{n}wa^+$ "this." All except adjectives are determiners.

Adjectives and dependent pronouns follow a head noun which is itself reduced to a combining form, while the dependent inflects to show the number of the head. Compounds with cb heads are formed absolutely freely with completely transparent meanings, and correspond to uncompounded constructions in most other languages. Consequently the cb needs to be treated as a standard part of noun and adjective paradigms. Cb heads are the most liable to segmental remodelling on the basis of the singular form (or even the plural) <u>8.2</u>.

Compounds with dependent pronouns naturally cannot be lexicalised; compounds with adjectives may develop specialised individual lexical meanings, though much less often than dependent-first compounds.

Quantifiers do not have combining forms and cannot be followed by the dependent-only demonstrative forms $k an^{\epsilon} k a \eta \bar{a}^{+/}$.

For WK and DK, a noun before a dependent pronoun must appear as a cb, but SB often produced forms with cbs segmentally remodelled after sg or even pl forms.

15.7.1 Adjectives

Adjectives follow a head cb. They do not themselves normally appear as heads, but a subset of adjectives lacking corresponding stative verbs may be used as heads of predicative complements <u>19.8.2</u>. Generally, compounds with $n\bar{n}$ - "person" or $b\bar{v}n$ -"thing" are used instead: $n\bar{n}$ -svn'' "good person", $b\bar{v}n$ -vvr' "living thing" etc. $B\bar{v}n^{n\epsilon/}$ is probably derived from the old gender agreement pronoun for abstracts; it can make a regular $r^{\epsilon}|a^{+}$ class plural $b\bar{v}n\dot{a}^{+}$ or pluralise with $n\dot{a}m^{a}$:

Būn-námá_àlá kà fù ňyētá +*ø*? Thing-pl NUM:how.many and 25G see:IPFV CQ? "How many things do you see?" SB

Bon also occurs with abstract and AdvP *pre*dependents:

tūlıgír bún ^{nɛ}	"heating thing, heater" = $b\bar{v}n-t\dot{v}l\iota g\dot{\iota}r^{\varepsilon}$
kù'əmī-n bύn ^{nε}	"water creature"

Deverbal adjective forms with no preceding cb are synonymous with agent nouns, so the presence of $b\bar{\nu}n$ - distiguishes different meanings in e.g.

but	būn-kúvdìr ^ɛ kūvdír ^ɛ	"thing to do with killing" "killer"
	Note the idioms	
	bōn-gíŋ ^a bōn-kúdòg ^ɔ	"short chap" (informal, humorous) "old man" (the normal expression)

The combination noun + adjective is almost invariably rendered with noun cb before the adjective, which inflects as sg pl or cb on behalf of the head noun. My informants could sometimes be induced to accept sg + adjective but never produced such forms spontaneously.

būvg ^a	"goat"	būυs ^ε	"goats"
bù-pìəlıg ^a	"white goat"	bù-pìəlıs ^ɛ	"white goats"
bù-sùŋ ^ɔ	"good goat"	bù-sùma+	"good goats"
nūa+/	"hen"	nɔ̄ɔs ^{ɛ/}	"hens"
nō-píəlìg ^a	"white hen"	nō-píəlìs ^ɛ	"white hens"
ทว ิ- รบ์ŋ ^ว	"good hen"	nō-súmà+	"good hens"

A second adjective or a dependent pronoun can follow a first adjective, which thus itself appears as a cb:

nīn-wók-pìəlıg ^a	"white tall person"
nō-píàl-kàŋā ^{+/}	"this white hen"

However, a noun + adjective compound cannot form a cb to be used as the generic complement of a deverbal noun; a sg/pl form is used instead:

	fū-zéňdà kùøs ^a	"seller of red (i.e. dyed) cloth"
not	*fū-zćň'-kùøs ^a	

i.e. adjective cbs may only precede other adjectives or dependent pronouns. Compounds with adjectives may develop specialised lexical meanings:

nū'-bíl ^a	"finger" ("small hand")
tì-sābılím ^m	a traditional remedy ("black medicine")
gòň'-sābılíg ^a	Haaf gosabliga "Acacia hockii" ("black thorn")

15.7.1.1 Class agreement

There are isolated set forms showing traces of the old agreement system:

là'-bīəlíf ⁹	"small coin" NT (<i>lā</i> ' <i>af</i> ² "cowrie", <i>bī əlá</i> ⁺ "a little"
dà-sī'ər ^ɛ	"some day, perhaps" (<i>dāar</i> ^ε "day", <i>sī</i> a ⁺ , "some")
dàbıs-sī ər ^ɛ	"some day" (<i>dàbısır^ɛ</i> "day")
yēl-súm ^{mɛ}	"blessing" (yε̄l ^{lɛ/} "matter" <i>, sùŋ</i> ɔ "good")
pu̯'à-pāal ^{a/}	"bride" (<i>pu̯'ā</i> ª "wife" <i>, pāalíg</i> ª "new")
dà-pāal ^{a/}	"young man, son" (<i>dā</i> ¤́+ "man")

The dependents do not regularly appear with these class suffixes.

In WK's speech (not DK's) and many written sources, m^m class nouns require adjectives in $-m^m$, as does $b\bar{v}n$ "thing" in abstract (but not concrete) senses:

	dā-páalìm ^m	"new millet beer"
		WK does not accept * <i>dā-páàl, *dā-páalìg</i> .
	tì-sābılím ^m	"black medicine", a specific traditional remedy
	tì-vōnním ^m	"oral medication" ("swallowing medicine")
	tì-kōvdím ^m	"poison" ("killing medicine")
	kpāň-sɔ́ɔňdìm ^m	"anointing oil" (<i>kpāaňm^{m/}</i> "oil, grease")
	būn-bɔ́ɔdìm ^m	"desirable thing" (1 Cor 14:1: กวั <i>ŋเlím^m "love"</i>)
but	būn-bʻodìr ^ɛ	"desirable thing" (BNY p17: a sheep)
	būn-ňyέtìm ^m	"the visible world"
but	būn-ňyέtìr ^ε	"a visible object"

15.7.1.2 Downtoning

Adjectives may show apocope-blocking 5.1.3 as a downtoner. Only singular forms seem to be possible. (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 wíugō.	"It's reddish."
fū-wíugō lā	"the reddish shirt"
Lì à nĒ tītā'arı.	"It's biggish."

15.7.1.3 Bahuvrihis

The combination noun + adjective may be used as a bahuvrihi adjective itself:

Lì à nē nū'-kpíilúŋ.	"It's a dead hand."
Bīig lā á nē nū'-kpíilúŋ.	"The child is dead-handed."
Ò à nē bí-[nū'-kpíilúŋ].	"He's a dead-handed child."

In constructions like $bi-n\bar{u}'-kp(il\dot{u}\eta)$ "child with a withered hand" the adjective is modifying the cb immediately preceding it, not *vice versa*. It is not possible to say $bi-n\bar{u}'-kp(im^m)$, and in such constructions the adjective may even be plural despite singular reference of the whole noun + adjective compound:

	bì-tùb-kpīda+	"deaf child" (<i>tùbυr</i> ^ε "ear", <i>kpì</i> + "die")
pl bì-tùb-kpīda nám ^a , bì-tùb-kpīdıs ^ɛ		۶ ^ε
	bì-tùb-līɪd ^ɛ	"child/children with blocked ears"
		(/ī ⁺ "block up")

Accordingly, the construction is zero-derivation of a noun-adjective compound to an adjective, and not modification of an adjective by a cb.

Other examples of bahuvrihis:

	kùg-n5b-wók ⁵	"long-legged stool"
	kùg-n5b-wá'àd [€]	"long-legged stools"
	zūg-máu̯k ^ɔ	"crushed-headed"
pl	zūg-má'àd ^ε	
	zù-wōk ^{ɔ/}	"long-tailed"
	nōb-gíŋ ^a	"short-legged"
	zū-pέεlὺg ^ͻ	"bald"; cf Dau sɔ' zug ya'a pie
pl	zū-pέεlà+	"If a man has gone bald" (Leviticus 13:40)
	lām-fóòg ^o	"toothless" (<i>lām^{mε/}</i> "gum" <i>fùe</i> + "draw out")
pl	lām-fɔ́ɔ̀d ^ɛ	<u>5.5</u>

The two adjectives "one of a pair" <u>15.4.2.3</u> are often used in bahuvrihis: $n\bar{i}f$ - $ny\dot{a}\mu k^{2}$ "one eye", $b\dot{a}$ - $n\bar{i}f$ - $ny\dot{a}\mu k^{2}$ "one-eyed dog"; $t\dot{v}b$ - $y\bar{\iota}\mu\eta^{2/}$ "one ear" $b\dot{\iota}$ - $t\dot{v}b$ - $y\bar{\iota}n\dot{a}^{+}$ "one-eared children."

15.7.1.4 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-sáaŋª	"stranger goat"]
	bì-kpī im ^{m/} or bì-kpìilúŋ ^ɔ	"dead child"
[only	bù-kpìilúŋ ^ɔ	"dead goat"]
	bì-dāỵ+ or bì-dāvgɔ	"male child"
[only	bù-dāvg ^ɔ	"male goat"]
	bì-pu̯'āª or bì-pu̯ākª	"female child"
	bì-zū'øm ^{m/} or bì-zùnzòŋ ^a	"blind child"

The same behaviour is also seen with some agent nouns:

	pu̯'à-zàaňs ^a	"dreamy woman"	KΤ
	nīn-nén ^{na}	"envious person"	
	bì-sīn ^{na/} or bì-sīnníg ^a	"silent child"	
only	bù-sīnníg ^a or bù-sīnnúg ^o	"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 $g^{a}|s^{\epsilon}$ or $r^{\epsilon}|a^{+}$ class, even with derivatives of intransitive verbs:

pu̯'à-kūvdíg ^a	"murderous woman, murderess"
pu̯'à-kūvd ^{a/}	only "killer of women"
pu̯'à-lā'adıgª	"woman given to laughing"
pu̯'à-lā'adª	"laugher at women"

Nouns (of any class) expressing bodily defects can be used adjectivally:

bì-zùnzòŋ ^a	"blind child"
bì-gìk ^a	"dumb child"
bì-wàbır ^ɛ	"lame child"
bì-bālērvg ^o	"ugly child"
bì-pòň'ɔr ^ɛ	"crippled child"

Other examples, which are effectively appositional, include:

nàsàa-bīig ^a	"European child"	
yàmmug-bī-púŋ ^a	"girl slave" (<i>yamug bipuŋ</i> Acts 16:16, 1976 <u>8.2</u>)	
yàm-bī-púŋ ^a	"girl slave" WK	
(vs yàmmug bí-púŋ ^a	"slave's girl")	
bī-púŋ-yàmmug ^a	"slave girl"	
nà'-bīig ^a or bì-nà'ab ^a	"prince"	
dàỵ-bīigª or bì-dāỵ+	"male child"	

15.7.2 Quantifiers

Quantifiers as determiners follow the head, except for $y\bar{i}g\dot{a}^+$ "firstly." A head can appear as a cb only with $y\bar{i}nn\dot{i}^+$ "one" and in a few fixed expressions like $d\dot{a}$ - $p\bar{i}iga$ "ten days"; elsewhere, quantifiers are not subject to L spreading: $k\bar{u}g$ - $y(nn\dot{i}^+$ "one stone" but $k\bar{u}gvr y\bar{i}nn\dot{i}^+$ "one stone."

Quantifiers precede dependent pronouns and $|\bar{a}^{+/}|$ "the, that", $\bar{n}w\dot{a}^{+}$ "this":

bunama atan' nwa	"these three things" (1 Cor 13:13)
būn-námá_àtáň' ňwá	
thing-pl NUM:three this	

Quantifiers as determiners can be coordinated: this is the mechanism for the creation of numbers other than simple digits, tens or hundreds:

o nya'andɔlib pii nɛ yi ò ňyà'an-dɔ̀llıb pīi nɛ̄ yí' ^{3AN} after-follower:PL ten with two "his twelve disciples" (Mt 26:20)

15.7.3 Adverbial phrases

When an abstract noun with a verbal sense has a preceding NP dependent as subject, complement or adjunct AdvPs may follow the head, including prepositional phrases, which are not found elsewhere as NP dependents, and also VP-final particles. This is therefore best regarded as a clause nominalisation process. Other uses of AdvPs as NP dependents after the head are marginal. $\dot{A}m\bar{\epsilon}\eta\dot{a}$ "really, truly" occurs in the meaning "genuine, real":

Dn s*D* á n*ē* du̯'átà àmēŋá lā.
3AN.CNTR EMPTY.AN COP FOC doctor:SG ADV:real:ADV ART
"That one's the real doctor."

With *ňwādıs yóòm lā póvgō-n* "months in the year" (SB) and *wābvg mɔɔɡv-n lā* "the elephant in the bush" (WK), I have not recorded the full contexts, possibly e.g. *M̀ dāa ňyɛ̃ wābvg mɔɔɡv-n lā* "I saw an elephant in the bush." The 1976 NT has

Lina ane labasuŋ Jesus Christ Wina'am Biig la yela. Lìnā á nē lábà-sùŋ Jesus Christ Wínà'am bîg lā yélà. DEMST.INAN COP FOC news-good:sg Jesus Christ God child:sg ART about. "This is the good news about Jesus Christ, God's Son." (Mk 1:1)

but the 1996 revision recasts this as

Lina ane Yesu Kiristo one a Wina'am Biig la labasuŋ. Lìnā á nē Yesu Kiristo ɔ́nì à Wínà'am bíìg lā lábà-sùŋ. DEMST.INAN COP FOC Yesu Kiristo REL.AN COP God child:sg ART news-good:sg.

15.7.4 Pronouns

Demonstrative, indefinite and interrogative pronouns may be used as determiners following a noun cb as NP head, or a noun cb as NP head followed by an adjective cb; they follow quantifiers without compounding:

bīig ^a	"child"	bì-kàŋā ^{+/}	"this child"
bì-sɔ̄'+	"a certain child"	bì-sùŋ-kàŋā+/	"this good child"
bì-kànɛ?	"which child?"	bì-bó?	"what child?"

yɛltɔɔd ayɔpɔi banɛ ka maliaknama ayɔpɔi mɔr la yɛl-tɔ́ɔd àyɔ́pɔ̀e bánì kà màli̯āk-námá_àyɔ́pɔ̀e 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)

15.7.5 Deictic particles *lā ňwà*

 $L\bar{a}^{+/}$ and $\bar{n}w\dot{a}^+$ are corresponding deictic particles "that" and "this." Although $\bar{n}w\dot{a}$ always retains this sense, $l\bar{a}^{+/}$ in the great majority of its occurrences is weakened to a **definite article**. It retains its deictic sense in opposition to $\bar{n}w\dot{a}^+$ in identificational clauses <u>21.4.1</u> and after demonstratives <u>15.3.2</u>.

Unlike $|\bar{a}^{+/}, \bar{n}w\dot{a}^{+}$ can stand alone as a NP:

Ňwà á nē bīig."This is a child." WK; tones sic.This cop foc child:sg.

 $L\bar{a}^{+/}$ and $n\bar{w}a^+$ always stand finally in the NP (which may itself be a dependent before another NP) except for the marginal case where a VP-final particle occurs in an $n\bar{c}$ -clause, when it may follow the article attached to the clause <u>19.10</u>.

As article, $|\bar{a}^{+/}$ corresponds in many cases to English "the", marking referents as specific and already established. However, unlike "the", $|\bar{a}^{+/}$ is not typically used for "familiar background", unless there was an explicit prior mention of the referent:

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Winnig lí yā."The sun has set."Sun:sg fall PFV.
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It is not used with pronouns, or with proper names of people or places: *mān* "me", *À-Wīn* "Awini", *Bòk* "Bawku." Nor is it used with abstract mass nouns:

Nonjilim pv naada."Love does not come to an end." (1 Cor 13:8)Nonjulím pvnāadá +ø.LoveNEG.IND finish:IPFV NEG.

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 $L\bar{a}^{+/}$ is not used in vocatives, contrasting with $\breve{n}w\dot{a}^+$, which often appears:

Bīiga ⁺ ø!	"Child!"	
Child:sg voc!		
Bīis ňwá!	"Children!"	[bi:sa]

There is no indefinite article: a NP with no $l\bar{a}^{+/}$ is indefinite if it could have taken $l\bar{a}^{+/}$ 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 $b\bar{i}ig$ "child" in

Ň	bīig	kā'e	+ø.	"I've no child" WK
1SG	child:se	NEG.BE	NEG.	

and with the complement of $\partial e \vec{n}^a$ "be something" when used ascriptively <u>19.11.2</u>:

Ò à nē bīig. "She is a child."
3AN COP FOC child:sg.

An indefinite NP is only likely to have a *specific* sense in the context of an explicit introductory presentational statement <u>27.4</u>:

Dau da be mori o biribing Dāu dá bè ø mɔrí ò bī-díbìŋ Man:sg TNS EXIST CAT have 3AN child-boy:sg "Once there was a man who had a son ..." KSS p35

Anina ka o nyɛ dau ka o yʋ'ʋr buon Aneas. Àníná kà ò ňyɛ̄ dáu kà ò yū'ʋr búèn Aneas. ADV:there and 3AN see man:sg and 3AN name:sg call:IPFV Aeneas. "There he found a man whose name was Aeneas." (Acts 9:33)

Outside such contexts, an indefinite NP is usually *generic*; unlike English "the", $|\bar{a}^{+/}$ is not used with a generic sense:

Tomtom po gat o zugdaana. Tòm-tōm pō gát ò zūg-dáanā ⁺ø. Work-worker:sg NEG.IND pass:IPFV 3AN head-owner:sg NEG. "The servant does not surpass his master." (Jn 15:20) Tiig walaa bigisid lin an tisi'a. Tìıg wélàa ø bìgısıd lín àň tí-sīa. Tree:sg fruit:PL CAT show:IPFV 3INAN:NZ COP tree-INDF.INAN. "It's the fruit of the tree that shows what tree it is." (Mt 12:33)

Kusaas ye	"The Kusaasi say" KSS p16
	drawing the moral of a story.

Generic core arguments are incompatible with aspectual use of $n\bar{\epsilon}^{+/}$ <u>19.2.1</u>. A predependent NP ending in $|\bar{a}^{+/}$ makes the following head definite, and the head does not itself take the article:

dự'átà lā bîig	"the doctor's child"
not *dự'átà lā bîìg lā	

Pronouns and personal names as predependents do *not* have this effect; only predependents *with the article*, along with demonstrative pronouns, automatically make their heads 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 below, $l\bar{a}$ does not occur with $\dot{o} b\bar{i}-p\dot{o}\eta$ "her daughter" on first introduction, but does occur in $\dot{o} b\bar{i}g l\bar{a}$ "her child" after the reference is established.

Pu'a sɔ' da bɛ mɔr **o bipuŋ** ka kikirig dɔl o. Ka o wum Yesu yɛla, ka keŋ igin o tuon. Ka sɔs Yesu ye o kadim kikirig la yis **o biig la** ni. Pu'à-sɔ̄' dá bè ø mór ò bī-púŋ kà kìkīrıg dɔll·ó ø. Woman-INDF.AN TNS EXIST CAT have 3AN child-girl:sg and fairy:sg follow 3AN.OB. Kà ò wúm Yesu yélà, kà kēŋ ø ígìn ò tùən. And SAN hear Jesus about, and go CAT kneel.down SAN in.front. Kà sós Yesu yế ò kàdim kíkīrıg lā øyís ò lā ní. bīia And beg Jesus that 3AN drive.out:IMP fairy:SG ART CAT expel 3AN child:SG ART LOC. "There was a woman whose daughter was oppressed by a devil. She heard about Jesus and came and knelt down before him. She asked Jesus to cast the devil out of her child." (Mk 7:25-26)

Note the idiom at first introduction of a new possessed referent; so too in

Dau da be mori o biribing Dāu dá bè ø mɔ̄rí ò bī-díbìŋ Man:sg TNS EXIST CAT have 3AN child-boy:sg "Once there was a man who had a son ..." KSS p35

Note also the contrast of meaning produced by the article in

Ň	bīig	kā'e	+ø.	"I've no child" WK
150	child:so	G NEG.BE	NEG.	
Ň	bīig	lā kā	'e ⁺ ø.	"My child's not there" WK

1SG child:SG ART NEG.BE NEG.

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 $b\bar{a}^{+/}$ and $s\bar{a}am^{ma}$ "father."

For an unambiguously indefinite specific meaning like "some, another", indefinite pronouns are used <u>15.3.3</u>.

Nā'-síəbà óňbìd nē mɔɔd. Cow INDF.PL chew:IPFV FOC grass:PL. "Some cows are eating grass."

An indefinite pronoun is necessary to make the head indefinite after a predependent with the article:

du'átàlābí-sō'"a child of the doctor's"doctor:sg art child INDEAN

The number $y\bar{i}nni^+$ "one" is sometimes used to introduce a new referent, but remains a number word, and is not bleached to an indefinite article:

Farisee dim nid yinne da bεFarisee dím nìd yīnní dà bὲ ...Pharisee EMPTY.PL person:SG one TNS EXIST ..."There was one man of the Pharisees ..." (Jn 3:1)

cf Dapa atan' n da be. "There were once three men." KSS p16 Dāpá_àtáň' n dá bɛ̀. Man:PL NUM:three CAT TNS EXIST

16 Adverbial phrases

16.1 Overview

Adverbial phrases characteristically appear as adjuncts within clauses and VPs. They also appear as arguments of verbs, and (excepting proadverbs) as dependents in NPs <u>15.6.3</u>. AdvPs of time, circumstance or reason appear as postlinker adjuncts <u>20.2.1</u> or VP adjuncts <u>19.9</u>, often ka-preposed <u>27.2</u>; AdvPs of place or manner only appear as VP adjuncts, and can only precede the subject by ka-preposing.

Many adverbs are formally identical to nouns; others, including proadverbs, do not conform to ordinary noun structure.

Many adverbial phrases represent adverbial *uses* of NPs, and have the usual structural possibilities for NPs. Otherwise, the range of structures for AdvPs is more limited. Only specialised *postpositions* can have a NP predependent.

Absolute clauses occur as adverbs of time/circumstance 24.2, while relative clauses with pronouns expressing place or manner occur as corresponding types of AdvP. As with NPs, coordination of AdvPs uses the particle $n\bar{\epsilon}$.

16.2 Time and circumstance

Adverbial phrases expressing **time** may be instantiated by proadverbs $\underline{16.7}$ or by distinctive time adverbs which do not have the structure of nouns, such as

zīná+	"today"
sù'øs ^a	"yesterday"
dūnná ⁺	"this year"

Some time adverbs resemble nouns in form but lack cb or pl forms, and cannot be referred to by pronouns, or occur with dependents, e.g. $b\bar{\epsilon}og^{2}$ "tomorrow"; $d\bar{a}ar^{\epsilon}$ "day after tomorrow/day before yesterday" is in the same category but happens to be homophonous with the ordinary noun $d\bar{a}ar^{\epsilon}$ "day."

However, many time AdvPs are simply NPs with temporal meanings, and no special marking. Such NPs may consist of single nouns, but the possibility of adding dependents distinguishes them from specialised time adverbs; see <u>29.7</u> and e.g.

yú'טŋ ^ɔ	"night"
nīntāŋ ^{a/}	"heat of the day, early afternoon"
úun ^{ne}	"dry season"

Adverbial phrases expressing **circumstances** are typically absolute clauses; such clauses are also frequently used to express time <u>24.2</u>.

No formal distinction is made between a point in time and a period over which a state of affairs persists:

Fù ná kūlbēog."You'll go home tomorrow."2SG IRR go.home tomorrow.

Tì kpźlìm ànínā dábisà bí'əlà.
1PL remain ADV:there day:PL few.
"We stayed there a few days."

Time AdvPs can be coordinated:

BĒogv-n nĒ záàm kà fv ná nīŋ t(*-kàŋā*. Morning-Loc with evening and 2SG IRR do medicine-DEMST.SG. "You'll use this medicine morning and evening."

16.3 Place

Locative adverbs comprise proforms along with Kusaasi place names; other locative AdvPs use the locative particle $n\bar{\iota}^{+/} \sim n^{\epsilon}$. It is not possible to use a noun other than a place name by itself as a place adverb, unless it has become a postposition <u>16.6</u>; synchronically such postpositions are separate lexical items.

The core adverb of place is thus the locative particle, which has the allomorphs $n\bar{\iota}^{+/}$ and n^{ϵ} along with a zero allomorph accompanying intrinsically locative forms; evidence for this zero allomorph is seen in the focus behaviour of locatives <u>27.1.2.2</u>.

The form $n\bar{\iota}^{+/}$ is used after words ending in a short vowel in SF, after pronouns and after loanwords; the liaison word n^{ϵ} is used elsewhere:

mù'arī-n	"in a lake"	yūdá nì	"among names"
m̀ nī	"in me"	mān nī	"in me"

la'asug doodin nε suoya ni
là'asug dóodī-n nε̄ suēyá nì
assembly:sg house:pl-loc with road:pl loc
"in the synagogues and in the streets" (Mt 6:2)

 $Y\bar{i}r^{\epsilon}$ "house" has the exceptional sg and pl locative forms $y(n^{n\epsilon}y\dot{a}a-n^{\epsilon})$ which have the particular nuance "home", as in the parting formula

Pò'usım yín. "Greet (those) at home." i.e. "Goodbye."

Note also the locative adverb $y i \eta^a$ "outside." The article $l\bar{a}^{+/}$ may precede or follow the locative particle:

mờ'arī-n lā or mờ'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) m gbàna ní wōsa ISG 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 fo nini.
Kèm Siloam búlogō-n ø píð fò nīní.
Go:IMP Siloam well:sg-LOC CAT wash 2sg eye:PL.
"Go to the well of Siloam and wash your eyes." (Jn 9:7)

Ka Svntaana kpɛn' Judas [...] svnfvn. Kà Sūtáanà kpɛ́ň' 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 lɛ́m yī nīdıbí-n lā nā yá'àsı ø yɛ́lì bā yē... And Pilate again emerge person:PL-LOC ART hither again CAT say 3PL.OB that ... "Pilate came out to the people again and said to them ..." (Jn 19:4)

ILK has, transposed into the orthography of this grammar:

Ò bè dá'a-n.	"He's at market."
Ò bè si̯á'arī-n.	"He's at the bush."
Ò bè pɔ̄ɔgú-n.	"He's at the farm."
Ò bè yín.	"He's at home."
Ò bè sākulí-n.	"He's at school."
Ò bè mɔ̄ɔgʋ-n.	"He's in the grasslands."
Ò bè kɔlıgı-n	"He's at the stream."
Ò bè tūvmmı-n.	"He's at work."

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More precise locative meanings are expressed with postpositions $\underline{16.6}$, many of which themselves include the locative particle:

Ò dìgιl gbáμŋ lā tέεbùl lā zúg.
3AN lay.down book:sg ART table:sg ART upon.
"She's put the book on the table."

Dāỵ lā bέ nē dó-kàŋā lā púugū-n. Man:sg ART EXIST FOC hut-DEMST.SG ART inside:sg-LOC. "The man is inside that hut."

Kusaasi place names, many postpositions, and a number of proadverbs <u>16.7</u> are "intrinsically locative", here analysed as accompanied by a zero allomorph of the locative particle:

Ò bè Bók.	"He's at Bawku." ILK	
Ò bè Témpáan.	"He's at Tempane." ILK	
Ò kèŋ Bók.	"He's gone to Bawku."	
Ò dìgıl gbáỵŋ lā tέεbùl lā zúg.	"She's put the book on the table."	
dàtìỵŋ² or dìtúŋ²	"righthand"	
dàgɔ̀bɪg ^a	"lefthand"	
àgźl ^{lɛ} or àgɔ̄lá ⁺	"upwards"	
lāll(+	"far off" (? <i>lāl ní</i> +)	

Place names often have a locative proform in apposition, particularly to express rest at a place, as opposed to movement towards or away:

À ná kēŋ Bók.	"I'm going to Bawku."
Fù yúùg Bók kpēláa?	"Have you been long in Bawku (here)?"
Fù yúùg Bókàa? SB	(rejected by WK as "Mooré")

In the speech of my informants, foreign place names share the syntactic behaviour of Kusaasi place names as intrinsically locative, but especially in the sense of rest at a place, the NT often either uses the postposition $n\bar{\iota}^{+/}$ or paraphrases like *Jerusalem téŋī-n* "in Jerusalem-land."

Proforms used in locative heads of relative clauses are intrinsically locative, and consequently so is the relative clause as a whole:

Onε ken likin zi' on ken si'ela. Ônι kēn līkι-n zī' ón kēn sī'əla ⁺ø. REL.AN GO:IPFV darkness-LOC NEG.KNOW 3AN:NZ GO:IPFV INDF.INAN NEG. "He who walks in darkness does not know where he is going." (Jn 12:35)

ka mɔri fu keŋ zin'ikanɛ ka fu pu bɔɔda. kà mɔ̄rí fù ø kēŋ zíň'-kànι kà fù pū bɔ́ɔdā +ø. and have 2sg.ob cAT go place-REL.sg and 2sg NEG.IND want NEG. "and take you where you do not want." (Jn 21:18)

Note the *time* expressions:

bēog ^o	"tomorrow"	bε̄ogυ-n ^{ε/}	"morning"
yīigí - n ^ε	"at first"	sān-sí'ā-n lā	"at one time, once"

Locative AdvPs can be coordinated:

Nyalima na bɛ winnigin nɛ nwadigin nɛ nwadbibisin. Ňyālımá nà bɛ̄ wínnìgī-n nɛ̄ ňwādıgí-n nɛ̄ ňwād-bíbısī-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 constructed by a metaphorical extension of the sense of the postposition $z\bar{u}g$ "upon"; similarly for proforms:

àlá zùg ^ɔ	"therefore"	bō zúg ^o	"why?"
dìn zúg ^ɔ	"therefore"		

16.4 Manner

AdvPs of manner may be instantiated by proforms, and there also are several morphologically distinctive manner-adverb formations; like specialised time adverbs, specialised manner-adverb words do not take dependents. However, various NP types can also be used as manner AdvPs.

Distinctive manner-adverbs often show apocope-blocking <u>5.1.3</u>. Some have the **manner-adverb prefix** \dot{a} -<u>13.2</u> or are derived from adjective stems with the suffixes m^{m} or $-ga^{+}$ <u>11.2</u>. Others include

pāalú+	"openly"	
ňyāe ^{nε/}	"brightly, clearly"	

Adverbial phrases

 $Ny\bar{a}e^{n\epsilon}$ shows the characteristic distribution of a manner-adverb rather than a noun, appearing as complement of $\partial e n^a$ "be something" and as an adjunct:

Wina'am a su'um nyain. "God is light." (1 Jn 1:5, 1996)
Wínà'am áň súm ňyāe.
God cop good:ABSTR brightly.
... kε ka ti lieb nyain. "... make us light." (1 Jn 1:7)
... kέ kà tì líàb ňyāe.
... cause and 1PL become brightly.

Ka li sid nie nyain."And there truly was light." (Genesis 1:3)Kà lì síd nìe ňyāe.And 3INAN truly appear brightly.

The spelling *nyain* appears for *ňyāe* "brightly" even in texts prior to 2016, where *nyainn* or *nyai* might have been expected. The 1992 audio NT renders it [jãí].

A number of manner-adverbs are formed by **reduplication of roots**.

nà'anā ^{+/}	"easily"	
tà'ətā ^{+/}	"straight away" (Mooré <i>taotao id</i>)
kōň'ɔkō+	"solely, by oneself"	

Reduplication of nouns forms a number of **distributive** manner-AdvPs:

dàbısır dábısìr	"day by day"
zīň'ig zíň'ìg	"place by place"

Reduplication of number words is similarly distributive <u>15.4.2.4</u>. Reduplication of manner-adverbs themselves is intensifying:

àmɛ̄ŋá mēŋá	"very truly"	
àsídà sídà	"very truly"	
<i>À wúm Kūsáàl bī'əlá.</i> 1sg hear:IPFV Kusaal slightly.	"I know Kusaal a little."	
<i>À wóm bī əl bī əl.</i> 15g hear:1PFV little little.	"I understand a very little."	

A very common form of manner-AdvP is a relative clause using the proform $s\bar{r} \partial m^m$ "somehow" as head 24.3.1.

Manner-adverbs resemble generic mass nouns in their syntactic behaviour in several respects. Even count nouns in generic senses may be encountered as AdvPs:

Μ̀ kέŋ	nōbá.	"I went on foot." SB; WK corrected this to
isg go	leg:pl.	<u>À kéŋ nē nōbá, using nē</u> "with."

A prepositional phrase with $n\bar{\epsilon}$ parallels a count plural used adverbially in

À-ňyē nē nīf sóň'ɔ___ À-wùm 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 tùm bédugū.	"She's worked a lot."
Ò từm pāmm.	"She's worked a lot."

Wosa "all" readily switches from quantifying an object to adverbial use:

Bà gòsī_ tí wūsa.	"They've looked at us all." WK
зрь look.at 1рь.ов all.	(for: <i>Bà gòsí tì wōsa.</i> 3PL look.at 1PL all.)

This is not a universal property of quantifiers:

Bà gòsĩ tí bédugū.	"They've looked at us a lot." WK
Bà gòsí tì bèdugū.	"They've looked at a lot of us." WK

Numbers have specific forms for the adverbial meaning "so many times" 15.4.2.4; the other count quantifiers sometimes appear similarly as adverbs:

Bà gòsĩ tí bábıgā.	"They've looked at us many times." WK
Bà gòsí tì bàbıgā.	"They've looked at many of us." WK

Manner AdvPs can be coordinated: so for example with *srəm* clauses <u>24.3.1</u>.

16.5 AdvPs as verb arguments

The prototypical use of AdvPs is as VP adjuncts; time/circumstance AdvPs also commonly appear as postlinker adjuncts:

Fò dúo wēlá +ø?literally "How did you rise?"; morning greeting.2sg rise how cq?Nānná-ná m áň ná'àb.Nānná-ná m áň ná'àb."Now I am a chief." WKNow-hither 1sg cop chief:sg.

AdvPs also occur as verb arguments. All types can appear as subjects of the verb $\dot{a} e \check{n}^a$ "be something /somehow." Other stative verbs may also have an AdvP subject, and there are a few examples with dynamic verbs:

Yiŋ venl, ka poogin ka'a su'um.
Yìŋ véňl kà pūvgv-n kā' súmm +ø.
Outside be.beautiful and inside:sg-LOC NEG.BE good:ABSTR NEG.
"Outside is beautiful but inside is not good." (Acts 23:3, 1996)

Kristo da kpii ti yɛla la kɛ ka ti baŋ nɔŋilim an si'em. Kristo_ø dà kpìi_tì yɛlá lā kɛ́ kà tì báŋ nòŋılím_ø àň sī'əm. Christ Nz TNS die IPL about ART cause and IPL realise love NZ COP INDF.ADV "Christ dying for us makes us understand what love is like." (1 Jn 3:16) (absolute clause AdvP <u>24.2</u> as subject)

In *Sòŋā bέ.* "OK it is." WK Good:ADV EXIST.

sòŋā is however used metalinguistically, meaning "the word sòŋā."

Verbs with appropriate meanings frequently take locative AdvPs as complements, rather than as adjuncts <u>19.8.3</u>.

The verb $\partial e \check{n}^a$ "be something/somehow" typically has a derived manner-adverb or abstract noun as complement rather than an adjective as NP head <u>19.11.2</u>:

Lì à nĒ zāalím.	"It's empty."
Lì à nē būgvsígā.	"It's soft."
Lì à súŋā.	"It's good."

Kusaal characteristically uses manner proadverbs as predicative complements in place of pronouns with abstract reference. i.e. the language says "be/do *how*" rather than "be/do *what*."

Dā níŋì_ àláa "Don't do that!" ("thus") +ø! NEG IMP do ADV: thus NEG. Fu wum ban yet si'em laa? Fù wúm bán vt sī'əm láa +ø? 2SG hear: IPFV 3PL:NZ Say: IPFV INDF.ADV ART PQ? "Do you hear what they are saying?" (Mt 21:16) Tiig wela bigisid on a si'em. Tìıg wélà bìgisid źп àň sī'əm.

Tree:sg fruit:PL show:IPFV 3AN:NZ COP INDE.ADV. "The fruit of a tree shows what ["how"] it is." (Mt 12:33, 1976)

Relative clauses with the proform $s\vec{r}
i m^m$ "somehow" as head are accordingly used after verbs of cognition, reporting and perception, to express the subordinate interrogative sense "say [etc] what ..." <u>24.3.1</u>.

For the idiom "X nìŋ wēlá ...?" "how can X ...?" see 22.2.1.

16.6 Postpositions

Postpositions are adverbs with a predependent. Most are either literally or metaphorically locative. Postpositional phrases are AdvPs and can be preposed with $k\hat{a}$ 27.2 freely, unlike prepositional phrases with $n\bar{\epsilon}$.

Postpositions may not be coordinated, but their predependents may:

tinam nɛ fun suuginɛ? "[what is there] between us and you?" (Mt 8:29)
tīnám nē fūn súugū-né +ø?

IPL with 2sg between-Loc cq?

Many postpositions are readily recognisable as special uses of ordinary nouns. Some postpositions are AdvPs including the locative particle.

zūg ^{ɔ/}	"onto" (<i>zūg^{ɔ/}</i> "head")	
téɛbùl lā zúg	"onto the table"	

 $Z\bar{u}g^{3/}$ is frequently used metaphorically to express a **reason** "because of ..."

dāu lā zúg	"on account of the man"
bō-zúgò?	"why?" (cf <i>bɔ̃ zúgɔ̃</i> "because" <u>20.2.1</u>)

Mán ňwè' dāu lā zúg kà police gbáň'a_m.
1SG:NZ strike man:SG ART upon and police seize 1SG.OB.
"Because I struck the man the police arrested me." 24.2

Although reason-AdvPs are, as here, frequently preposed with $k\dot{a}$, they may also occur as postlinker adjuncts <u>20.2.1</u>:

Pian'akanε ka m pian' tisi ya la zug, ya anε nyain.
Pi̯àň'-kànι kà m̀ pi̯āň' ø tísì yā lā zúg, yà á nē ňyāe.
Word-REL.SG and 1SG speak CAT give 2PL.OB ART upon, 2PL COP FOC brightly.
"Because of the the words I have spoken to you, you are clean." (Jn 15:3)

The set expression $s\bar{a}a z \dot{u}g^{3}$ is used for "sky"; it is intrinsically locative:

Ka kvk>r yi saazug na ... Kà kvk>r yī sāa zúg nā ... And voice emerge rain onto hither "And a voice came from heaven..." (Jn 12:28)

zūgύ-n^ε

"on"

"under" (*tɛ̃ŋ*^a "ground")

tέεbùl lā zúgū-n "on the table"

tēŋír^e

téɛbùl lā téŋìr "under the table"

As a locative adverb without a predependent:

Gòsım tēŋír!	"Look down!", more commonly Gòsım tēŋı-n!	
<u> אַסטש-n</u> נ/	"inside" (<i>pūvg</i> ^a "belly, inside")	
dūk lā púvgū-n ňwādıs yúòm lā púvgū-n	"in the pot" "months in the year" (metaphorical locative)	

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bābá ⁺		"beside" (pl of $b\bar{a}bur^{\epsilon/}$ "sphere of activity")		
	m̀ nɔ̄bá bàba	"beside my feet"		
sìsù	υgū-n ^{ε/}	"between" (replaced by <i>sὺυgῦ-n</i> ^{ε/} in KB)		
	tīnám nē fūn sís <i>ù</i> ugū-n	"between us and you"		
tùøn	nε	"in front of"		
cf	dāká lā túèn Gòsım túèn!	"in front of the box" "Look to the front", without a predependent		
gbìn	nε	"at the bottom of" (<i>gbìn^{nɛ}</i> "buttock")		
	zūər lā gbín	"at the foot of the mountain"		
ňyá'aŋ ^a		"behind; after (time)" (<i>ňyáˈaŋ</i> ª "back")		
	lì ňyá'aŋª	"afterwards" as a postlinker/VP adjunct		
	Nē'ŋá ňyá'àŋ kà ò kū demst.inan after and 3an go.	II. "After this she went home." .home.		
sā'ai	n ^{٤/}	"into/in the presence of", "in the opinion of"		
	Wínà'am sá'àn	"in the sight of God"		
	Fù ná dī'e tíìm pự'á-bàmmā lā sá'àn. 25g IRR receive medicine woman-DEMST.PL ART among. "You'll get the medicine from where those women are."			
yēlá ⁻	+	"about, concerning" (pl of <i>yɛ̃l^{lɛ/}</i> "matter, affair")		
	Bà yὲl·ō_ ø mān yế 3pL say 3AN.OB 1SG.CNTR ab "They told him all about mé	bout all.		
kōň':	okō	cf àràkóň' "one" in counting		
	m̀ kɔ̃n̆'ɔkɔ̃	"by myself"		

16.7 Proadverbs

Adverbs have corresponding proforms.

	Demonstrat	ive	Indefinite	Interrogativ	/e
Place	kpē+	"here"	zìň'-sī'a+	yáa ní+	"where?"
	kpēlá+ àní+ ànínā+/	"there" "there" "there"	"somewhere"	yáa	"whither /whence?"
Time	nānná ⁺ nānná-nā ^{+/} sān-kán ^ɛ	"now" "now" "then"	<i>sān-sí</i> 'a ⁺ "sometime"	sān-kán ^ɛ būn-dáàr ^ɛ bò-wìn ^{nɛ}	"when?" "which day?" "what time of day?"
Manner	àňwá ⁺ àwá nā ^{+/} àlá ⁺	"like this" "like this" "like that"	<i>sī`əm^m</i> "somehow"	wēlá ⁺	"how?"

The indefinites are used in relative clauses 24.3.1.

The a- of the "manner" forms is the manner-adverb prefix and is preceded by the LF-final vowel - ι 7.2.1.

Proforms expressing reason are formed with the postposition $z\bar{u}g^{2/}$ <u>16.6</u>: àlá zù g^{2} "because of that", $b\bar{z}z\dot{u}g\dot{z}$ "why?" (cf $b\bar{z}z\dot{u}g\bar{z}$ "because" <u>20.2.1</u>.)

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Ideophones

17 Ideophones

Adjectives cannot themselves take adverbs as modifiers. In e.g.

Lì à nĒ píəlìg pāmm. "It's very white"

the adverb $p\bar{a}mm$ goes with the copula verb rather than the adjective; it is not possible to say $f\bar{u}-p(a)\log p\bar{a}mm |\bar{a}|$ for "the very white shirt."

However, in any syntactic rôle an adjective may be immediately followed by an ideophone with intensifying force, as may derived stative verbs. As is common cross-linguistically, ideophones often display unusual phonological features. Such ideophones are specific to particular adjectives and their derived stative verbs.

Lì à nĒ píəlìg fáss fáss. Lì à nĒ sābılíg zím zím.	"It's very white." "It's deep black."	
Lì à nē zíň'a wím wím.	"It's deep red."	
Lì à nĒ fū-zíň'a wím wím.	"It's a deep red shirt."	WK
Ѝ ňyź fū-zíň'a wím wím.	"I've seen a deep red shirt."	WK
Fū-zíň'a wím wím bέ.	"There's a deep red shirt."	WK
À bóòd fū-zíň'a wím wím lā.	"I want the deep red shirt."	WK
Ò à nē wɔ̄k tɔ́lılìlı.	"She's very tall."	
Ò à nē gīŋ tírıgà.	"She's very short."	
Ò wà'am tólılìlı.	"She's very tall."	
Ò gìm nĒ tírīgà.	"She's very short."	

Not all adjectives, or even all adjectives with gradable senses, have associated ideophones; thus WK has only the adverb *pāmm* in

Lì à súŋā pāmm.	"It's very good."
Lì à nẽ bẽ'ɛd pāmm.	"It's very bad."
Lì zùlım pāmm.	"It's very deep."
Lì mà'as pāmm.	"It's very damp."

Most dynamic verbs likewise are not associated with ideophones:

Ò từm pāmm.	"She's worked hard."
Ò tòm hālí.	"She's worked hard." <u>27.6</u>
Ò zò pāmm.	"She's run a lot."
Ò zò hālí.	"She's run a lot."

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Ideophones

However, many verbs can be followed by words which are again stereotyped and often show phonological features not found in the regular vocabulary. These are often more obviously onomatopoeic than the ideophones which intensify adjectives, and are not generally uniquely associated with particular verbs:

Ò zòt nɛ̃ tólìb tólìb. "He [a rabbit] is running lollop-lollop." WK

Similarly, the stance verb $zi'e^{ya}$ "be standing" and its dual-aspect derivatives are often followed by $s\bar{a}p\iota^+$ "straight" (LF *sappine* KB, cf <u>5.1.3</u>), but the word is found also after other verbs.

ka ku nyaŋe due o meŋi zi'e sapii. kà kú ňyāŋı ø dúe ò mēŋı ø zí'e sāpıı. and NEG.IRR prevail CAT rise 3AN self CAT stand IDEO "and was not able to rise and stand straight." (Lk 13:11, 1996)

maalim suoraug sappi məəgin la màalım suā-dáug sāpı məəgu-n lā make:IMP road-male:sg IDEO grass:sg-LOC ART "Make straight the high road in the wilderness" (Isaiah 40:3)

Ideophones of this type resemble manner adverbs syntactically, and similarly can be preposed with $k\dot{a}$ (Abubakari 2017.) There is perhaps some overlap of categories: see on $ny\bar{a}e^{n\epsilon/}$ "brightly", for example <u>16.4</u>.

A third type of ideophone overlaps with emphatics <u>27.6</u>: so, for example kimm in B5 kimm "what exactly?" <u>15.3.4</u>.

Prepositional phrases function typically as VP adjuncts, less often as complements. They cannot form components of noun phrases directly. Neither prepositions nor their own complements can be coordinated. Except for $n\bar{\epsilon}$ "with", the prepositions are also used as clause adjuncts <u>20.2.1</u>.

 $N\bar{\epsilon}$ is "with" in both accompanying and instrumental senses. The $n\bar{\epsilon}$ "and" which coordinates NPs and AdvPs <u>15.1</u> is fundamentally the same word. $N\bar{\epsilon}$ may only take NPs or AdvPs as complements (including nominalised \hbar -clauses.)

WK has forms with bound personal pronouns as complements; note the H toneme on the preposition:

ní m ^a	ní tī+/
ní f ⁹	ní yā+/
<i>n∙ó</i> -⁰ [nữ(:)]	ní bā+/
ní lī ^{+/}	

The *ne o* of the 1996 NT version is frequently read $[n\tilde{o}]$ in the audio.

Other speakers only use $n\bar{\epsilon}$ with free pronouns; WK has alternative forms also with $n\epsilon$ before those bound pronouns which have a vowel in SF: $n\epsilon l$, $n\epsilon t$, $n\epsilon y$, $n\epsilon b$, with the pronouns having L toneme throughout; SB has the same forms.

Examples for *n* $\bar{\epsilon}$:

Lìgıním_fù nīf nế fù nú'ùg. Cover:IMP 2SG eye:SG with 2SG hand:SG. "Cover your eye with your hand."

Bà kèŋ nēnōbá."They've gone on foot." WK3PL go with leg:PL.

Dìm nē Wīn, dā tú'às nē Wīnné +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 nε sumbugusum."Go home in peace." (Mk 5:34)Kùlımnēsùmbūgusím.Go.home:IMP with peace.

[*Bárıkà né fù*] *kēn kēn.* [Blessing with 2sg] arrival arrival. "Welcome!" (based on a greeting template <u>28</u>)

M gέň' nέ fù. "I'm angry with you." SB
 15G get.angry:prv with 25G.

The compound preposition $l\dot{a}$ 'am $n\bar{\epsilon}$ "together with" derives from a *n*-catenation construction <u>22.2.2</u>:

...mɔr ya'am yinne la'am nɛ tɛn'ɛsa yinne. ... mɔ̄r yā'am yīnní là'am nɛ̄ tɛ̄ň'ɛsá yīnní. ... have sense one together with thought one. "... had one mind together with one thought." (Acts 4:32)

Wōv means "like." With pronoun complements WK has

wῦυ mān LF mánẽ	wύυ tì
wōu fūn LF fúnē	wúu yà
พบิบ วิท ^ะ	wúu bà
wóo lì	

WK permits phrases introduced by $w\bar{v}v$ to be preposed with $k\dot{a}$ 27.2, but rejects this construction for $n\bar{\epsilon}$ + NP:

Wōv búŋnế kà ò zót.Like donkey:sG like and 3AN run:IPFV."Like a donkey, he runs."

but *Né m nú'ùg kà m sī'ıs. With 1sg hand:sg and 1sg touch. is not possible for "With my hand, I touched it."

The complement is often a *si am* relative clause <u>24.3.1</u>:

Ò zòt wōv búŋ n zòt sī əm lā.
 3AN run:IPFV like donkey:SG NZ run:IPFV INDF.ADV ART.
 "He runs like a donkey runs."

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 $W\bar{\upsilon}\upsilon$ occurs often after $w\bar{\varepsilon}n^{na/}$ "resemble", introducing its complement; the preposition $n\bar{\varepsilon}$ is frequently used instead. In any case, the complement is followed by the empty particle $n\bar{\varepsilon}$ whenever it does not already have the article $|\bar{a}^{+/}$, even if it is a pronoun, or is specific:

พบิบ mān nē	"like me"
wōu búŋ nē	"like a donkey"

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

Alazugɔ mɔri ya'am wυυ wiigi nɛ... Àlá zùgɔ̄, mòrī yā'am wūυ wīigí nē... Therefore, have sense like snake:PL like... "Therefore, be wise as serpents ..." (Mt 10:16)

 $W\bar{\upsilon}\upsilon$, $w\bar{\varepsilon}n w\bar{\upsilon}\upsilon$, and $w\bar{\varepsilon}n n\bar{\varepsilon}$ can also be used for "about" with numbers. The complement is not followed by the redundant $n\bar{\varepsilon}$ in this case:

wōv tūsá àyí' "about 2000" like thousand:PL NUM:two

 $W\bar{\epsilon}n n\bar{\epsilon} X$ and $w\bar{\epsilon}n w\bar{\upsilon}\upsilon X$, using $w\bar{\epsilon}n^{na/}$ "resemble" in *n*-catenation 22.2.2, behave as unitary prepositional phrases to the extent that the entire sequence $w\bar{\epsilon}n$ + preposition + complement can be preposed with $k\dot{a}$, or extraposed after the negative prosodic clitic:

Da lo ya nindaase, wenne foosug dim la niŋid si'em la. Dā ló yà nīn-dáasē ⁺ø, wēn nē fɔ̄ɔsúg dím lá ø NEG.IMP tie 2PL eye-face:PL NEG, resemble with puff:GER EMPTY.PL ART NZ nìŋıd sī'əm lā. do:IPFV INDF.ADV ART. "Don't screw up your faces like the hypocrites do." (Mt 6:16, 1976)

Àsέε⁼ is "except for" (← Hausa *sai*)

àsέε Wínà'am "except for God" (calquing the Twi gye Nyame)

For pronoun complements the free forms are used.

Hālí⁺ means "up to and including"; cf Hausa *har*, but this is a word found extremely widely in the savanna and Sahel; it may ultimately derive from Arabic حتى ħatta: (Heath 2005.)

O daa pvn anε ninkvvd hali pin'ilvgvn sa.
Ò dāa pvn à nε nīn-kúvd hālí pīň'ilúgō-n sá.
3AN TNS previously COP FOC person-killer:sG even beginning:sG-LOC since.
"He was a murderer from the beginning." (Jn 8:44)

For pronoun complements, the free forms are used.

 $H\bar{a}l\ell^+$ can also appear as a prelinker adjunct and as an emphatic <u>27.6</u>. As emphatic "even" preceding $n\bar{\epsilon}$ or $l\dot{a}$ 'am $n\bar{\epsilon}$ "(together) with" and a \dot{n} -clause complement, it produces the meaning "despite, even though, even as":

Hali la'am nε on daa an yεlsum wusa daan la, o da lieb nɔŋdaan...
Hālí là'am nε̄ ón dāa áň yɛ̄l-súm wūsa dáàn lā,
Even together with 3AN:NZ TNS COP matter-goodness all owner:sg ART,
ò dà lìəb nɔ̄ŋ-dáàn...
3AN TNS become poverty-owner:sg...
"Despite his having possessed every blessing, he became poor..." (2 Cor 8:9)

Zugsob yεl yε, Hali nε man vve nwa...Zūg-sóbyέl yε̄, Hālí nε̄ mán vūẹ ňwá ...head-EMPTY.AN say that even with 1sg:NZ be.alive this ..."The Lord says: Even as I live .." (Rom 14:11)

hali nε man daa sɔbi tisi ya si'em la, m daa pu sɔbi li hālí nĒ mán dāa sɔ̄bı ø tísì yā sī'əm lā even with 1sg:NZ TNS write CAT give 2PL.OB INDF.ADV ART m̀ dāa pū sɔ̄bí lī ... 1sg TNS NEG.IND write 3INAN.OB ... "Despite how I wrote to you, I did not write it ..." (2 Cor 7:12)

19.1 Structure

The core of the verb phrase is a verb word along with bound particles which, together with verb flexion, mark tense, aspect, mood and polarity. Some verb complements are left-bound liaison words; remaining complements and adjuncts follow in that order, after which VP-final particles may occur.

The VP is subject to independency marking. This is primarily a tone overlay, but there are associated segmental features: the particle $y\bar{a}^+$ after phrase-final perfective forms and the dual-aspect verb imperative flexion $-m^a$ appear only when the tone overlay is present.

The system separates tense, marked by preverbal particles, from aspect, marked by verb flexion and postverbal $n\bar{\epsilon}^{+/}$. As is common cross-linguistically, future reference is marked by *mood*. Negative markers vary with mood. Mood itself is marked primarily by such preverbal particles, but the flexion $-m^a$ of dual-aspect verbs is a portmanteau marker of imperative mood, positive polarity and independency.

The VP shows no agreement. Apparent number agreement in imperatives is actually due to the incorporation of the postposed 2nd pl subject pronoun ^{ya}.

	Tense		Mood	Preverb		LW1	LW2	
lèɛ	dàa	nàm	ø ⇔ pi	pùn	VERB	n٤	m ^a	nē+/
	sàa	ňyēɛ(tı)	ø ↔ da	lèm		уа	f	
	ø		nà ↔ kừ	tì			0	
	pà'			kpèlım			<i>h</i> +	
	sà			là'am			tı+	
	dāa			dÈŋım			ya+	
	dà						ba+	

Bound VP particles occur in a fixed order:

The particles in the column "Mood" also mark polarity: positive \leftrightarrow negative.

LW1, LW2 are slots for left-bound liaison words $\underline{19.7.3}$.

For $l \epsilon \bar{\epsilon}$ "but" see <u>19.7.1</u>; for *nam* "still" and $n \bar{\nu} \epsilon (t \iota)$ "habitually" see <u>19.3.2</u>; for aspectual $n \bar{\epsilon}^{+/}$ see <u>19.2.1</u>.

Tone Pattern LO verbs have all-M tones in the irrealis mood 6.3.

19.2 Aspect

The basic aspect distinction is **perfective** versus **imperfective**. Dual-aspect verbs distinguish aspects by flexion: the unmarked stem form is perfective, the suffix *-*da* forms the imperfective, and a form with *-*ma* is used for imperative when the verb word itself carries the independency-marking tone overlay <u>19.6.2.2</u>. Single-aspect verbs have a single form which is always imperfective.

The terms **dynamic** and **stative** are used in this description as labels for verb classes, not aspects. Dynamic verbs can be morphologically dual-aspect or single-aspect. They typically express occurrences, but can also express states: the imperfective form of a dynamic verb can have habitual/propensity meaning, which can be regarded either as expressing multiple occurrences or as a state, describing the character of the subject, and the perfective of dynamic verbs which express a change of state in the subject can express the resulting state itself. Stative verbs are all single-aspect. By default, they express persistent/abiding states.

19.2.1 Aspectual nē

Following a verb word with no free words intervening, the VP focus particle $n\bar{\epsilon}^{+/} 27.1.2$ by default marks a contrast with another time at which the situation expressed by the verb did not obtain; the meaning might be paraphrased "at the time referred to in particular." When $n\bar{\epsilon}^{+/}$ is used in this way, the time referred to is not coextensive with the time of the situation (CGEL pp125 ff); in the terminology of Klein 2013, there is a "topic-time contrast." With imperfective aspect, this happens when the time referred to is strictly contained within the time of the situation: the meaning is similar to the English "progressive", and is similarly not freely used with verbs which by default express abiding states. With perfectives expressing events, the time referred to and the time of the situation always coincide, and aspectual use of $n\bar{\epsilon}^{+/}$ is not possible; however, *resultative* perfectives express a state resulting from the action of the verb, and because this state is not present prior to the action, there is invariably a topic-time contrast. Accordingly, aspectual $n\bar{\epsilon}^{+/}$ after a perfective form marks it as resultative; conversely, if a perfective verb form does not express a change of state in the subject, any following $n\bar{\epsilon}^{+/}$ cannot be aspectual.

 $N\bar{\epsilon}^{+/}$ may not be used at all in certain syntactic contexts, and may not appear a second time in an aspectual sense if it is already present focussing a constituent; the aspect distinctions are then unmarked.

If free words intervene between $n\bar{\epsilon}^{+/}$ and the verb it cannot be interpreted as aspectual, and the relevant aspect distinctions are unmarked:

Ò kùesıdī bá nē. "She's selling them."
 3AN sell:IPFV 3PL.OB FOC.

Ò kùəsıd nē sūmma lā. "She is selling the groundnuts." 3AN sell:IPFV FOC groundnut:PL ART.

but *Ò* kùosıd sūmma lā nē. "She sells/is selling the groundnuts." 3AN sell:IPFV groundnut:PL ART FOC. (VP focussed: "They're not free.")

 $N\bar{\epsilon}^{+/}$ may only be used aspectually if the VP has positive polarity; if not, the relevant distinctions are again unmarked:

	Ò zàbıd. 3AN fight:IPFV.	"He fights."
	<i>Ò zàbıd nē.</i> 3AN fight:IPFV FOC.	"He's fighting."
but	Ò pō zábıdā +ø. 3AN NEG.IND fight:IPFV NEG.	"He's not fighting/He doesn't fight."

The VP must have indicative mood for aspectual use of $n\bar{\epsilon}^{+/}$. In direct commands a following $\dot{a}|\dot{a}$ "thus" imposes a continuous/progressive imperfective sense on the verb <u>19.4</u>, but aspectual $n\bar{\epsilon}^{+/}$ cannot appear.

Passives <u>19.8.1.1</u> cannot use the imperfective aspect with progressive meaning, so $n\bar{\epsilon}^{+/}$ can never be aspectual after such forms.

	<i>Dāam lā núùd.</i> Beer art drink:IPFV.	"The beer gets drunk." WK
	<i>Dāam núùd zīná.</i> Beer drink:IPFV today.	"Beer gets drunk today." WK
but	Dāam lā núùd nē. Beer art drink:IPFV FOC.	Only "The beer is for drinking." WK ("Not for throwing away.") not "The beer is being drunk."

* $D\bar{a}am n\dot{u}\dot{u}d n\bar{\epsilon}$ was rejected by WK altogether (because without a context the subject was intepreted as generic, see below.)

Contrast the intransitive use of patientive ambitransitive verbs expressing changes of state:

 \dot{M} yóżd $n\bar{\epsilon}$ kúlìŋ $l\bar{a}$. "I'm closing the door." 1SG close:IPFV FOC door:SG ART.

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Lì $m\dot{a}'ad$ $n\bar{\epsilon}$. "It is getting cool." ($m\bar{a}'e^{+/}$ "get cool") 3INAN get.cool:IPFV FOC.

A perfective form can only be interpreted as resultative if it expresses a change of state in the subject.

	Ò kpì nē.	"He's dead."
	3AN die foc.	
but	Ѝ dá' nē búŋ.	"I've bought a <i>donkey</i> ."
	15G buy FOC donkey:sg.	("What have you bought?"; focussed object)

Assume-stance verbs do not express a change of state in the subject, because stance verbs are not stative in Kusaal. Accordingly, the perfective of an assumestance verb cannot accept a resultative reading:

Ò dìgın nē.	"He's lain down." DK: "Someone calls at your
3AN lie.down foc.	house and gets no answer; he thinks you're out
	but I'm explaining that you've gone to bed."

With stative verbs, aspectual $n\bar{\epsilon}^{+/}$ may only occur if there is an explicit time expression in the immediate context, or if the the following constituent does not permit focussing with $n\bar{\epsilon}^{+/}$ 19.2.3. If not, $n\bar{\epsilon}^{+/}$ must be interpreted as focussing the VP or a constituent of the VP:

	Ò gìm. 3AN be.short.	"She's short."
but	<i>Ò gìm nē.</i> 3an be.short foc.	"He's <i>short.</i> " ("I was expecting someone taller.")
	<i>À mór pự'ā.</i> 1sg have wife:sg.	"I have a wife."
but	<i>Ì mớr nẽ pự'ā.</i> 1sg have foc woman:sg.	"I have a woman." (not "wife": implies an irregular liaison, WK)

The general principle that $n\bar{\epsilon}^{+/}$ following a verb without intervening unbound words is aspectual if the verb allows for it has an exception with **generic** statements. These are usually recognisable by the fact that they have indefinite subjects without determiners (or pronouns referring to such subjects) and are not presentational <u>27.4</u>:

Nīigí >ňbid nē mɔɔd. Bà nùud nē kú'èm.
Cow:PL chew:IPFV FOC grass:PL. 3PL drink:IPFV FOC water.
"Cows eat grass. They drink water." ("What do cows eat? and drink?")

Aspectual $n\bar{\epsilon}^{+/}$ is omitted in replying to polar questions or commands by repeating the verb:

A: Gòsım!	"Look!"	B: Ѝ gósìd!	"I'm looking!"
A: Fù gósìd néɛ?	"Are you looking?"	B: Ѝ gósìd!	"I'm looking!"

19.2.2 Perfective

Perfective is the unmarked aspect. It is not incompatible with a present tense interpretation, often corresponding to the English "simple present", which is likewise unmarked over against the progressive form. It is the usual aspect found with the irrealis mood to express future events, and in ya'-clauses 23.2. Nevertheless, even without tense marking, the perfective often has an implication of completion, in contrast with the imperfective.

The perfective frequently does occur without tense marking, either explicit or implicit from context <u>19.3.5</u>. With most verbs this simply expresses a completed event or process with the time unspecified, creating the implication that the event is still currently relevant; the sense resembles the English "present perfect":

	Sāa dāa ní.	"It rained." (before yesterday.)
	Rain ™s rain.	
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)

Perfective appears with present meaning with events and processes which can be conceptualised as being coextensive with the moment of utterance:

 \dot{O} yèl yē ... "He says" (translating for the foreign doctor) 3AN say that ... Performatives naturally fall into this category:

Μ̀ pú'ùs yā.	"Thankyou", "I thank you."
1SG greet PFV.	(cf Hausa <i>Naa goodèe,</i> also perfective)
Ѝ 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:

```
M ňyé nū'-bíbisá àtáň'.
1sG see hand-small:PL NUM:three.
"I can see three fingers."
M téň'ès kà ... "I think that ..."
1sG think and ...
```

With verbs which express a change of state in the subject the perfective may express the resulting state:

Lì bòdıg yā .	"It's got lost."
3INAN lose PFV.	
Lì bòdıg nē .	"It's lost."
3INAN lose FOC.	

Such resultative perfectives are followed by aspectual $n\bar{\epsilon}^{+/}$ whenever syntactically permissible, because there is always a topic-time contrast with the situation preceding the action of the verb.

Ò	kpì nē.		"He's dead."
3AN	die Foc.		
Ň	géň	nē.	"I'm tired."
1SG	get.tired	l FOC.	
Bà	kùdvg	nē.	"They're old."
3PL	grow.old	FOC.	

Lì pè'ɛl nē. 3inan fill foc.	"It's full."
Lì yò nē. Binan close foc.	"It's closed."
<i>À búg nē.</i> 1sg get.drunk foc.	"I'm drunk." [calque/borrowing of Hausa <i>bùgu</i>]
<i>Ò lèr nē.</i> 3an get.ugly foc.	"He's ugly." WK <i>sic</i>
Lì sòbıg nē. 3inan blacken foc.	"It's black." WK <i>sic</i>

The only agentive transitive verbs $\underline{19.8.1}$ I have found which express a change of state in the subject with resultative perfectives involve putting on clothing:

Ňyέ	fūug.	"I've put a shirt on."
isg put.	on shirt:sg.	
Ì yέ	nē fūug.	"I'm wearing a shirt."
isg put.	on Foc shirt:sg.	

In catenation and in absolute clauses, the choice of perfective over imperfective implies that the event is complete. Consequently, in catenation the order of VPs when the first has perfective aspect is iconic, with constituent order constrained to follow event order <u>22.1</u>. Thus while English might say: "Two men stood with them, dressed in white", Kusaal must have

Ka dapa ayi' yε fupiela zi'e ba san'an. Kà dāpá àyí' yέ fū-píəlà ø zì'e bà sā'an. And man:PL NUM:two dress shirt-white:PL CAT stand 3PL among. "Two men dressed in white were standing with them." (Acts 1:10)

In contrast, an imperfective may be followed by a perfective:

Ňwādısá àtáň'kà fù ná mōr bīiglā nkēnā.MonthNUM:three and 2SG IRR have child:SG ART CAT come hither."Bring the child here in three months." ("having the child, come here.")

With absolute clauses as adjuncts, the temporal relationship to the main clause is determined by aspect, with perfective in the absolute clause implying priority and imperfective simultaneity $\underline{24.2}$. In the same way, narrative generally features series of tense-unmarked perfectives describing events strictly in order $\underline{19.3.5}$.

Perfectives may appear in general statements such as proverbs, which in such cases should probably be regarded as mini-anecdotes:

Kukoma da zab taaba ason'e bi'ela yela. Kùkòma dá zàb tāabá à-sɔ̃ň'e bī'əlá yɛ̀la. Leper:PL TNS fight each.other PERS-better.than slightly about. "Lepers once fought each other about who was a bit better." KSS p40

19.2.3 Imperfective

Without aspectual $n\bar{\epsilon}^{+/}$, the imperfective of dynamic verbs is "habitual", expressing multiple occurrences, or a propensity of the subject to the achievement, accomplishment or activity expressed by the verb:

Ò ờňbιd. 3AN chew:IPFV.	"He chews."
<i>Nīdıb kpíìd.</i> Person:pl die:IPFV.	"People die."
Nīigí òňbıd mɔɔd. Cow:pl chew:IPFv grass:pl.	"Cows eat grass."
<i>À zíň'i.</i> 1sg be.sitting.	"I sit."
<i>À záňl dāká lā.</i> 1sg carry.in.hands box:sg art.	"I carry the box in my hands."

With aspectual $n\bar{\epsilon}^{+/}$, the imperfective of dynamic verbs has a meaning analogous to the English "progressive."

Ò *`o`mbid nē.* "He's chewing."
 3AN chew:IPFV FOC.

À zíň'i nē. "I'm sitting." 1SG be.sitting FOC.

M záňl nē dāká lā.
1SG carry.in.hands FOC box:SG ART.
"I'm carrying the box in my hands."

With verbs describing events the sense is often "time-limited habitual":

Nīdıb	kpîìd	nē.	"People are dying."
Person:PL	die:IPF	√ FOC.	

Stative single-aspect verbs express persistent or abiding states; accordingly they do not normally display topic-time contrasts or take aspectual $n\bar{\epsilon}^{+/}$:

Ò gìm.	"She's short."
зам be.short.	
Ì mór pự'ā.	"I have a wife."
1sg have wife:sg.	

By default, if the particle $n\bar{\epsilon}^{+/}$ follows such a verb it is interpreted as *focussing* either the VP or a VP constituent, but $n\bar{\epsilon}^{+/}$ can be aspectual if there is an explicit time reference in the clause itself (which may be as little as a tense marker.) This can constrain the meaning to a temporary state, limited to a particular time period, with a contrast between the time referred to and other times when the state was not in effect. (The requirement for an explicit marker of time in the same clause may be partly an artefact of acceptability judgments based on short isolated clauses.)

Li $v\epsilon n$ $n\epsilon$. "It's *beautiful*." (Focus on the verb.) 3INAN be.beautiful FOC.

but *Nānnánā, lì vèn nē.* "Just now, it's beautiful." Now, 3INAN be.beautiful FOC.

> Sān-kán lā, lì dāa zúlım nē. Time-dem.sg art, sinan ths be.deep foc. "At that time, it was deep."

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Mù'ar lā dāa zúlìm nē.	"The lake <i>was</i> deep."	
Lake:sg ART TNS be.deep FOC.	(Implying, "Now it's shallow." WK)	
Lì dāa vén nē.	"It was beautiful." WK: "I gave you a cup, and	
SINAN TNS be.beautiful FOC.	it was OK then, but now you've spoiled it."	
Lì dāa būgus nē.	"It was soft." ("Now it isn't.")	
SINAN TNS be.soft foc.		

If the following constituent does not permit focussing with $n\bar{\epsilon}^{+/} \underline{27.1.2.1}$, $n\bar{\epsilon}^{+/}$ has to be aspectual even if the verb is stative and there no explicit time marker:

M̀ mór bīisá_ àtáŋā. 1sg have child:PL NUM:three.exactly. "I've got exactly three children."

but *M mór nē bīisá_ àtáŋā.*

ISG 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	I TNS COP good:ADV.	
Lì	dāa á nē súŋā.	"At the time, it was good." WK
3INAN	I TNS COP FOC good:ADV.	

Lì à nĒ súŋā. "It's good." ("Now; it wasn't before." WK) 3INAN COP FOC good:ADV.

Emphatics 27.6 do not behave in this way:

bɔzugɔ o anε fu biig mɛn.
bɔ̄ zúgɔ´ ò à nɛ́ fù bīig mɛ́n.
Because 3AN COP FOC 2SG child:sG also.
"Because he is your child too." (Genesis 21:13)

19.3 Tense

19.3.1 Tense particles

Tense particles come first in the VP, preceded only by $l\dot{\epsilon}\epsilon$ "but." They are mutually exclusive. They comprise

dàa	"day after tomorrow"
sàa	"tomorrow"
Ø	present, or implicit (see below)
pà'	"earlier today"
sà	"yesterday"
dāa	before yesterday
dà	before the time marked by <i>dāa</i>

The day begins at sunrise:

Fù sá gbìs wĒlá +ø?	"How did you sleep yesterday?" i.e."last night"
2SG TNS sleep how CQ?	

Future tense markers normally require irrealis mood, but imperative is possible if a main clause has been ellipted before a subordinate clause of purpose:

Ò sáa zàb nà'ab l	lā.	"Let him fight the chief tomorrow."
3AN TNS fight chief:sg A	ART.	

 $D\bar{a}a$ means "before yesterday" but can be used freely for even remote past. The NT has numerous parallel passages where the same events are narrated in one passage with $d\bar{a}a$ and in another with $d\dot{a}$, but when both markers occur, $d\dot{a}$ always expresses time prior to $d\bar{a}a$. (For other "pluperfects", cf tense marking in content clauses 25.2, and in \dot{n} -clauses within narrative 19.3.5.)

19.3.2 Auxiliary tense particles

Two particles may occur in the slot following tense particles but preceding polarity/mood particles.

Nàm means "still" or with a negative "yet":

Tìım	lā	nám	bÈE	+ø?	"Is there any medicine left?"
Medicine	ART	still	EXIST	PQ?	("Does the medicine still exist?")

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dunia **nam pv** pin'il la dūnıyá_ø nàm pv pīň'il lā world:sg NZ still NEG.IND begin ART "before the world began" (Mt 25:34) ("The world having not yet begun.")

M nám zī' Ø ňyē gbīgımnε +Ø.
1SG still NEG.KNOW CAT see lion:SG NEG.
"I've never seen a lion." SB (see <u>22.2</u> on *n*-catenation idioms)

 $Ny\bar{\epsilon}\epsilon$ or $ny\bar{\epsilon}\epsilon$ tí (KT $\bar{\epsilon}\epsilon n$ tí, NT nyii ti, KB $\epsilon\epsilon n$ ti) means "habitually." The main verb is naturally imperfective.

Ò ňyēε zábìd ná'àb lā.
 3AN usually fight: IPFV chief:sg ART.
 "He's accustomed to fight the chief." WK

Ò ňyēε gɔ̄sıd ná'àb lā.
 3AN usually look.at:IPFV chief:sg ART.
 "He's accustomed to look at the chief." WK

Ò dāa ňyēε zábìd ná'àb lā.
 3AN TNS usually fight: IPFV chief:sg ART.
 "He was accustomed to fight the chief." WK

δ ε ε ň tí zàbιd nε ná'àb lā.

 san usually fight: IPFV FOC chief: SG ART.

 "He's accustomed to fight the chief." KT

δ εεň tí zìň'i kpēlá. "She's accustomed to sit there." KT
 3AN usually be.sitting there.

δ εεň tí dīgι kpēlá. "She's accustomed to lie there." KT
 3AN usually be.lying there.

Ti **ɛɛnti pu** sɔbid dinɛ ka ya na karim ka ku nyaŋi gban'e li gbinnɛ. Tì ɛɛň tí pū sɔ̄bıd dínì kà yà ná kārím kà kú ňyāŋı ø 1PL usually NEG.IND write:IPFV REL.INAN and 2PL IRR read and NEG.IRR prevail CAT gbáň'e lì gbìnnɛ̄ +ø.

grab 3INAN base:sg neg.

"We do not write what you will read and not be able to grasp the meaning of." (2 Cor 1:13)

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19.3.3 Discontinuous past

My informants use the **discontinuous-past** marker n^{ϵ} to make an earlier-today past with indicative meaning:

M̀ ɔ̃ñbıdī-n sūmma. "I was eating groundnuts." 1SG chew:IPFV-DP groundnut:PL.

This implies "and now I'm not", a sort of anti-current-relevance. Such a "discontinuous" past is proposed for many languages (especially in West Africa) in Plungian and van der Auwera 2006; n^{ϵ} fulfils their criteria for a typical discontinuous past well. They note (5.2) that such markers often acquire attenuative, hypothetical or counterfactual senses, which are much the commonest rôles of n^{ϵ} in Kusaal <u>23.1.1</u>.

19.3.4 Periphrastic future constructions

Kusaal does not use tense-unmarked indicative imperfectives for immediate future (like English "I'm going home.") Note the use of the *perfective* in

À kúl yā.	equivalent in usage to "I'm going home now."
1SG go.home PFV.	Perfective as an instantaneous present <u>19.2.2</u>

There are two periphrastic indicative constructions for "to be about to ...": (a) $b \dot{} c d^a$ "want" + gerund. The subject need not be animate; the construction is only possible with gerunds from dynamic verbs.

Tìug lā bóòd līig. "The tree is about to fall." Tree:sg ART want fall:ger.

Yv'vŋ bɔɔd gaadvg, ka bɛog bɔɔd nier. Yú'vŋ bɔ́ɔ̀d gáadv̀g kà bɛ̄og bɔ́ɔ̀d níàr. Night want pass:GER and morning want appear:GER. "The night is about to pass and tomorrow is about to appear." (Rom 13:12)

(b) subject + $y\bar{\epsilon}$ -purpose clause; the subject must be animate. (Cf also <u>25.2</u>.)

 \dot{M} yé \dot{m} kµā sūmma. "I'm going to hoe groundnuts." 1SG that 1SG hoe groundnut:PL.

M yέ m kiá nīm. "I'm going to cut meat"
 1sg that 1sg cut meat:sg.

19.3.5 Implicit tense marking and narrative

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:

<i>Nīdıb kpîìd nē.</i> Person:pL die:IPFV FOC.	"People are dying."
Nīdıb kpîid. Person:PL die:IPFV.	"People die."
<i>À zíň'i nē.</i> 1sg be.sitting foc.	"I'm sitting down."
<i>Ò gìm.</i> 3AN be.short.	"She's short."
<i>À mór pự'ā.</i> 1sg have wife:sg.	"I have a wife."

In isolation, it it is not possible to construe expressions like these as past. With perfective aspect, similarly, the sense without an explicit context must be resultative present, perfective-present or instantaneous present <u>19.2.2</u>:

Ò	kpì	nē.	"She's dead."
3AN	die	FOC.	
Ò	<i>kp</i> ì	yā.	"She's died."
3AN	die	PFV.	
Ò	yÈl	уē	"He says"
3AN	say	that	
Ň	ט'טמ	òs yā.	"(I) thank you."
		et PFV.	(1) 01101111 9001

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"I agree."

À si̯ák yā. 1sg agree pfv.

M̀ ňyέ nū'-bíbisá_ àtáň'. "I can see three fingers." 1SG see hand-small:PL NUM:three.

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M téň'ès kà ...
Isg think and ...
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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 todaypast usage of discontinuous-past n^{ϵ} :

À sá zàb ná'àb lā sú'ès. 1SG TNS fight chief:SG ART vesterday. À záb ná'àb lā sú'ès. "I fought the chief vesterday." or 1SG fight chief:SG ART vesterday. Fù sáa nà kūl. 2SG TNS IRR go.home. Fù sáa nà kūl or bēog. 2SG TNS IRR go.home tomorrow. Fù nà kūl "You'll go home tomorrow." or bēog. 2SG IRR go.home tomorrow. Fù ná kūl. cf "You will go home." 2SG IRR go.home (later today, tomorrow, next week ...) À pá' òňbidī-n sūmma. 1SG TNS chew: IPFV-DP groundnut: PL. and À *śňb*idī-n sūmma. "I was eating groundnuts earlier today." (today-past sense of discontinuous-past n^{ε}) 1SG chew:IPFV-DP groundnut:PL.

Systematic meaningful omission of past tense markers occurs in **narrative**.

In KB/NT narrative, main clauses which do not contain an explicit time expression show tense marking much more often than not, *unless* they are introduced by ka; the first 12 chapters of Acts in the 1996 version show over five times as many tense-marked as unmarked forms. On the other hand, clauses introduced by ka only have tense marking to signal that they disrupt the narrative flow, as with flashbacks or descriptive passages. KB/NT narrative varies in the proportion of tense-marked clauses without ka to unmarked clauses with ka; the Balaam's Donkey narrative <u>30.1</u>

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shows a higher proportion of tense-marked clauses without ka than typical NT narrative, for example. However, throughout KB, narrative favours long sequences of coordinated ka-clauses with perfective aspect without tense marking, narrating the sequence of events in order. Here ka itself corresponds to *zero* in English.

Less formal sources like the Three Murderers text <u>30.2</u> drop tense-marking in clauses without kà within narrative much more often than the Bible versions. In view of the consistency of the tense marking principles of KB/NT, narrative clauses of this kind are probably analogous to the "historic present" of English informal conversational narration (CGEL p130); significantly, $kp\bar{\epsilon}$ "here" and spatio-temporal deictics like kana "this" are also common in such texts.

In any case, tense-marking must be absent in clauses introduced by $k\dot{a}$ which are carrying the narrative forward, and conversely, disruptions in narrative flow must normally be tense-marked (with exceptions as noted below.) Informants interpreted isolated $k\dot{a}$ -clauses without tense marking as fragments of narratives expressing events, leading to consistent rejection of any aspectual interpretation of the particle $n\bar{\epsilon}^{+/}$ in favour of constituent focus; but with tense marking, $n\bar{\epsilon}^{+/}$ was taken as aspectual just as in clauses without $k\dot{a}$:

	Lì bòdıg nē. 3inan get.lost foc.	"It's lost."
	<i>Kà lì bódìg nē.</i> And 3inan get.lost foc.	Rejected by WK; accepted after some thought by DK, explained as contradicting "someone hid it" i.e. as contrastive focus
	<i>Bà kùdıg nē.</i> 3PL get.old Foc.	"They're old."
	<i>Kà bà kúdìg nĒ.</i> And 3p∟ get.old Foc.	"And they're old." Rejected by WK; accepted by DK with the gloss "You're saying they're old when he promised to give you new ones", i.e. as contrastive focus
-	Kà lì dāa bódìg nē. And sinan tns get.lost foc.	"And it was lost."
	Kà bà sá kùdıg nɛ̄. Kà bà dāa kúdìg nɛ̄.	etc all acceptable as "and they were old."

Thus, except in the informal style seen in KSS, tense-marking both with and without $k\dot{a}$ signals disruption of the narrative flow:

But

Ka Yesu **daa** an yuma pii nɛ ayi' la, ka ba keŋ maluŋ la wuu ban ɛɛnti niŋid si'em la. Ka maluŋ la dabisa naae la, ka ba lɛbidi kun. Ka Yesu kpɛlim Jerusalem teŋin ka o ba' nɛ o ma pu baŋ ye o kpɛlim yaa. Ba **daa** tɛn'ɛs ye o dɔlnɛ ba teŋ dim la, ka keŋ ...

Kà Yesu ø dāa áň výmà pīi né àví lā, kà bà kēŋ málùŋ And Jesus NZ TNS COP year:PL ten with NUM:two ART, and 3PL go sacrifice:sg lā wūv bán ēɛň tí nìŋıd sī əm lā. Kà màluŋ lā dábisà ø ART like 3PL:NZ usually do:IPFV INDF.ADV ART. And sacrifice:SG ART day:PL NZ nāe lā, kà bà lébidì ø kūn. Kà Yesu kpźlìm Jerusalem finish ART, and 3PL return: IPFV CAT go.home: IPFV. And Jesus remain Jerusalem ténī-n kà ò bā' né ò mà рū bán vé ò kpèlim land:sg-Loc and 3AN father:sg with 3AN mother:sg NEG.IND realise that 3AN remain yāa ⁺ø. Bà dāa tēň'ɛs yź ò dòl né bà tèŋ-dìm lā, kà kēn... 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)

Note the "aside" \dot{O} mà **dá** à $n\bar{\varepsilon}$... in the genealogy of Jesus in Matthew 1.1ff 1996, which has dozens of clauses of the pattern kà X dự'á Y "and X begat Y":

Ka Jese du'a na'ab David. Ka David du'a Solomon. O ma **da** anε Uria pu'a. Ka Solomon du'a Rehoboam.

Kà Jese dụ'á ná'àb David. Kà David dụ'á Solomon. Ò mà
And Jesse beget king:sg David. And David beget Solomon. 3AN mother:sg
dá à nē Uria pụ'á. Kà Solomon dụ'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)

In contrast, the genealogy in Luke 3:23ff 1996, which moves backwards in time, has dozens of consecutive examples of

kà X sáàm dá à nĒ Y "and X's father **was** Y" and X father:sg tns cop foc Y

Disruptions in narrative flow normally *must* be tense-marked, but very long series of coordinated "asides" do sometimes drop tense marking; in KB the genealogy

in Luke shows *ka X saam da ane Y* at the beginning of paragraphs in the text, but *ka X saam an Y* otherwise.

Tense-unmarked dynamic-verb imperfectives can appear without aspectual $n\bar{\epsilon}^{+\prime}$ in narrative to express several instances of an event:

Ka on kpɛn' la, o yɛli ba ye [...]. Ka ba la'ad o.
Kà ón kpɛň' lā, ò yɛ́l bā yɛ̃ [...]. Kà bà lá'ad·ō ø.
And 3AN:NZ enter ART, 3AN say 3PL.OB that ... and 3PL laugh:IPFV 3AN.OB.
"After he came in, he said to them [...]. But they laughed at him." (Mk 5:39-40)

 \dot{N} -clauses normally mark tense independently, but within narrative they mark tense relative to the narrative timeline:

Jndāa ňyētsúŋāóndāa áň bí-līaláa+ø?3AN.CNTR TNSsee:IPFVgood:ADVSAN:NZ TNSCOPchild-baby:SG ARTPQ?"Did he see well when he was a baby?"

but Ka Pita yo'on tiɛn Yesu n sa yɛl si'el la ye ...
Kà Pita yō'on tíeň Yesu n sà yɛ́l sī'əl lā yɛ̄ ...
And Peter then remember Jesus NZ TNS say INDF.INAN ART that ...
"And Peter then remembered what Jesus had said the day before..." (Mt 26:75)

When absolute clauses are preposed with ka 27.2, main clauses lack tense marking regardless of whether tense marking appears in the absolute clause (132 of 136 cases in Mark, Luke, and Acts 1-14, 1976.) When the absolute clause is a postlinker adjunct 20.2.1, main clauses are tense-marked or not in the same way as other clauses in narrative, with absolute clauses agreeing with the main clauses as to tense-marking (69 cases out of 78.)

In this example, $n\bar{\epsilon}$ is perhaps marking constituent focus:

Ka ban ken la, Jesus **gbisid ne**.

Kà bán kēn lā, Jesus gbīsid nē.
And 3PL:NZ go:IMPF ART, Jesus sleep:IPFV FOC.
"As they were travelling, Jesus was sleeping." (Lk 8:22-23, 1976)
KB ka gbɛɛm zɛɛg Yesu ka o gbisid. "sleep overcame Jesus and he slept."

If $n\bar{\varepsilon}$ were aspectual, one would have expected tense marking.

Tense marking is not affected by clause adjuncts other than time expressions or by the "resumptive" $y\bar{\epsilon}$ of indirect speech 25.2.1; cf:

Amaa ba **da** zɔt o nɛ dabiem, ban da pʋ niŋ o yadda ye o sid anɛ nya'andɔl la zug. **Amaa ka** Barnabas zaŋ Saul n mɔr o keŋ ...

Àmáa bà dà zòt ō ø nē dábīəm, bán dà pū nín·ò ø But 3PL TNS fear: IPFV 3AN.OB FOC fear. 3PL:NZ TNS NEG.IND dO 3AN.OB váddā vé ò sìd à nē ňvá'àn-dòl Àmáa kà Barnabas lā zúg. faith that 3AN truly COP FOC after-follower:SG ART upon. But and Barnabas záŋ Saul n mɔr·ó _ø ø k<u></u>
ē<u>n</u> ... take Saul CAT have 3AN.OB CAT **GO** ... "But they were afraid of him, because they did not believe that he was really a disciple. But Barnabas brought Saul ..." (Acts 9:26-27)

A tense-marked interruption in the narrative flow may itself contain clauses coordinated with ka; the tense marker of the first such clause is not repeated, but the following ka-clauses are not carrying on the narrative and can thus 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 nē
3PL TNS NEG.IND have child:sg NEG, because Elizabeth TNS COP FOC kúndù'ar kà bà bàyí' lā wūsa mé kùdıg nē.
barren.woman:sg and 3PL NUM:two ART all also get.old Foc.
"They had no child, because Elizabeth was barren and they were both old." (Lk 1:7, 1996; no nɛ in the KB ka babayi' la wusa mɛ kudig hali.)

19.4 Mood

There are three moods: indicative, imperative and irrealis. The distinction among them is in itself quite straightforward, but the *marking* of mood involves portmanteau morphs which also express polarity, and in the case of the imperative, independency as well.

Indicative is the unmarked mood. It uses the negative particle $p\bar{v}$. It is used for statements and questions about the present and past, and timeless events and states. It can express the immediate future in periphrastic constructions. It is the only mood which permits the use of the particle $n\bar{\epsilon}^{+/}$ with aspectual meaning.

Imperative mood is negated by $d\bar{a}$. With dual-aspect verbs carrying the independency-marking tone overlay it shows a special inflection $-m^a$ <u>19.6.2.2</u> but otherwise the verb word coincides in form with the indicative.

Ò vòl t(ìm kà ò nóbìr pō zábē +ø.
3AN swallow medicine and 3AN leg:sg NEG.IND fight NEG.
"She took medicine and her leg didn't hurt." WK

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Ò vòl t(ìm kà ò nóbìr dā zábē +ø.
3AN swallow medicine and 3AN leg:SG NEG.IMP fight NEG.
"She took medicine so her leg wouldn't hurt." WK

The $-m^a$ imperative of dual-aspect verbs is perfective by default:

Kòňsım! "Cough!"

Imperatives without independency-marking tone overlay make perfective/imperfective distinctions in the usual way by verb flexion:

Dā	kóňsē +ø!	"Don't cough!" (To a patient who has coughed
NEG.IMF	cough NEG!	during an eye operation with local anaesthetic)
Dā	kóňsıdā +ø!	"Don't cough!" (Explaining before the operation
NEG.IMF	cough:IPFV NEG!	what to avoid throughout)

Whether or not it carries the flexion $-m^a$, imperative mood is followed by the postposed 2pl subject pronoun y^a in direct commands to several people <u>21.3</u>.

The particle $n\bar{\epsilon}^{+/}$ cannot appear in its aspectual sense with the imperative, but \dot{a}/\dot{a} "thus" after imperatives imposes continuous/progressive meaning:

Dìm!	"Eat!"
Dìmí àlá!	"Carry on eating!"

COP-2PL.SUB ADV: thus quiet: ABSTR!

Informants contract -*í*-à- either to -*í*- or to -*á*-: [dɪmɪla] [dɪmala].

Dìmī-ní	àlá!	"Keep ye on eating!"	[dımınıla] [dımınala]
Eat:IMP-2PL.SUB	ADV:thus!		

Single-aspect verbs used as imperatives frequently add àlá:

Dìgí àlá! Zì'é àlá!		zi'ela	"Keep on lying down!" [dɪɡɪla] [dɪɡala] "Be still!" (Jesus to the storm, Mk 4:39, 1976)
Dìgī-ní Be.lying.		àlá! .SUB ADV:thus!	"Keep (ye) on lying down." [dıgınıla] [dıgınala]
Āa-ní	àlá	bāaňlím!	"Be (ye) quiet!"

Bει-*n*(<u>)</u> àlá ànínā! "Be ye there!" EXIST-2PL.SUB ADV:thus ADV:there!

Imperative mood is used in direct commands and prohibitions and in purpose clauses. Imperative mood follows another imperative in catenation.

Gòsım! Look:imp!	"Look!"
Gòsımī_ø! Look:imp 2pl.sub!	"Look ye!"
Dā gīse +ø! Neg.IMP look Neg!	"Don't look!"
<i>Kèl kà ò gōs!</i> Cause:IMP and 3AN look!	"Let her look!"
Kèm nā n gōs! Come:IMP hither CAT look!	"Come and look!"
Dòllī m! Follow 1sg.ob!	"Follow me!"
Dòllī-ním! Follow-2pl.sub 1sg.ob!	"Follow ye me!"
<i>Mòr nīn-báalìg!</i> Have eye-pity!	"Have pity!"

Irrealis mood expresses future statements and questions and has the preverbal mood markers $n\dot{a}$ (positive) $k\dot{v}$ (negative.) Tone Pattern LO verbs show a tone perturbation to all-M tonemes <u>6.3</u>.

The irrealis mood distinguishes aspects by verb flexion like the indicative, but aspectual $n\bar{\epsilon}^{+/}$ cannot occur. Perfective aspect occurs much more often than imperfective. Irrealis mood with past tense markers is contrary-to-fact, not future-in-the-past: see <u>23.1</u> for its use in conditionals.

Ò dāa ná zāb ná'àb lā. "He would have fought the chief" (but didn't)
 3AN TNS IRR fight chief:sg ART.

19.5 Polarity

VP negation markers combine this function with mood marking. They appear after tense markers but before preverbs. They induce the appearance of a clause final negative prosodic clitic $\underline{7.1}$. There are three "negative verbs", equivalent to negative particle + positive verb.

Aspectual use of $n\bar{\epsilon}^{+/}$ is not compatible with negative polarity <u>19.2.1</u>.

Indicative mood is negated by $p\bar{v}$ (for some speakers $b\bar{v}$, as in Toende Kusaal.) Imperative is negated by $d\bar{a}$; conversely, forms which are negated by $d\bar{a}$ are imperative. Irrealis is negated by $k\dot{v}$, which *replaces* the positive irrealis marker $n\dot{a}$. Younger speakers sometimes use $k\dot{v}$ for $p\bar{v}$, but none of my informants accepts this.

<i>Ò zàb ná'àb lā.</i> 3an fight chief:sg art.	"He's fought the chief."
Ò pō záb nà'ab láa ⁺ ø. 3AN NEG.IND fight chief:sg art NEG.	"He hasn't fought the chief."
Zàm ná'àb lā! Fight:IMP chief:sg ART!	"Fight the chief!"
<i>Dā záb nà'ab láa</i> + <i>ø!</i> NEG.IMP fight chief:SG ART NEG!	"Don't fight the chief!"
Ò nà zāb ná'àb lā. 3AN IRR fight chief:sg art.	"He'll fight the chief."
Ò kừ zāb ná'àb láa ⁺ ø. 3an neg.irr fight chief:sg art neg.	"He won't fight the chief."

19.5.1 Negative verbs

Three verbs are equivalent to negative particle + verb. They do not carry the independency tone overlay $\underline{19.6.1.1}$. Negative prosodic clitics appear as usual.

 $K\bar{a}'e^+$ "not be, not have" appears as $k\bar{a}'$ before a complement <u>7.5</u>. It is the negative to both "be" verbs, $\dot{a}en\bar{n}^a$ "be something/somehow" and $b\dot{\epsilon}^+$ "be somewhere, exist" and also to $m\bar{c}r^{a'}$ "have." * $P\bar{v}b\dot{\epsilon}$ is not found, but $p\bar{v}m\bar{c}r$ is quite common; $p\bar{v}\dot{a}en\bar{n}$ is rare but can be found in contrastive contexts <u>19.11.2</u>.

Examples:

Dāỵ	lā kā'	ná'abā	+ø.	"The man isn't a chief."
Man:se	GART NEG.B	E chief:sg	NEG.	

 $D\bar{a}\mu$ $l\bar{a}$ $k\bar{a}'$ $b\bar{l}iga$ $+\phi$. "The man hasn't got a child." Man:SG ART NEG.HAVE child:SG NEG.

Pu'ā lā mór bīig àmáa dāu 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."

 $D\bar{a}\underline{u}$ $l\bar{a}$ $k\bar{a}$ 'e ⁺ø. "The man isn't there." Man:SG ART NEG.BE NEG.

 $D\bar{a}\mu$ $k\bar{a}'e$ $d52g\bar{v}$ -n laa ⁺ø. "There's no man in the room." Man:SG NEG.BE room:SG-LOC ART NEG.

 $D\bar{a}\mu$ $l\bar{a}$ $k\bar{a}$ ' $d5g\bar{v}$ -n $l\dot{a}a$ ⁺ ϕ . "The man is not in the room." Man:SG ART NEG.BE room:SG-LOC ART NEG.

 $K\bar{a}'e^+$ has a clause-final variant $k\dot{a}'asig\bar{\epsilon}$ (always LF):

Ò bīig ká'asìgē +ø.
 3AN child NEG.EXIST NEG.

"She has no child."

 $Z\bar{i}^{+}$ "not know" normally replaces negative particle + $m\bar{i}$.

Bùŋ-bāň'ad zī' yē tēŋ 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 *mi* with negative particles do occur:

M biig Solomon anε dasaŋ, ka pυ mi' wυυ lin nar si'em. M bīig Solomon á nē dá-sāŋ, kà pū mī' 1SG child:SG Solomon FOC COP young.man:SG, and NEG.IND know wūυ lín nār sī'əmm +ø. how 3INAN:NZ be.proper INDF.ADV NEG. "My son Solomon is young, and does not know how things ought to be." (1 Chronicles 22:5)

A clause-final LF **zi'isigɛ** also appears in KB, NT (e.g. Lk 12:40.)

Mit "see that it doesn't happen that ..." <u>22.3</u> is always imperative. In this sense, the postposed 2pl subject ^{ya} does not occur, even in address to several people.

Mit ka ya maal ya tuumsuma nidib tuon ye ba gosi.

Mìt kà yà máàl yà tùum-sùma nīdιb túèn yé bà gɔ̄sε +ø.
NEG.LET.IMP and 2PL do 2PL deed-good:PL person:PL before that 3PL look.at NEG.
"See that you don't do your good deeds in front of people so they'll look at you." (Mt 6:1, 1996)

KB has *mid* without a following negative clitic: *Mid ka ya maali ya tuum suma nidib tuon ye ba gos.*

Mit also appears with a NP object in the sense "beware of ..."; no final negative clitic appears in this case:

Miti ziri nodi'esidib bane kene ya sa'an na la. Mìtī ø zīrí nò-dí'əsìdıb bánì kɛ̄nní yà sā'an nā lā. Beware 2PL.SUB lie mouth-receiver:PL REL.PL come:IPFV 2PL among hither ART. "Beware of false prophets who come among you." (Mt 7:15, 1996)

19.6 Independency marking

The VP of a main clause or content clause is marked as independent. The marking is absent in all subordinate clause types other than content clauses. It is also absent in all clauses introduced by ka other than content clauses, regardless of whether they are subordinate or coordinate 20.1. The marker is primarily a tone overlay, but has associated segmental manifestations.

19.6.1 Tonal Features

19.6.1.1 Tone overlay

The independency-marking tone overlay is manifested only on VPs with positive polarity and indicative or imperative mood. It affects only the *first* word in the VP capable of carrying it: first the preverbal particle $l\hat{\epsilon}\epsilon$ "but", next any preverb, then the verb itself. Preverbal particles which have intrinsic M tonemes (past tense marker $d\bar{a}a$, auxiliary tense marker $ny\bar{\epsilon}\epsilon$) not only remain M themselves but also prevent the overlay from applying to any subsequent words.

The overlay otherwise changes all tonemes in the affected word to L if they were not L already. Affected words, regardless of their intrinsic tones, are always followed by M spreading, and show M toneme on the final vowel mora before liaison (changed as usual to H before liaison words beginning with a fixed-L toneme <u>7.3.</u>)

Examples of tone overlay manifesting independency marking in main clauses (with zab^{ϵ} "fight", $g5s^{\epsilon}$ "look at", $naab^{a}$ "chief"):

Ò zàb ná'àb lā.	"He's fought the chief."
Ò gòs ná'àb lā.	"He's looked at the chief."
Ò sà zàb ná'àb lā.	"He fought the chief yesterday."
Ò sà gòs ná'àb lā.	"He looked at the chief yesterday."

In contrast, the intrinsic tones appear after ka, with preverbal particles having intrinsic M tonemes, with negative polarity, and in subordinate clauses:

Kà ò záb nà'ab lā.	"And he's fought the chief."
Kà ò gōs ná'àb lā.	"And he's looked at the chief."
Ò dāa záb nà'ab lā.	"He didn't fight the chief."
Ò dāa gวิs ná'àb lā.	"He didn't look at the chief."
Ò pō záb nà'ab láa.	"He hasn't fought the chief."
Ò pū gɔ̄s ná'àb láa.	"He hasn't looked at the chief."
Ò yá' zàb nà'ab lā.	"If he fights the chief."
Ò yá' gɔ̄s ná'àb lā.	"If he looks at the chief."
Ón zàb nà'ab lā.	"He having fought the chief"
Ón gōs ná'àb lā.	"He having looked at the chief."

Content clauses have independency marking <u>25.2</u>:

Bà yèl yé ò zàb ná'àb lā.
3PL say that 3AN fight chief:SG ART.
"They say he's fought the chief."

Examples for the M of the final host mora before liaison, using the verbs $b\dot{2}dig^{\epsilon}$ "lose", $y\bar{a}dig^{\epsilon}$ "scatter" and the bound pronouns m^{a} "me" ba^{+} "them":

Intrinsic tones:

bòdıgı m ^a	bòdıgıdī m ^{a/} (ipfv)	bòdıgı bā+/
yādıgí m ^a	<i>yādıgídī m^{a/}</i> (ipfv)	yādıgí bā+/

After tone overlay:

bòdıgī m ^{a/}	bòdıgıdī m ^{a/}	bòdıgī bá+
yàdıgī m ^{a/}	yàdıgıdī m ^{a/}	yàgıdī bá+

Before a liaison word with initial fixed-L toneme 7.3: contrast

Bà kùvdī _ bá.	"They kill them."
3PL kill:IPFV 3PL.OB.	

2	C	2
Z	υ	Z

Verb phrases

with	Bà kùudí bà būus. 3PL kill:IPFV 3PL goat:PL.	"They kill their goats."
and	Bà gòs·ō_ø. 3pl look.at зам.ов.	"They looked at her."
with	Bà gòsú_ ò bīig. 3PL look.at 3AN child:sg.	"They looked at her child."

with ML necessarily changed to HL before the fixed-L pronouns.

19.6.1.2 Tone sandhi after subject pronouns

Bound pronoun subjects are normally followed by M spreading despite their own fixed L tonemes 7.3. However, the *third* persons $\partial l \dot{l} b \dot{a}$ are never followed by M spreading when the following VP has independency marking.

Examples with zab^{ε} "fight" $g\bar{j}s^{\varepsilon}$ "look at" $naab^{a}$ "chief": Without independency marking after coordinating kaable:

Kà ṁ záb nà'ab lā.	"And I've fought the chief."
Kà ò záb nà'ab lā.	"And he's fought the chief."
Kà ṁ gว̄s ná'àb lā.	"And I've looked at the chief."
Kà ò gɔ̃s ná'àb lā.	"And he's looked at the chief."

With independency marking:

Ѝ záb ná'àb lā.	"I've fought the chief."
Ò zàb ná'àb lā.	"He's fought the chief."
Ѝ gós ná'àb lā.	"I've looked at the chief."
Ò gòs ná'àb lā.	"He's looked at the chief."

The first and second person bound subject pronouns *are* followed by M spreading before a VP with independency marking, *unless* they are immediately preceded by $y\bar{\varepsilon}$ "that" (here introducing a content clause <u>25.2</u>):

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 yé **ò** zàb ná'àb lā. 3AN say that 3AN fight chief:sg ART. "He says he's fought the chief."

and Ò yèl **yé m̀ zàb** ná'àb lā. 3AN say that 1SG fight chief:SG ART. "He says I've fought the chief."

Absence of M spreading after bound subject pronouns is independent of tone overlay and is still seen when tone overlay is absent, e.g. when the VP has irrealis mood, or there is a preverbal particle carrying a M toneme:

Ò kờ zāb ná'àb láa +ø. 3AN NEG.IRR fight chief:SG ART NEG. "He will not fight the chief."

Ò *lɛɛ* dāa záb nà'ab lā.
3AN but TNS fight chief:sg ART.
"But he did fight the chief."

Ò yèl yé m̀ nà zāb ná'àb lā.
3AN say that 1SG IRR fight chief:SG ART.
"He says I'll fight the chief."

19.6.2 Segmental features

There are two segmental features of independency marking. They occur when and only when the verb word itself has undergone *tone* overlay, and are therefore absent whenever the verb is preceded by the particle $l\dot{\epsilon}\epsilon$ "but", a preverb, or a particle with M toneme, or when the VP 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 M spreading reveal its presence.

19.6.2.1 Perfective yā

Any perfective verb form carrying the independency-marking tone overlay which would otherwise be phrase-final is followed by the particle $y\bar{a}^+$. NT usually writes this particle as *-eya*, but informants show no trace of liaison, and KB writes *ya* solid with a preceding ordinary perfective SF. It is perhaps connected historically with the perfective flexion *-ra* of one conjugation of Nawdm verbs.

<i>Ò zàb yā.</i> 3an fight pfv.	"She's fought."
<i>Ò gòs yā.</i> 3an look pfv.	"She's looked."
Ò <i>sà zàb yā.</i> 3AN TNS fight PFV.	"She fought (yesterday.)"
<i>Sāa ní yā.</i> Rain:sg rain pfv.	"It has rained."
<i>À téň'ès kà lì lù yā.</i> 1sg think and 31NAN fall PFV.	"I think it's fallen down." (content clause)
Ò zàbī_m. заn fight 1sg.ob.	"He's fought me." (not final)
Ò gòsī m. заn look.at 1sg.ов.	"He's looked at me." (not final)
<i>Sāa dāa ní.</i> Rain:sg ™s rain.	"It rained." (M preverbal particle)
Ò <i>dāa záb.</i> 3AN TNS fight.	"He fought." (M preverbal particle)
<i>Ò nà zāb.</i> 3an irr fight.	"She'll fight." (irrealis)
<i>Kà ò záb.</i> And 3AN fight.	"And he fought." (no independency marking)
	 JAN fight PFV. Ô gòs yā. JAN look PFV. Ô sà zàb yā. JAN TNS fight PFV. Sāa ní yā. Rain:sG rain PFV. Ñ téň'ès kà lì lù yā. ISG think and JINAN fall PFV. Ô zàbī m. JAN fight 1SG.OB. Ô gòsī m. JAN look.at 1SG.OB. Sāa dāa ní. Rain:sG TNS rain. Ô dāa záb. JAN TNS fight. Ô nà zāb. JAN IRR fight.

266		Verb phrases	19.6.2.1
	<i>Kà ò gว̄s.</i> And заn look.	"And he looked." (no independency ma	arking)
	<i>Ò pō zábē</i> + <i>ø.</i> 3an neg.ind fight neg.	"He's not fought." (negative)	
	Ò pῦ g፺sẽ +ø. 3an neg.ind look neg.	"He's not looked." (negative)	
	Ò gìm.	"She's short." (stative)	
	Ò mì'.	"She knows." (stative)	
	Ò nòŋ.	"She loves him." (stative)	

The particle $y\bar{a}$ is tonally unique among left-bound words bearing M toneme in being Pattern O: when the LF occurs in questions, the toneme is L not H <u>6.4</u>:

Lì	bòdıg	yā.	"It's got lost."
3INA	N get.los	t PFV.	
Lì	bòdıg	yàa +ø?	"Has it got lost?"
3INA	м get.los	t pfv pq?	

Phrase constituents can only follow $y\bar{a}^+$ by extraposition 27.3:

Ya yidigya bεdegυ.	"You are very much mistaken." (Mk 12:27)
Yà yídìg yā bédugū.	
2PL go.astray PFV much.	
Μ̀ pú'ùs yā bέdugū.	"Thank you very much."

1SG greet PFV much.

19.6.2.2 Imperative -*m*

Imperatives of dual-aspect verbs carrying the independency-marking tone overlay adopt the flexion $-m^a$ <u>10.1</u>.

Gòsım!	"Look!" (or <i>Gòsīm!</i> with the vowel absorbed <u>3</u>)
Gòsımī_m!	"Look at me!"
Look:IMP 1SG.OB!	

	Gòsımí fò nú'ùg! Look:IMP 25G hand:sG!	"Look at your hand!" (or <i>Gòsím fò nú'ùg!</i> with the vowel absorbed)
	Dì'əm!	"Receive!"
	Dì'əmī Ø! Receive:IMP 2PL.SUB!	"Receive ye!"
	Dì'əmī-ní bā! Receive:IMP-2PL.SUB 3PL.OB!	"Receive ye them!" (- <i>ní-</i> for - <i>ya *ɲa</i> before liaison <u>7.2.3</u>)
	Dì'əmī-n·ó_ ø! Receive:imp-2pl.sub 3an.ob!	"Receive ye her!"
	Dì'əmī-ní àlá! Receive:IMP-2PL.SUB ADV:thus!	"Keep ye on receiving!"
But	Dā gɔ̃sε +ø! Neg.imp look neg!	"Don't look!" (negative)
	<i>Kèl kà ò gōs!</i> Cause:IMP and 3AN look!	"Let her look!" (No independency marking: subordinate)
	Kèm nā n gɔ̃s! Come:IMP hither CAT look!	"Come and look!" (No independency marking: subordinate)
	Dòllī-ní m! Follow-2pl.sub 1sg.ob!	"Follow ye me!" (single-aspect verb)

19.7 Other bound words in the VP

For non-contrastive subject pronouns see <u>15.3.1</u> <u>19.6.1.2</u>.

19.7.1 Lèe "but"

l ϵ "but" precedes even tense particles, but like a preverb, and unlike a post-subject particle 20.2.3, it prevents the independency-marking tone overlay from falling on the verb, and is then itself followed by M spreading:

Kà ò lέε dāa záb nà'ab lā.
And 3AN but TNS fight chief:sg ART.
"But he fought the chief."

Bà lὲε záb nà'ab lā."But they've fought the chief." WK3PL but fight chief:sg ART.

Kà bà lέε zàb nà'ab lā. "But they've fought the chief." WK And 3PL but fight chief:sg ART.

*L*έε záb nà'ab lā! "But fight the chief!" WK But fight chief:sg ART!

Ka man pian'ad la lee ku gaade. Kà mān pi̯áň'àd lā lέε kỳ gāadε ⁺ø. And 1sg.cntr speech Art but neg.irr pass neg. "But my words will not pass away. (Mt 24:35, 1996)

NT has the $-m^{a}$ -imperative, suggesting tone overlay on the verb, in

Lee iemini o na'am so'olim la... Lèɛ ìəmī-ní ò nā'am sú'ulìm lā... But seek:IMP-2PL.SUB 3AN kingship possession ART... "But seek ye his kingdom ..." (Lk 12:31, 1976)

WK does not accept this, and he corrected e.g.

**L*ɛ̀ɛ gɔ́sìm ná'àb lā! attempted: "But look at the chief!" But look.at:IMP chief:sg ART!

to *L*έε ḡs ná'àb lā. But look.at chief:sg ART.

19.7.2 Preverbs

Preverbs follow all other preverbal particles. All carry the independencymarking tone overlay in place of the following main verb (cf $l\dot{\epsilon}\epsilon$ "but" <u>19.7.1</u>.) Those derived from verbs show a suffix -*m*- <u>12.1.4</u>.

pòn "previously, already":

Ò pòn záb nà'ab lā. "He's already fought the chief." 3AN already fight chief:sg ART. Kà ò pún zàb nà'ab lā.
And 3AN already fight chief:sg ART.
"And he's already fought the chief."

lèm "again" (cf lèb^ɛ "return"):

Ò lèm záb nà'ab lā. "He's fought the chief again" 3AN again fight chief:sg ART.

Kà ò lém zàb nà'ab lā. "And he's fought the chief again." And 3AN again fight chief:sg ART.

Ò pū lém zàb nà'ab láa ⁺ø.
3AN NEG.IND again fight chief:sg ART NEG.
"He hasn't fought the chief again."

Ò nà lɛ̃m záb nà'ab lā. "He'll fight the chief again." 3AN IRR again fight chief:sg ART.

M nīf lém zábìd nē. "My eye is hurting again." 1SG eye:sG again fight FOC.

Ka so' kudin ku len nyee li ya'asa. Kà sɔ̄' kūdım kú lēm ňyéɛ_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)

kpɛ̀lum is "still" before an ipfv, but "immediately afterwards" before a pfv. It occurs also as a main verb "remain, still be." KB has the reduced form **kpɛ̀n**.

Ka o kpelim zu'om. Kà ò kpέlìm zū'əm. And 3AN immediately go.blind. "Immediately he went blind." (Acts 13:11, 1996: KB Ka o kpɛn zu'om.)

m biig Josef nan kpɛn vve.
m bīig Josef nán kpɛ̀n vve.
1sg child:sg Joseph still still be.alive.
"My child Joseph is still alive." (Genesis 45:28)

 $l\dot{a}$ 'am "together" (cf $l\dot{a}$ 'as^{ϵ} "gather"); as a main verb $l\dot{a}$ 'am^m is "associate with."

ka nidib wusa da la'am kpi nε o. kà nīdιb 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)

dèŋım "beforehand" (cf $dèŋ^{\epsilon}$ "go, do first": $\dot{m} déŋ\bar{\iota} f$ "I've got there before you"; $dèŋ^{\epsilon}$ is used with the same meaning in *n*-catenation <u>22.2</u>.)

Pin'ilugun sa ka Pian'ad la da pun dɛŋim bɛ.
Pīň'ilúgū-n sá kà Pi̯àň'ad lā dá pùn dɛ̀ŋım bɛ̀.
Beginning:sg-Loc hence and word:sg ART TNS already beforehand EXIST.
"In the beginning, the Word already existed beforehand." (Jn 1:1)

màligim "again" (cf Toende Kusaal malig "do again"):

Amaa man pian'ad la kv maligim gaadε. Àmáa mān pi̯áň'àd lā kú mālıgım gáadē ⁺ø. But 1sg.cntr speech Art neg.Irr again pass neg. "But my words will not pass away. (Mt 24:35)

ti "after" occurs often in *n*-catenation; for *hālí tì pāa* ... "up until" see <u>20.2.1</u>. If the next following VP in the same clause or series of coordinated clauses is perfective, there is disturbance of the usual iconic alignment of VPs with event order, with ti corresponding to English "before."

hali ka Herod ti kpi. "Until Herod had died." (Mt 2:15)
hālí kà Herod tí kpì.
Until and Herod after die.

 $K \epsilon m \sigma t i n \gamma \epsilon d \mu' d t a$. "Go to see the doctor." SB GO:IMP CAT after see doctor:sg.

Bεogv ti nied la ka ba gaad! Bε̄ogv´ ø tì nìəd lá kà bà gáàd. Morning Nz after appear: IPFV ART and 3PL pass. "Before morning appears they have passed!" (Isaiah 17:14)

19.7.3 Left-bound liaison words

A verb may be followed by up to two successive left-bound liaison words. They precede all other verb phrase complements and also precede the focus particle $n\bar{\epsilon}^{+/}$ in all its senses.

The first slot may be occupied by either y^a "2pl subject of direct command" <u>21.3</u> or discontinuous-past n^{ϵ} <u>23.1.1</u>; they can never occur together. The two words are tonally alike, changing the toneme of the last preceding host vowel mora to M, and themselves having H toneme.

The second slot is for bound object pronouns. There is no formal distinction between direct and indirect objects. Only one bound object pronoun may occur; cases where a verb has both non-contrastive direct and indirect object pronouns without ellipsis are expressed by *n*-catenation using tis^{ϵ} "give" <u>22.2</u>.

19.8 Complements

"Complement" will be used below to describe all verb core arguments other than the subject. Complements may be NPs, AdvPs, prepositional phrases or clauses.

Verbs vary in the kind of complement they take and in whether the complements are obligatory; the matter is complicated in Kusaal by the fact that "obligatory" complements in fact need not be explicitly present: if they are absent, the gap then represents an anaphoric pronoun.

NP and AdvP complements can be classified as direct and indirect objects, as predicative complements, or as locative complements.

19.8.1 Transitivity and objects

Indirect objects precede direct, and objects precede other complements, except in cases of extraposition due to weight <u>27.3</u>. A bound pronoun before a noun object therefore cannot be the direct object:

À dāa tísì_lī ná'àb lā. 1SG TNS give 3INAN.OB chief:SG ART. "I gave the chief to it."

There is otherwise no formal difference between direct and indirect objects. Transitive verbs vary in whether they require a direct object/complement:

da ku nidaa, da zuuda dā kū nīdá ⁺ø, dā zūudá ⁺ø... NEG.IMP kill person:SG NEG, NEG.IMP steal:IPFV NEG... "Do not kill [a person] ... do not steal ..." (Lk 18:20, 1996)

Obligatorily transitive verbs may appear without any expressed object, but in such cases the meaning is necessarily **anaphoric**:

Ò pō zámm +ø. "She didn't cheat him/her." 3AN NEG.IND cheat NEG.

Transitive single-aspect verbs which do not take locative complements are all obligatory transitives. Thus with $\partial e \vec{n}^a$ "be something/somehow":

Mānı g áň dụ'átà àmáa fūn pū áňyā +*ø*. 1SG.CNTR CAT COP doctor:SG but 2SG.CNTR NEG.IND COP NEG. "I'm a doctor but you aren't."

Mānı g áň du'átà kà fūn mén áẹň. 1SG.CNTR CAT COP doctor:SG and 2SG.CNTR also COP. "I'm a doctor and you are too."

Particular cases of null anaphora appear with direct objects preposed with $k\dot{a}$ <u>27.2</u> and in adnominal $k\dot{a}$ -catenation <u>22.3</u>.

In replies to questions and reponses to commands, null anaphora of complements may refer to an antecedent in the previous speaker's words:

Q.	<i>Fù mór gbāỵŋ láa +ø?</i> 2sg have letter:sg ART PQ?	"Do you have the letter?"
A.	Ēεň, ṁ mór. Yes, 1sg have.	"Yes, I have it."
Q.	<i>Fù bʻod.</i> ó-o +ø? 2SG want-3AN.OB PQ?	"Do you love her?"
A.	Áyìι, m̀ pū̃ bɔ́ɔdā +ø. No, 1sg neg.ind want neg.	"No, I don't love her."

Agentive ambitransitive verbs appear with and without objects, with no change in the rôle of the subject, and no anaphoric implication if the object is absent:

banε zuud nidibi gban'ad bànι zūud nīdιbι ø gbāň'ad REL.PL steal:IPFV person:PL CAT seize:IPFV "those who steal people by force" (1 Tim 1:10) onɛ daa zuud "he who used to steal" (Eph 4:28) כחו dāa zūud REL.AN TNS steal: IPFV

Some verbs only take objects of a very limited type, often expressed with a "cognate accusative" noun formed from the same stem. They may be obligatorily transitive or agentive ambitransitive:

Fò túm bó-tòuma +ø? "What work do you do?"
2SG work:IPFV what-work cq?
Ka ya ninkuda zaansim zaansima.
Kà yà nīn-kúdà zàaňsım záaňsímà.
And 2PL person-old:PL dream:IPFV dream:PL.
"And your old people dream dreams." (Acts 2:17)

Patientive ambitransitive verbs can appear transitively with an expressed object, but if there is no object they are normally interpreted as intransitive, with the object of the transitive appearing as the subject. Examples include

yò+	"close"	nāe+/	"finish"
zàmιs ^ε	"learn/teach"	nāmıs ^{ɛ/}	"suffer/make suffer"
bòdιg ^ε	"lose, get lost"	bàs ^ε	"go/send away"
dūe+/	"raise/rise"	mā'e+/	"get cool"

Many, though not all, patientive ambitransitive verbs express a change of state and can use the perfective form in a resultative sense 19.2.2:

Ѝ náa tūvma lā.	"I've finished the work."
1SG finish work ART.	
Tōuma lā náa nē.	"The work is finished."
Work ART finish Foc.	

Almost any verb can potentially take an indirect object expressing benefit, interest etc (this could lead to ambiguity in principle):

Ò dùgū_	_ <i>m</i> .	"He cooked (for) me."
3AN COOK	1SG.OB.	

Lì mà	lısī m.	"I like it." ("It's sweet for me.")
зіnan be.s	sweet 1SG.OB.	

Àláafὺ bέε_ 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; tis^{ϵ} "give" is the prototypical example, along with causatives from transitive verbs like $dits^{\epsilon}$ "feed" $n\bar{u}lvs^{\epsilon}$ "give to drink."

<i>À tís ná'àb lā dāká.</i> 1sg give chief:sg art box:sg.	"I've given the chief a box."
<i>À tís ná'àb lā.</i> 1sg give chief:sg art.	"I've given it to the chief."
*À tís dāká. À tís∙ō_ø dāká. 1sg give зам.ов box:sg.	impossible as "I've given him a box", which is
Dā tís·ò_ø sī'əla ⁺ø. NEG.IMP give 3AN.OB INDF.INAN NEG.	"Don't give her anything!"

Dā tísē +ø!	"Don't give it to her!"
NEG.IMP give NEG.	
À 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 *zò* X *nīn-báalìg* "have pity on X", *nìŋ* X *yàddā* "believe X, believe in X", *zò* X *dàbīəm* "fear X", *si̯àk* X *nɔ̄ɔr* "obey X", *ňwɛ̀*' X *nú'ùg* "make an agreement with X."

Wina'am na kad nidib poten'esua'ada saria.
Wínà'am ná kād nīdıb pú-tèň'-sū'adá sàríyà.
God IRR drive person:PL inside-mind-secret:PL judgment.
"God will judge people's secret thoughts." (Rom 2:16, 1996)

Ò zòt·ō_ ø nīn-báalìg. 3an feel:ipfv 3an.ob eye-pity.	"She has pity on him."
Bà zòt·ō_ø dábīəm. 3PL feel:IPFV 3AN.OB fear.	"They are afraid of him."
Bà nìŋ·ō_ø yáddā. 3PL do 3AN.OB assent.	"They believed her."
Ò ňwż' ná'àb lā nú'ùg. 3AN strike king:sg ART hand:sg.	"He made an agreement with the king."

19.8.1.1 Passives

For passive meaning expressed by an empty *bà* "they" as subject see <u>15.2.3</u>. Transitive verbs expressing a change of state are usually patientive ambitransitives. Obligatory transitives or agentive ambitransitives can be used *passively* with no formal change. The original agent may not then be expressed.

À 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.	

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.

Imperfective passives can only appear with habitual/propensity meanings <u>19.2.1</u>. Stative verbs accordingly cannot make passives.

The verb $s\bar{s}b^{\epsilon}$ "write" is a specialised usage of $s\bar{s}b^{\epsilon}$ "make/go dark", and is patientive ambitransitive. It can form a resultative; the imperfective $s\bar{s}b\iota d^{a/}$ seems to accept intransitive use only when some adverbial modification is present.

Gbàỵŋ	lā	sźb	nē.	"The letter is written."
Letter:s	G AR	т writ	e foc.	

Gbànasóbìdzīná."Letters get written today." WKLetter:pL write:IPFv today.

Gbàuŋ lā sóbìd sóŋā. "The letter is writing well (i.e. easily.)" WK Letter:sg ART write:IPFV good:ADV.

19.8.1.2 Middle use of intransitives

The assume-stance verbs <u>12.1.1</u>, rather than the make-assume-stance series, are often used transitively for parts of one's own body:

Lìgıním_fò nīf nế fò nú'ùg. Cover:IMP 25G eye:SG with 25G hand:SG. "Cover your eye with your hand."

Thus Dìginím fò nú'ùg. "Put your hand down." is commoner than Lie.down:IMP 25G hand:SG.

Dìgılím fò nú'ùg. "Put your hand down." Lay.down:IMP 25G hand:sG.

Similarly $n i e^+$ "appear" is usually intransitive, corresponding to transitive $n \epsilon \epsilon l^{\epsilon}$ "reveal", but $n i e^+$ is much more frequent than $n \epsilon \epsilon l^{\epsilon}$ before $\delta m \epsilon n^{a/}$ "him/herself" etc.

Ka o nie o mɛŋ Jemes san'an ...
Kà ò níe ò mɛŋ Jemes sá'àn ...
And зʌn appear зʌn self James among ...
And he revealed himself to James (1 Cor 15:7)

19.8.2 Predicative complements

Like objects, predicative complements may or may not be required, in the sense that surface omission must imply anaphora. As in English, predicative complements can have "depictive" or "resultative" meaning; the distinction in Kusaal falls out naturally from the stative or dynamic nature of the verb:

Kεl ka m liebi fv tvmtvm yinne.
Kεl kà m líəbì fv tvm-tūm yīnní.
Cause:IMP and 1sG become 2sG work-worker:sG one.
"Make me [become] one of your servants" (Lk 15:19); dynamic lìəb^ε

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À á né fù tùm-tūm. "I am your servant."; stative à eň^a 1SG COP FOC 2SG work-worker:SG.

Adjectives may appear as NP heads so long as the NP is a predicative complement. The only permitted dependents are the article and ideophones <u>17</u>. This is most frequent with aen^a "be something" <u>19.11.2</u>, but is seen also with other verbs:

Lì à nĒ píəlìg.	"It's white, a white one."
Lì à nē píəlìg fáss.	"It's very white."
Bà à nĒ píəlà.	"They're white."

si'el zie sabili wuu nidne. sī'əl zí'è sābíllì ø wūv nīd nē. INDF.INAN stand black:sg CAT like person:sg like. "something stood, black like a person." KSS p16

Mam anɛ pielug amaa m ya'a paae bugumin asɛɛ ka m lɛb zin'a. Mām á nɛ̄ píəlùg àmáa m̀ yá' pāe búgúmī-n, 1SG COP FOC white:SG but 1SG if reach fire-LOC, àsɛ́ɛ kà m̀ lɛ́b zìň'a. except and 1SG become red:SG. "I am white, but when I reach the fire I turn red." [a crayfish] (BNY p16)

Most adjectives do not permit this. All examples in my materials involve adjectives without corresponding stative verbs. More often, compounds with $n\bar{n}$ -"person" or $b\bar{o}n$ - "thing" + adjective are used instead. Even adjectives which may appear without a noun head cannot do so before a dependent pronoun; thus only

Lì à nĒ būn-píàl-kàŋā. "It is this white one."

Some 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 $p\dot{v}d^{\varepsilon}$ "name, dub" has as first object a NP with the head $y\bar{v}'vr^{\varepsilon/}$ "name", and the name itself as second object; this may be introduced by $y\bar{\varepsilon}$ "that."

Ka fu na pud o yu'ur ye Yesu. Kà fù ná púd ò yū'ur yē Yesu. And 2SG IRR dub 3AN name:SG that Jesus. "And you will call him Jesus." (Mt 1:21) Ka o pvd biig la yv'vr Yesu.
Kà ò púd bīig lā yú'vr Yesu.
And 3AN dub child:sg ART name:sg Jesus.
"And he called the child Jesus. " (Mt 1:25)

 $B\dot{u}el^{\epsilon}$ "call, call out, summon" can be used in the ipfv with an object expressing the person and the name as a complement, again often introduced by $y\bar{\epsilon}$:

on ka ba buon ye Pita la òn kà bà búèn yē Pita lā REL.AN and 3PL call:IPFV that Peter ART "who was called Peter" (Mt 10:2)

 $B\dot{v}e^{|\epsilon|}$ is often used passively with $y\bar{v}'vr^{\epsilon/}$ "name" as subject and the name itself as complement:

dau sɔ' ka o yʋ'ʋr buon Joon. dàu̯-sɔ́' kà ò yū'ʋr búèn Joon. man-INDF.AN and 3AN name:sg call:IPFV John. "a man [habitually] called John." (Jn 1:6)

 $M \dot{a} a l^{\epsilon}$ "make" is used with object and resultative predicative complement in

Ka o maal o meŋ nintita'ar. Kà ò máàl ò mēŋ nīn-títā'ar. And зам make зам self person-great:sg. "He made himself out to be a great man." (Acts 8:9. 1976)

A $k\dot{a}$ -catenation <u>22.3</u> can appear as a resultative predicate.

19.8.3 Locatives

Locative AdvPs <u>16.3</u> occur as complements after verbs of position and movement. Some verbs *require* a locative complement, and its absence is anaphoric.

Ňуí	Bòk.	"I left Bawku."
1sg eme	rge Bawku.	
NA VÁ	w5	"I've left [there] "
Ѝ уí	ya.	"I've left [there]."
1SG eme	rge PFV.	

No single-aspect verb or dual-aspect verb derived from a stance verb requires a locative; nor does $k\bar{\epsilon}\eta^{\epsilon}$ "go/walk." No verb requires a locative *second* complement.

...ka pv tun'e kenna.. ...kà pv̄ tūň'e ø kēnná +ø. ...and NEG.IND be.able CAT go:IPFV NEG. "who couldn't walk." (Acts 14:8)

Ò kèŋ Bók. but "She's gone to Bawku." зам go Bawku. Ò dìgin "He's lain down." vā. 3AN lie.down PFV. "Lie down here!" but Dìginim kpē! Lie.down: MP here! Ò dìgıl gbáuŋ lā. "She's put the book down." 3AN lay.down book:sg art.

but Ò dìgιl gbáỵŋ lā tέεbùl lā zúg. 3AN lay.down book:sg ART table:sg ART upon. "She's put the book on the table."

Àláafỳ bέ·o_ø."He's well." ("Health exists for him.")Health EXIST 3AN.OB.Indirect object but no complement.

but Dāu lā bé nē dó-kàŋā lā púugū-n.
Man:sg ART EXIST FOC hut-DEMST.Sg ART inside:sg-LOC.
"The man is inside that hut."

19.8.4 Prepositional phrases

 $W\bar{\epsilon}n^{na/}$ "resemble" usually takes a phrase introduced by $n\bar{\epsilon}$ or $w\bar{\upsilon}\upsilon$ <u>18</u>.

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

 $L\bar{a}|^{|a|}$ "be far" usually takes a phrase introduced by $n\bar{\epsilon}$:

Amaa o pv lal nε tii. Àmáa ò pv̄ lāl nέ tīι +ø. But 35G NEG.IND be.far with 1PL NEG. "But he is not far from us." (Acts 17:27)

 $D5/^{la/}$ "accompany" with the preposition $n\bar{\epsilon}$ means "be in accordance with":

Li dɔlnɛ lin sɔb Wina'am gbauŋʋn si'em la ye ... Lì dɔ̀l nɛ̄ lín sɔ̄b Wínà'am gbáu̯ŋʋ̄-n sī'əm lā yɛ̄ ... 3INAN follow with 3INAN:NZ write God book:SG-LOC INDF.ADV ART that ... "This is in accordance with what is written in God's book ..." (1 Cor 2:16)

The preposition $n\bar{\epsilon}$ can be distinguished from focus- $n\bar{\epsilon}^{+/}$ 27.1.2 by contexts where focus is prohibited. $Y\bar{i}^+$ "emerge" does not take a prepositional phrase:

	À yí nĒ Bɔ́k. 1sg emerge Foc Baw		"I come from Bawku." SB
but	Meeri one yi Magda Meeri ́ภì yī Mary rel.an emerge	Magdala	"Mary who came from Magdala" (Mk 16:9, 1996)

19.8.5 Clauses

Certain verbs require a following subordinate clause introduced by $k\dot{a}$ or $y\bar{\epsilon}$. $K\bar{\epsilon}^+$ "let" does not appear at all without a following $k\dot{a}$ -catenation, while if $n\bar{a}r^{a/}$ "be obliged to" appears without a purpose clause there is a necessarily anaphoric sense; *mit* in its usual sense "let not" always takes a $k\dot{a}$ -catenation. $B\dot{>}da$ " want, love" takes a purpose clause in the sense "want to ..."; without any object it has an anaphoric meaning in either sense. $G\bar{u}r^{a/}$ "be on guard, watch, wait for" takes a NP headed by a gerund or a purpose-clause complement to express "waiting for an event." $\dot{A}e\breve{n}^a$ "be something/somehow", which is uniquely flexible in the variety of different types of argument it may appear with, may also take a content-clause complement.

Verbs of cognition, reporting, and perception have as complement a content clause, a relative clause with $s\bar{r} \rightarrow m$, or a postpositional AdvP with $y\bar{\epsilon}l\dot{a}$ "about." Most such verbs have an anaphoric sense without such an object.

19.9 Adjuncts

Adjuncts, typically AdvPs, occur as the last element in the VP. Several VP adjuncts may occur together. Clause-final adjuncts are always taken as VP adjuncts in this grammar; clause-level adjuncts precede the subject <u>20.2.1</u>.

Bà dìt nẽ sā'ab dɔ́-kàŋā lā púvgū-n.

3PL eat:IPFV FOC porridge hut-DEMST.SG ART inside:SG-LOC. "They're eating porridge in that hut."

19.10 Verb-phrase-final particles

For the independent-perfective marker $y\bar{a}^+$ see <u>19.6.2.1</u>.

The particles $n\bar{a}^{+/}$ "hither" and $s\dot{a}^{+}$ "hence; ago" follow any complements. The verb $k\bar{\epsilon}n^{+}$ "come" is invariably used with $n\bar{a}^{+/}$; the imperative SF $k\dot{\epsilon}m$, which coincides for $k\bar{\epsilon}n^{+}$ "come" and $k\bar{\epsilon}\eta^{\epsilon/}$ "go", is always disambiguated by the fact that it is followed by $n\bar{a}^{+/}$ or $s\dot{a}^{+}$ respectively: $k\dot{\epsilon}m n\bar{a}!$ "come" $k\dot{\epsilon}m s\dot{a}!$ "go!"

M mór kú'èm náa +ø? "Shall I bring water?" SB 1sg have water hither PQ?

Bùgúm lā yítyáa ní ná +ø?FireART emerge:IPFV 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":

Fu na baŋ li nya'aŋ sa. Fò ná báŋ lì ňyá'aŋ sá. 2SG IRR realise 3INAN behind since. "You will come to understand afterwards." (Jn 13:7, 1976)

Lazarus pun bε yaugun la daba anaasi sa. Lazarus pún bὲ yáugū-n lā dābá_ànāasí sà. Lazarus previously EXIST grave:SG-LOC ART day:PL NUM:four since. "Lazarus had already been in the grave four days." (Jn 11:17)

The particles are VP-final, not clause-final:

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Kèmnāng5s."Come and look!" SBCome:IMP hither CAT look.

Man ya'a pv kεεn na tu'asini ba ... Mān yá' pv̄ kēε-n nā ø tú'asī-ní bā... ISG.CNTR if NEG.IND come-DP hither CAT talk-DP 3PL.OB... "If I had not come to talk to them ..." (Jn 15:22)

 $N\bar{a}^{+/}$ and $s\dot{a}^{+}$ often follow any article $|\bar{a}^{+/}|$ ending an \dot{n} -clause containing them; closely parallel constructions may show either $n\bar{a} |\bar{a}|$ or $|\bar{a}| n\bar{a}$:

ňwādıg-kánì kēn nā lā month REL.SG come:IPFV hither ART "next month" SB

dunia kanε ken **la na** dūnıyá-kànı kēn lā nā world-REL.SG come:IPFV ART hither "the world which is coming" (Lk 20:35)

ti tum onε tum man **na la** tuuma. tì túm ònι tùm mān nā lā tūuma IPL work REL.AN send ISG.CNTR hither ART work "Let us do the work of him who sent me." (Jn 9:4)

M diib ane ye m tum one tumi m **la na** boodim naae. \dot{M} dī b á nē yé m túm one tumi m lā nā boodim mae. 15G food COP FOC that 15G work RELAN send 15G.OB ART hither will cat finish. My food is that I do the will of him who sent me completely. (Jn 4:34)

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 yîib 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 lɛbvg la na Nīn-sáàl Bîg lā lɛ́bòg lā nā Person-smooth:sg Child:sg ART return:ger ART hither "the return of the Son of Man" (Mt 24:27)

19.11 Verbs "to be"

19.11.1 *Bε* **"be somewhere, exist"**

With no following locative $b\dot{\epsilon}^+$ means simply "exist"; before a locative, $b\dot{\epsilon}^+$ means "be located in a place" when the locative is focussed or foregrounded 27.1, but "exist in a place" otherwise:

Wínà'am bέ. God εχιςτ.	"God exists." (Calque of the West African Pidgin <i>God dey,</i> implying "It'll all work out in the end.")
Àláafù bé∙o_ø. Health exist заn.ob.	"She's well." ("Health exists for her.")
<i>Wāad bé.</i> Cold.weather EXIST.	"It's cold."
Mam bene moogin. Mām bé nē mɔ̃ɔɡʊ-n. 1sg.cntr Exist Foc grass:sg-loc.	"I'm in the bush." BNY p8
Moogin ka mam bε. Μōɔgύ-n kà mām bέ.	"I'm in the bush." BNY p10

Grass:sg-loc and 1sg.cntr exist.

Dāu lā bé nē dó-kàŋā lā púvgū-n.
Man:sg ART EXIST FOC hut-DEMST.SG ART inside:sg-LOC.
"The man is inside that hut." (Reply to "Where is that man?")

Dàu-sɔ̄' bɛ́ dɔ́-kàŋā lā púʋgū-n. Man-INDF.AN EXIST hut-DEMST.SG ART inside:SG-LOC. "There's a certain man in that hut."

For the corresponding negative $k\bar{a}'e^+$ see <u>19.5.1</u>. * $p\bar{v}$ b $\dot{\epsilon}$ is not used. $B\dot{\epsilon}^+$ plays a rôle analogous to a "passive" to $m\bar{z}r^{a/}$ "have" in constructions like: M bīig bέ."I have a child." Equivalent to M mór bīig.1SG child:SG EXIST.

 \dot{M} $b\bar{i}ig$ $k\bar{a}'e^{+}\phi$. "I have no child." Equivalent to \dot{M} $k\bar{a}'$ $b\bar{i}iga$. 1SG child:SG NEG.BE NEG.

 $B\dot{\epsilon}^+$ can be used in direct commands:

Bέε ànínā."Be (i.e. stay) there!" SBEXIST ADV:there.

 $B\bar{\epsilon}_{i-n}$ àlá ànínā. "Be ye there!" [bɛ:nala anina] EXIST-2PL.SUB ADV:thus ADV:there.

19.11.2 Àeň "be something/somehow"

The <u>e</u> of the SF of <u>àe</u> \check{n}^{a} is always lost except on the rare occurrence of the word phrase-finally, and nasalisation too is lost before $n\bar{\epsilon}^{+/}$ <u>7.5</u>.

Ò à nɛ bīig. "She is a child."
3AN COP FOC child:sg.

but *Mānı ø áň du̯'átà kà fūn mén áẹň.* 1SG.CNTR CAT COP doctor:SG and 2SG.CNTR also COP. "I'm a doctor and you are too."

The usual negative uses $k\bar{a}'e^+$ "not be", but $p\bar{v} \dot{a}en$ does occur, for example in expressing contrasts:

 \dot{M} $k\bar{a}$ ' $d\mu' \dot{a}t\bar{a}a$ $+ \phi$. "I'm not a doctor." 1SG NEG.BE doctor:SG NEG.

Mānı \emptyset áň dụ'átààmáa fūn $p\bar{v}$ áňyā $+\emptyset$.ISG.CNTR CAT COP doctor:SG but2SG.CNTR NEG.IND COPNEG."I'm a doctor but you aren't."

Āa-ní àlá bāaňlím! "Be (ye) quiet!" COP-2PL.SUB ADV:thus quiet:ABSTR!

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As with English copular clauses, the sense may be ascriptive or specifying (CGEL p266.) If it is **ascriptive**, the complement is non-referring, and normally focussed with $n\bar{\epsilon}^{+/}$ 27.1.2.2 if permitted 27.1.2.1:

 \dot{O} à $n\bar{\varepsilon}$ $b\bar{i}ig.$ "She is a child." 3AN COP FOC child:sg.

In **specifying** constructions focus frequently falls on the subject, which usually then has n-focus 27.1.1:

Manε an kɔnbkem suŋ la. Mānı ø áň kɔ́ňb-kìm-sùŋ lā. 1SG.CNTR CAT COP animal-tender-good:SG ART. "I am the good shepherd." (Jn 10:11)

 Mane a o.
 "I am he." (Jn 18:5, 1976)

 Mānı_ ø áñ∙o_ø.
 Isg.CNTR CAT COP заN.OB.

Nobibisi a mam disuŋ. Nō-bíbisì ø áň mām dí-sòŋ. Hen-small:PL CAT COP ISG.CNTR food-good:SG. "Chicks are my favourite food." BNY p13

When the complement of $\partial e \breve{n}^a$ is definite, the construction is usually specifying, with the subject in focus:

	<i>À á nē dụ'átà.</i> 1SG COP FOC doctor:SG.	"I'm a doctor." ("What do you do?") Ascriptive.
but	<i>Mānı _ ø áň dỵ'átà lā.</i> 1SG.CNTR CAT COP doctor:SG ART.	"I'm the doctor." ("Which one is the doctor?") Specifying.

However, definite complements may be in focus as "pragmatically non-recoverable" because of their internal structure or other factors: see <u>27.1.2.2</u>.

 $A e \check{n}^a$ allows a wide range of different types of NP as arguments. It shares with deadjectival stative verbs the ability to take an AdvP of any type as subject <u>16.5</u>:

Zīná	а	nē	dá'a.	"Today [time] is market."
Today	л со	P FOC	market:sg.	

Yiŋ venl, ka poogin ka'a su'um.
Yìŋ véňl kà pūvgv-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 nòŋı yā sī'əm lā á nē bédugū. 1SG:NZ love 2PL.OB INDF.ADV ART COP FOC much. "How much I love you [manner], is a lot." (2 Cor 7:3, 1976)

 $A e \check{n}^a$ takes a predicative complement. Some adjectives can appear as NP heads as predicative complements after $\grave{a} e \check{n}^a$ and other verbs <u>19.8.2</u>, but typically $\grave{a} e \check{n}^a$ has a derived manner-adverb or abstract noun as complement instead. In any case, such constructions are ascriptive, and use $n\bar{\epsilon}^{+/}$ where syntactically permissible:

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Lì à nẽ ná'anā. 3INAN COP FOC easily.	"It's easy."
Lì à nẽ būgusígā. 3INAN COP FOC soft:ADV.	"It's soft."
Lì à n <i>ē zāalím.</i> 3INAN COP FOC empty:abstr.	"It's empty."
Lì àň súŋā. 3INAN COP good:ADV.	"It's good." <u>27.1.2.1</u>

Absolute clauses <u>24.2</u> and even content clauses may be complements of $\partial e \vec{n}^a$:

M diib anε ye m tum onε tumi m la na boodim naae.
M dīıb á nē yé m túm onι tumi m lā nā boodim ø nāe.
1SG food COP FOC that 1SG work RELAN send 1SG.OB ART hither will cat finish.
"My food is that I do the will of him who sent me completely." (Jn 4:34)

Typical clauses consist of a subject NP followed by a VP. Clause-linker particles and clause adjuncts may precede the subject position; post-subject particles may intervene between NP and VP.

20.1 Clause types

Criteria for describing a clause as **main** or **subordinate** do not always neatly align. **Independency marking** of VPs <u>19.6</u> in principle marks a clause as non-subordinate, but the matter is complicated by **downranking** of main clauses to function as subordinate content clauses without internal alteration, and by the fact that main clauses preceded by the linker particle ka "and" in its *coordination* function always lack independency marking. Historically, ka was perhaps once always subordinating; its coordinating function may have arisen by **insubordination**, "the conventionalised main-clause use of what, on prima facie grounds, appear to be formally subordinate clauses" <u>Evans 2009</u>.

Three types of clause subordination can be distinguished: **nominalisation**, **catenation**, and **complementisation**.

	independency-marked	not independency-marked
main <u>21</u>	main without <i>kà</i>	main with initial <i>kà</i>
complementised <u>25</u>	<i>yē/kà</i> content	<i>yēlkà</i> purpose
catenated <u>22</u>		n/kà catenation
nominalised		<i>n</i> ` absolute/relative <u>24</u> <i>yà</i> ' conditional <u>23</u>

Main and content clauses can be statements, questions or commands. *Kà*-preposing is found only in these clause types and in relative clauses with initial antecedents <u>24.3.2</u>. Only main and content clauses may lack VPs altogether.

Clause types marked by the post-subject particles \dot{n} and $y\dot{a}'$ are nominalised. They are unproblematically subordinate, and always lack independency marking. They differ from catenated and purpose clauses in having independent tense marking. $Y\dot{a}'$ -clauses and $s\bar{a}d\iota g(m)$ -clauses only appear as postlinker clause adjuncts, do not participate in NP or VP formation, and cannot be coordinated. Otherwise, \dot{n} -clauses are coordinated with $n\bar{\epsilon}$ like other AdvPs and NPs, whereas all other clauses are coordinated with $k\dot{a}$: ... pa'ali ba [on daa nyɛ Zugsɔb la suorin, **ka** o pian' tis o si'em], **πε** [Saul n model Yesu yela ne sunkpi'euŋ Damaskus teŋin si'em.] ... pá'alì bā źп dāa ňyē Zūg-sób lā sūerí-n, kà ò ... teach 3PL.OB 3AN:NZ TNS see head-EMPTY.AN ART road:SG-LOC and 3AN piāň' ø tís·ò ø sī əm, nē Saul n mīsl Yesu vélà speak CAT give JAN.OB INDF.ADV with Saul NZ proclaim Jesus about nē sūň-kpí'òn Damaskus ténī-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)

Catenated clauses introduced by n lack their own subjects, resembling serial verb constructions but with a greater range of structures and functions; those introduced by ka have their own subjects. Catenated clauses are clearly subordinate and lack independency and tense marking. Catenation involves a more intimate union between clauses than complementisation; catenated clauses are part of their main clauses for focus purposes, and the main clause is frequently semantically subordinate to the catenated clause.

Complementised clauses are introduced by $y\bar{\varepsilon}$ "that", or less often $k\dot{a}$. They fall into two groups.

Purpose clauses lack independency marking and have VPs with imperative mood; they show tense marking only if the main clause is ellipted.

M pū bóòd yź fù kēŋ Bókō +ø.
1SG NEG.IND want that 2SG go Bawku NEG.
"I don't want you to go to Bawku."

Content clauses are downranked main clauses, with both independency marking and the full range of possible main clause structures. They function as complements of verbs of cognition, reporting, and perception:

Ka o ba' nε o ma pv baŋ ye o kpɛlim yaa.
Kà ò bā' nέ ò mà pv̄ báŋ yé ò kpɛlım 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)

When *coordinating*, *kà* is never followed by independency marking.

A clause must be subordinate if it precedes clause-final elements belonging to the preceding clause, such as negative prosodic clitics:

ka pv nar ka ba buolim ye Tvmtvmma.
kà pv nár kà bà búelì m yɛ Túm-tvmma +ø.
and NEG.IND must and 3PL call 1SG.OB that work-worker:SG NEG.
"and (I) ought not to be called an apostle" (1 Cor 15:9)

Structures can be obscured by extraposition 27.3. Even a catenated clause after $k\bar{\epsilon}^+$ "cause" is unexpectedly placed after the VP-final perfective marker $y\bar{a}^+$ in

Amaa Wina'am kɛya ka ya an nɔɔr yinne nɛ Yesu Kristo. Àmáa Wínà'am kɛ´ 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)

Any subordinate clause type can be embedded (potentially recursively) in any other, but catenated clauses cannot follow complementised clauses at the same level. A catenated clause embedded in a content clause in a purpose clause:

M pv bood [ye fv ti yεl beog daar [ye fvnε kε [ka mam Abram lieb bvmmora.]]] bóòd yế fừ tí fūnı ø λ Dū yèl bēog dāar νē 1SG NEG.IND want that 2SG after say tomorrow day.after.tomorrow that 2SG.CNTR CAT būn-mórā +ø. kέ kà mām Abram líàb cause and 1sg Abram become thing-haver:sg NEG. "I do not want you afterwards some day saying that it was you who made me, Abram, rich." (Gen 14:23)

A content clause within an absolute nominalised clause:

[ban mi' [ye biig la kpinɛ la]] zug bán mī' yē bīig lā kpí nē lā zúg 3PL:NZ know that child:SG ART die FOC ART upon "because they knew that the child was dead" (Lk 8:53)

A *n*-catenated clause within a relative nominalised clause:

[Paul n sob gbauŋ si'a [n tis Efesus dim la]] nwa. Paul ǹ sɔ̄b gbáu̯ŋ-sī'a n tís Efesus dím lā ø ňwá. Paul nz write book-INDF.INAN CAT give Ephesus EMPTY.PL ART CAT this. "This is the letter Paul wrote to the Ephesians." (1996 NT heading)

20.2 Structure

Except in special circumstances, clauses require a subject NP, which is followed by a VP, with any post-subject particles intervening.

The **clause-linker particles** $k\dot{a}$ "and" and $y\bar{\varepsilon}$ "that" are placed before the subject (which may itself be ellipted after $k\dot{a}$.) Clause-level adjuncts may precede, follow, or occupy the clause-linker position before the subject.

While $y\bar{\varepsilon}$ is invariably subordinating, $k\dot{a}$ may be coordinating or subordinating. The gloss "and" is merely conventional; $k\dot{a}$ is used in a great variety of constructions with meanings that vary considerably <u>19.3.5</u> <u>22.3</u> <u>25</u> <u>27.2</u>.

Kusaal is strictly SVO; deviations not achieved by $k\dot{a}$ -preposing always represent extraposition. Indirect objects precede direct, and objects precede other complements. VP adjuncts follow complements.

Emphatics 27.6 are clause-level particles associated with top-level NPs/AdvPs.

Main clauses and content clauses have similar structures. Both display independency marking on the first VP <u>19.6</u>, and have structural possibilities not permitted to other clauses. They may also lack VPs altogether.

20.2.1 Clause adjuncts

Clause-level adjuncts precede the subject position. They fall into three groups: prelinker adjuncts, linker adjuncts and postlinker adjuncts, which respectively precede, occupy, or follow the clause linker position.

Besides the clause-linker particles $k\dot{a}$ "and" and $y\bar{\varepsilon}$ "that" themselves, English conjunctions largely correspond to linker adjuncts and prelinker adjuncts.

Linker adjuncts do not occur along with linker particles at all. They include

"or" (← Hausa)
01 (C Hausa)
"or"
"therefore"
"therefore"
"thus"
"because"

B5 zúg5, stigmatised as an Anglicism in ILK, is in fact freely used in NT/KB for "because."

Police gbáň'a_m bɔ̄ zúgɔ́ m̀ ňwɛ́' dāu lā. Police seize 1sg.ob because 1sg hit man:sg ART. "The police arrested me because I hit the man." (ILK)

It also appears after an absolute clause, just like the postposition $z\bar{u}g^{2/}$ alone.

Prelinker adjuncts may precede but never follow linker particles.

àmáa	"but" (cf Arabic اما ?amma: "as for")
hālí	"until" (cf Arabic حتى ħatta:); preposition <u>18</u>
àsée	"unless" (cf Hausa <i>sai</i>); preposition
àlá zùg	"thus"

KB has no examples of $k\dot{a} \dot{a}m\dot{a}a$ to 365 of $\dot{a}m\dot{a}a k\dot{a}$, one of $k\dot{a} \dot{a}s\dot{\epsilon}\epsilon$ to 247 of $\dot{a}s\dot{\epsilon}\epsilon k\dot{a}$ and 436 examples of $h\bar{a}l\dot{\iota} k\dot{a}$ but none of $k\dot{a} h\bar{a}l\dot{\iota}$ as a clause adjunct. The orders are thus almost without exception as in

Ka sieba la' o. **Amaa ka** sieba yɛl ye ... Kà sīəba lá'·o_ø. Àmáa kà sīəba yɛ́l yē ... And INDF.PL laugh βΑΝ.ΟΒ. But and INDF.PL say that... "Some laughed at him, but others said..." (Acts 17:32)

Prelinker adjuncts precede $y\bar{\varepsilon}$, both as linker and "resumptive" $y\bar{\varepsilon}$ 25.2.1:

Wina'am daa po gaŋi ti ye ti tom dian'ad tooma, amaa ye ti bɛ nyain.
Wínà'am dāa pō gāŋí tī yế tì tóm dịā'ad tóomà +ø,
God TNS NEG.IND choose IPL.OB that IPL work dirt work NEG,
àmáa yế tì bế ňyāe.
but that IPL 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)

Postlinker adjuncts follow any clause-linker particle or other clause adjunct but precede all other clause constituents, including *kà*-preposed elements:

Amaa **on sadigim kpi la**, bɔ ka m lɛm lɔɔd nɔɔr ya'asɛ? Àmáa ɔ́n sādıgím kpí lā, bɔ́ kà m̀ lɛ́m But ȝʌN:Nz since die ʌRT, what and ısɕ again lɔ̄ɔd nɔ̄ɔr yá'asɛ̀ +ø +ø? tie:IPFV mouth:sɕ again NEG cQ? "But since he has died, why should I still be fasting?" (2 Samuel 12:23)

Certain categories of constituent occur *exclusively* as postlinker adjuncts: yà'-clauses "if/when ..." 23.1, sādıgím-clauses 24.2, bɛ̃ogɔ́ "tomorrow" and dāa-sí'ɛrɛ̃ "perhaps." When yà'-clauses or sādıgím-clauses appear after main clauses, this represents extraposition 27.3.

In addition, AdvPs referring to time, circumstance or reason may be either be used as postlinker adjuncts or as VP adjuncts. All VP adjunct AdvPs, including also those referring to place or manner, may be placed before the clause subject by ka-preposing 27.2. This means that AdvPs referring to time, circumstance or reason can potentially occur before the subject alone, preceded by ka, followed by ka, or both preceded and followed by ka, whereas other types of AdvP *must* be followed by ka when they appear before the subject. Thus

Nānná-ná m̀ áň ná'àb. "Now I am a chief." Now-hither 1sg cop chief:sg.

is grammatical, but $*M\bar{2}g\dot{\upsilon}-n\ m\bar{a}m\ b\dot{\epsilon}$ was corrected by WK to

M̄ɔ̄ɔgú-n kà mām bɛ́. "I'm in the bush." Grass:sg-loc and 1sg.cntr exist.

(Cf English VP-oriented and clause-oriented AdvP adjuncts, CGEL pp575f.)

Any AdvPs or clauses expressing time, circumstances, or reason may appear as postlinker adjuncts, including absolute clauses, *din zúg* "therefore" *lin zúg* "therefore", *li ňyá*'aŋ^a "afterwards", *lín à sī əm lā* "as things stand", *àsīda* "truly."

In KB nannanna nānná-nā^{+/} "now", and din zúg and lin zúg "therefore" without final - \bar{j} appear with the following distributions:

	X alone	kà X	X kà	kà X kà
nānná-nā	394	23	16	4
dìn zúg	154	8	99	15
lìn zúg	29	3	43	20

Thus while $n\bar{a}nn\dot{a}-n\bar{a}$ is much more often used as a clause adjunct than not, din zúg and lin zúg are very often treated as kà-preposed VP adjuncts. This state of affairs has probably arisen through originally VP-only din zúg and lin zúg encroaching on the function of the corresponding linker adjuncts din zúgō and lin zúgō.

B5 zúg, without final -*5*, appears in KB only in the *kà*-preposed form *b5 zúg kà* ...? "why ...?"

Bozug ka li aan ala? "Why is it so?" (Haggai 1:9) Bō zúg kà lì áaň àlá +ø? What on and JINAN COP thus cq?

WK generally uses $n\bar{a}nn\dot{a}-n\bar{a}^{+/}$ "now" as a clause adjunct but *requires kà* after kà nānná-nā, suggesting that that for him nānná-nā^{+/} is normally a *prelinker* adjunct:

Kà nānná-ná	kà	m áň	ná'àb.	"And now I am a chief."
And now-hither	r and	l 1SG COF	chief:sg.	Rejected by WK without the second <i>kà</i>

Clause adjuncts are with few exceptions found only in main and content clauses. Despite the semantics, the position of the negative prosodic clitic shows that the ka-clauses are not subordinate in e.g.

O pv yεεd **fuugɔ**, hali ka li yuug.
Ò pv̄ yέὲd fūugɔ́ +ø, hālí kà lì yúùg.
SAN NEG.IND wear:IPFV shirt:SG NEG, even and SINAN take.long.
"He had not worn clothes for a long time." (Lk 8:27)

M kv basif ka fv kengε asεε ka fv ningi m zug bareka.
M kv bāsí f kà fv kēŋέ +ø àsέε kà fv níŋì m zūg bárıkà.
ISG NEG.IRR leave 2SG.OB and 2SG go NEG unless and 2SG do ISG head:SG blessing.
"I will not let you go unless you bless me." (Genesis 32:26)

However, *hālí* can be a prelinker adjunct before a *n*-catenated clause:

Ti nwa'ae li hali paae Nofa. Tì ňwá'a_lī hālí_ø pāe Nofa. 1PL strike 3INAN.OB until CAT reach Nophah. "We struck them as far as Nophah." (Numbers 21:30)

...ka keŋ iee yinne kanɛ bɔdig la hali ti nyɛɛ o? ...kà kēŋ ø já yīnní-kànı bòdıg lā hālí ø tì ňyē·ó-o +ø? ...and go cat seek one-REL.SG get.lost ART until cat after see-3AN.OB cQ? "... and go and look for the one which is lost until he finds it?" (Lk 15:4)

 $W\bar{v}v$ "like" <u>18</u> can be a linker adjunct before a content clause:

ka tuumbe'ed **ku** len so'e ti wuu ti aa li **yamugo**. kà từơm-bɛ̄'ɛd kứ lɛ̄m sứ'v_tī wūv từ áaň_lừ yàmmvgɔ̄ +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 wuu ya anε m biis nε.
M piáň'adī ø tísidī yá wūu yà á né m bīis nē.
1SG speak:IPFV CAT give:IPFV 2PL.OB like 2PL COP FOC 1SG child:PL like.
"I talk to you as if you were my children." (2 Cor 6:13)

20.2.2 Subjects

Kusaal is not a pro-drop language, and requires, for example, the dummy subject pronoun l (never \dot{o}) in impersonal constructions such as

Lì	tùl.	"It [weather] is hot."
3INAN	ı be.hot.	
Lì	àň súŋā.	"It's good."
3INAN	I COP good:Adv.	Contrast Mooré <i>yaa sõama</i> , with no pronoun.
Lì 3inan	<i>nàr kà fù kūl.</i> I must and 256 go.home.	"It's necessary for you to go home."

Li may be omitted in ya'-clauses:

Ya'a ka'anε alaa, m naan kv yɛlinɛ ya ye ... Yà' kā'a-ní àlá, m̀ nāan kú yɛlı-ní yā yē ... If NEG.BE-DP ADV:thus, 1SG then NEG.IRR say-DP 2PL.OB that... "If it were not so, I would not have told you that ..." (Jn 14:2)

 $Zi'isig\epsilon \ \underline{19.5.1}$ appears without a subject as "unbeknownst" at KSS p16. See $\underline{21.3}$ for omission and movement of subject pronouns in commands.

Subject pronouns are regularly ellipted after the clause-linker particle $k\dot{a}$ when they would have the same reference as the subject of the preceding clause. Any M spreading after the pronoun remains 7.3. Pronouns after $k\dot{a}$ introducing a content clause are not subject to deletion, and $k\dot{a}$ -catenation typically involves a change of subject, so this deletion is characteristic of coordinating $k\dot{a}$, especially narrative: a pronoun after $k\dot{a}$ then usually signals a change of subject. Conversations may be reported $K\dot{a} \dot{o} y \not{\epsilon} l \dots k\dot{a} \dot{o} y \not{\epsilon} l \dots$ with each \dot{o} marking a switch of speaker. The implication of subject change can override gender agreement (which is no longer robust 15.3.1), though not number, even in the face of semantic inappropriateness:

Pu̯'ā lā dá' dāká kà kēŋ Bók.
Woman:sg ART buy box:sg and go Bawku.
"The woman bought a box and went to Bawku." WK

Pu'āb lā dá' dāká kà bà kēŋ Bók.
Woman:PL ART buy box:SG and 3PL go Bawku.
"The women bought a box and they went to Bawku." WK
(Possible, though unusual, with "they" referring to "the women.")

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but Pu'ā lā dá' dāká kà ò kēŋ Bók.
Woman:sg ART buy box:sg and 3AN go Bawku.
"The woman bought a box and it went to Bawku." WK

Occasionally the pronoun after $k\dot{a}$ is ellipted as referring, not to the subject of the preceding clause, but to the subject of a preceding $k\dot{a}$ -preposed absolute clause:

Ban wυm nɛ'ɛŋa la ka sin. Bán wùm nĒ'ŋá lá kà sīn. ^{3PL:NZ} hear DEMST.INAN ART and be.silent. "After they heard this they fell silent." (Acts 11:18)

Elsewhere, absence of subject pronouns is due to *informal* ellipsis, "corrected" when informants' attention is drawn to it. M spreading after pronouns remains:

Náe yàa +ø?	"[Have you] finished?"
Finish pfv pq?	

20.2.3 Post-subject particles

For yà' "if" 23.1; nominaliser-'n 24; sādıgím "since" 24.2; nāan(ı) 23.1.2.

sìd "truly"

Ò sìd dāa á nē ná'àb. "Truly, he was a chief." WK
3AN truly TNS COP FOC chief:sg.

kolum or *kodum* "always" (← Hausa) is most often found with negatives:

Ka so' kudin ku len nyee li ya'asa. Kà sɔ̄' kūdım kú lɛ̄m ňyɛ́ε 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 "next, afterwards":

Ka Yesu tans nε kvk>tita'ar ka nyaan kpi.
Kà Yesu táňs nε kvk>-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)

Onε pa'ati an Kristo la bεε? <u>Ĵnι</u> ø pá' tì àň Kristo lā bέε ⁺ø? 3AN.CNTR CAT perhaps COP Christ ART or PQ? "Perhaps he is the Christ?" (Jn 4:29)

yō'un "then, next"

Manoa yu'un da baŋ ye o anɛ Zugsɔb maliak. Manoa yū'un dá bàŋ yź ò à nɛ̄ Zūg-sɔ́b máli̯āk. Manoah then TNS realise that 3AN COP FOC head-EMPTY.AN angel:sg. "Then Manoah realised that he was an angel of the Lord." (Judges 13:12)

20.3 Ellipsis

Informal ellipsis is liable to be declared incorrect by speakers if their attention is drawn to it; it does not affect meaning. It is common in greetings <u>28</u>. More systematic ellipsis may imply anaphora or avoid repetition, as after ka (above), with VP complements <u>19.8.1</u>, coordination within NPs <u>15.1</u>, implicit tense marking <u>19.3.5</u>, or in replies to questions <u>19.2.1</u>. Ellipsis can become formalised, as with <u>yèl</u> before <u>yē</u> <u>25.2</u>, questions with $k \dot{v} v^+$ or $b \dot{\epsilon} \epsilon^+$ <u>21.2</u>, indirect commands <u>25.1</u> <u>25.2.1</u>, <u>ka</u>-preposing and *n*-focus <u>27.1.1</u> <u>27.2</u> or <u>hāl(</u>⁺ as a stand-alone intensifier <u>27.6</u>.

Clause-level bound words may be left standing alone, but not phrase-level:

Wina'am tisid ... ka mɛ tisid ...
Wínà'am tísìd ... kà mɛ́ tɪsɪd ...
God give:IPVF ... and also give:IPFV ...
"God gives ... and [God] also gives ..." (1 Cor 15:38); emphatic mɛ́ 27.6

Ellipsis of repeated elements in clause coordination is common, e.g.

Dāu lā ňyć bī-d(bìŋ kūv bī-púŋàa +ø?
Man:sg ART see child-boy:sg or child-girl:sg PQ?
"Did the man see a boy or a girl?"

21 Main clauses

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 <u>25.2</u>. Both clause types display independency marking on the first VP <u>19.6</u>. They can show focussing with \dot{n} , clefting, and $k\dot{a}$ -preposing <u>27</u>. Unlike subordinate clauses, they may lack VPs altogether.

Main clauses divide into declarative (the unmarked default), content questions, polar questions, and commands, along with several verbless subtypes.

Coordinated main clauses agree in type as declarative, interrogative or imperative. They are coordinated with $k\dot{a}$ "and", $k\bar{v}v$ "or", $b\bar{\epsilon}\epsilon$ "or". $K\bar{v}v$ and $b\bar{\epsilon}\epsilon$ are linker adjuncts; they are synonyms in this use. In coordinating function $k\dot{a}$ always introduces a clause *without* independency marking on the VP.

Except in narrative, coordinating $k\dot{a}$ has much the same sense as English "and", though $k\dot{a} \dots l\dot{\epsilon}\epsilon$ means "but" <u>19.7.1</u>. Within narrative, it generally corresponds to *zero* in English, and such clauses show distinctive tense-marking behaviour <u>19.3.5</u>.

Coordination of direct commands:

Pò'osım À-Wīn, kà pó'òs À-Bōgor. Greet: MP PERS-Awini, and greet PERS-Abugri. "Greet Awini, and greet Abugri."

Coordination of questions:

Fù búgnέε +ø?Bēε fùgéÈňm yā kúu +ø?2sg get.drunk FocPQ?Or2sg go.mad PFV orPQ?"Are you drunk? Or have you gone mad?"

21.1 Content questions

Content questions (except those with lia <u>21.4.2</u>) contain an interrogative pronoun; the final word of the question appears as a LF with a tone perturbation due to the following content-question prosodic clitic <u>7.1</u>.

The focus particle $n\bar{\epsilon}^{+/}$ may not be used in content questions, either in constituent-focus or aspectual senses <u>27.1.2.1</u>.

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 27.1.1 when syntactically possible:

Fù bóòd bó +ø?	"What do you want?"
2SG want what co?	

Main clauses

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Fù bóòd línè
                              "Which do you want?"
                +ø?
2SG want DEM.INAN CO?
Ànɔ´'ɔnì @ ňyē bíigà
                              "Who has seen a child?"
                        +ø?
Who
         CAT see child:sg co?
Ànź'àn bīigi, ø ňwá +ø?
                              "Whose child is this?"
Who
       child:sg cat this co?
                              "Whom did the man see?"
Dāu
       lā ňyé ànó'onè +ø?
Man:sg ART see who
                       cq?
```

Interrogatives other than subjects are very often $k\dot{a}$ -preposed <u>27.2</u>:

Ànɔ´'ɔ̀n kà dāỵ lā ňyɛ́ɛ +ø? Who and man:sg ART see cq? "Whom did the man see?"

Preposing is obligatory for $b\bar{j} z \dot{u}g$, "why?" <u>20.2.1</u> and for $b\bar{j}$ when used in the same sense:

*B*5 *k*à *f*ὺ *k*úmmà ⁺ø? "Why are you crying?" What and 2SG weep:IPFV CQ?

21.2 Polar questions

Polar questions are of two types. One is exactly like a statement but with final LF and tone changes due to the polar-question prosodic clitic; in this case the neutralisation of LF-final vowel length is to long <u>7.1</u>. There are no restrictions on focus- $n\bar{\epsilon}^{+/}$. The answer expected is $\bar{\epsilon}\epsilon\bar{n}$ <u>21.4.4</u>.

<i>Dāu lā ňyέ bíigàa</i> + <i>ø</i> ? Man:sg ART see child:sg pq?	"Has the man seen a child?"
<i>Bà kùud nē búusèe</i> + <i>ø</i> ? 3PL kill:IPFV FOC goat:PL PQ?	"Are they killing goats?"
<i>À á nĒ dáùv +ø?</i> 1SG COP FOC man:SG PQ?	"Am I a man?"

Fὺ pū	wúmmàa	+ø +ø?	"Don't you understand?"
2SG NEG.IND	hear:IPFV	NEG PQ?	(expects <i>ēɛň</i> , here "no")

The second type of polar question follows the ordinary statement form with either $b\epsilon\epsilon$ "or" (expecting disagreement, with $\dot{a}y\iota$) or $k\delta\nu$ "or" (expecting agreement, with $\bar{\epsilon}\epsilon\bar{n}$.) NT rarely uses $k\bar{\upsilon}\upsilon$ in this way.

Dāỵ lā ňyέ bīig kúυ ⁺ø? Man:sg ART see child:sg or pq? "Has the man seen a child?" (I expect so.)

Dāỵ lā ňyέ bīig bέε ⁺ø? Man:sg ART see child:sg or pq? "Has the man seen a child?" (I expect not.)

21.3 Commands

For indirect commands, see <u>25.1</u> <u>25.2.1</u>.

In a direct command the subject is 2nd person; in accordance with a crosslinguistically common pattern, a singular pronoun is deleted, and a plural subject pronoun is placed immediately after the verb, in Kusaal assuming the liaison-word form y^a ; for the realisation of y^a see <u>7.2.1</u> <u>7.2.3</u>. Thus

	<i>Fù gʻs bīig lā.</i> 2sg look.at child:sg art.	"You (sg) have looked at the child."
	Yà gós bĩig lā. 2PL look.at child:sg art.	"You (pl) have looked at the child."
but	Gòsım bīig lā! Look.at:ımp child:sg art!	"Look (sg) at the child!"
	Gòsımī ø bīig lā! Look.at:imp 2pl.sub child:sg art!	"Look (pl) at the child!"
	Gòsım tēŋι-n! Look:IMP ground:sg-LOC!	"Look (sg) down!"
	Gòsımī ø tēŋı-n! Look:IMP 2PL.SUB ground:SG-LOC!	"Look (pl) down!"

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Dā gɔ̄s tēŋι-nέ +ø! "Don't (sg) look down!" NEG.IMP look ground:sg-loc NEG!

Dā gɔ̄sı_ø tēŋı-né +ø! NEG.IMP look 2PL.SUB ground:SG-LOC NEG! "Don't (pl) look down!"

Dāḡsε+ø!"Don't (sg) look."NEG.IMP lookNEG!

Dāgɔ̄sı yá+ø!"Don't (pl) look."NEG.IMP look2PL.SUB NEG!

Pronouns remain in place after *yà*'-clauses:

Fv ya'a mor pu'a, fvn da mood ye fv bas oo.
Fv ya' mor pu'ā, fvn dā mood yé fv bas·oo +ø.
2sg if have wife:sg, 2sg NEG.IMP struggle:IPFV that 2sg abandon-3AN.OB NEG.
"If you have a wife, don't try to leave her." (1 Cor 7:27)

They also remain in quoted direct commands within indirect speech 25.2.1, even when the addressee is the same as in the original utterance:

Ò yèl yé bà gòsım tēŋı-n.
3AN say that 3PL look:IMP ground:SG-LOC.
"She said to them: Look down!" WK

Ò yèl yé fù gòsım tēŋı-n.
3AN say that 25G look:IMP ground:SG-LOC.
"She said to you sg: Look down!"

Ò yèl yé yà gòsım tēŋı-n.
3AN say that 2PL look:IMP ground:SG-LOC.
"She said to you PL: Look down!"

Some speakers still keep postposed ^{ya} after the verb even when there is a pronoun subject before it:

Ò yèl yé bà gòsımī ø tēŋı-n.
3AN say that 3PL look:IMP 2PL.SUB ground:SG-LOC.
"He said to them: Look down!" WK

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In catenation, where WK does not repeat ^{ya} in VPs after the first:

KÈmī ø nā n gōs! Come:IMP 2PL.SUB hither CAT look! "Come (ye) and look!"

such speakers have e.g.

Kèmīønānḡsıø!Come:IMP 2PL.SUB hither CAT look2PL.SUB!"Come (ye) and look!"

Direct commands which consist only of a verb, or a verb with a following postposed subject pronoun, occasionally end in a Long Form like that preceding a negative prosodic clitic:

Gòsımā!	"Look!"
Gòsımīyá!	"Look! (plural)

21.4 Verbless clauses

21.4.1 Identificational clauses

Verbless identificational clauses have the form NP + catenator-n + deictic particle or $wa n\bar{a}$ "this here." The NP may be an interrogative pronoun.

Kùlıŋı ø lā. Door:sg cat that.	"That is a door."	
Kùlıŋı_ ø wá nā. Door:sg cat this hither.	"This here is a door."	
Bēogυ ø lā. Tomorrow cat that.	"See you tomorrow" ("That's tomorrow.")	
Bɔɔ_ø lá +ø? What cat that cq?	"What's that?"	
<i>Ňwāamıs_ ø ňwá!</i> Monkey:pL сат this!	"Monkeys!" [ŵã:mɪsa] (Said by a passenger in my car, on suddenly catching sight of some.)	

21.3

Identificational clauses may append clauses by catenation:

Anɔ'ɔn nwaa yisid nidib tvombɛ'ɛdi basida?
Ànɔ́'ɔ̀n_ø ňwáa_ø yīsıd nīdıb túùm-bɛ̄'ɛdı_ø básıdà +ø?
Who cat this cat expel:IPFV person:PL deed-bad:PL cat throw.out:IPFV cq?
"Who is this who drives people's sins out?" (Lk 7:49)

Yɛl bɔɔ nwa ka Wina'am kɛ ka li paae ti?
Yɛl-bɔɔ ø ňwá kà Wínà'am kɛ kà lì páa tì +ø?
Matter-what cat this and God cause and 3INAN arrive 1PL.OB cQ?
"What is this that God has made to come to us?" (Genesis 42:28)

Verbless clauses can be embedded in verbal clauses:

Ya ningid boo nwa?
Yà níŋìd boo @ ňwá +@?
2PL do:IPFV what CAT this cq?
"What is this you are doing?" (Nehemiah 2:19)

Fv maal boo la tis mam?
Fv máàl bóo ø lā ø tís màm +ø?
2sg make what cat that cat give me cq?
"What is this that you have done to me?" (Numbers 23:11)

21.4.2 Lia-clauses

X + lia means "where is X?" Although I often heard *lia* in spontaneous conversation in the 1990's, no examples appear in the 1996 or 2016 Bible versions.

Fù màlã lía+ø?2SG mother:SG ART be.where cQ?"Where is your mother?" (WK to a child in the outpatient clinic.)

Ka awai la dia [sic]?"But where are the nine?" (Lk 17:17, 1976)Kà àwāelā lía+ø?And NUM:nine ART be.where cq?

21.4.3 Vocatives

Vocative clauses usually either precede a main clause, or stand alone. They take the form of NPs followed by the vocative prosodic clitic 7.1:

M pul'ā né m bīise +ø!
15G wife:sG with 15G child:PL VOC!
"My wife and my children!"

M dìəmmā +ø, bó kà fù kúesìda +ø?
 1sg parent.in.law:sg voc, what and 2sg sell:IPFV cq?
 "Madam, what are you selling?"

Vocatives do not take the article $|\bar{a}^{+/}$, but often end in $\check{n}w\dot{a}$ "this":

Bīis ňwá!	"Children!"	[bi:sa]	<u>7.5</u>
Pu̯'ā ňwá!	"Woman!"	[pʊ̯awã]	
Zōn ňwá	"Fools!"	[zɔn:a]	

21.4.4 Particles as clauses

Some particles occur characteristically as complete utterances. Some are onomatopoeic; others are widely shared among local languages.

Tò.	"OK." (= Hausa <i>tôo</i>)
Báp.	"Wallop!"
Ňfá!	"Well done!"

"Yes" is $\bar{\epsilon}\epsilon n$; "No" is $\dot{a}y i\iota$. 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 nέε +ø? 3INAN finish foc pq?	"Is it finished?"
Ēεň.	"Yes."
Áyìι.	"No"
Lì pữ nāée +ø +ø? 3INAN NEG.IND finish NEG PQ?	"Isn't it finished?"
Ēεň.	"No."
Áyìι.	"Yes."

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22 Catenated clauses

22.1 Overview

A clause may be followed by one or more VPs, each introduced by catenator-n; for the realisation of this particle see <u>7.2</u>. Complements, VP adjuncts, and even other clauses introduced by ka may be incorporated within such chains.

Amaa ka Zugsob malek daa keŋ n yo'og sarega doog za'anoor la yu'uŋ kan, n more ba n yiis yiŋ.
Àmáa kà Zūg-sób máliāk dāa kēŋ n yó'òg sārıgá dóòg
But and head-EMPTY.AN angel:SG TNS go CAT open prison:SG house:SG zá'-nɔ̄or lā yū'uŋ-kán, n mōrí bā n yīis yíŋ.
compound-mouth:SG ART night-DEM.SG, CAT have 3PL.OB CAT extract outside.
"But an angel of the Lord came and opened the gate of the prison that night and took them outside ..." (Acts 5:19, 1996)

Ka dau so' due n zi'e la'asug la nidib sisoogin, n a Parisee nid **ka o yu'ur buon Gamaliel**, n a one pa'an Wina'am wada la yela, ka lem a yu'ur daan nidib sa'an.

Kà dàu-sɔ̄' dūe n zí'e lá'asùg lā nīdıb sísùugū-n, n áň And man-INDF.AN rise CAT stand assembly:SG ART person:PL among-LOC, CAT COP Parisee níd kà ò yū'ur búèn Gamaliel, n áň *źn*ì pà'an Pharisee person:sg and 3AN name:sg call:IPFV Gamaliel, CAT COP REL.AN teach:IPFV dáàn Wínà'am wádà lā yélà, kà lém àň yū'ur nīdıb sá'àn. God law ART about, and again COP name:sg owner:sg person:PL among. "A man stood up in the assembly, a Pharisee **called Gamaliel**, a teacher of God's law and also reputable among the people." (Acts 5:34, 1976)

Toende Kusaal (like Dagaare, Bodomo 1997) has zero throughout corresponding to catenator-n, but most other Western Oti-Volta languages show n, at least in slow speech. In languages with the zero realisation, these structures have usually been regarded as serial verb constructions, and many uses of catenation are indeed closely parallel to uncontroversial serial verb constructions in other languages. For example, substitution of ka for catenator-n makes it impossible to interpret "auxiliary" verbs in the specialised senses associated with n-catenation:

M záŋ(m nú'ugò ø sī'ıs dāká lā.
1sg pick.up 1sg hand:sg cat touch box:sg art.
"I touched the box with my hand."

?? M záŋí m nú'ùg kà sī'ıs dāká lā.
"I picked up my hand and touched the box."

M dāa kúès bùŋu ø tís dự'átà.
1SG TNS sell donkey:SG CAT give doctor:SG.
"I sold a donkey to the doctor."

?? M dāa kúès bùŋ kà tís dự'átà.
"I sold a donkey and gave it to the doctor."

However, *n*-catenation shows much greater flexibility than typical serial verb constructions, and in particular VPs can be catenated to verbless clauses <u>21.4.1</u>:

Anɔ'ɔn nwaa yisid nidib tuumbɛ'ɛdi basida? Ànɔ´'ɔn_ø ňwáa_ø yīsıd nīdıb túùm-bɛ̄'ɛdı_ø básıdà +ø? Who cat this cat expel:IPFV person:PL deed-bad:PL cat throw.out:IPFV cQ? "Who is this who drives people's sins out?" (Lk 7:49)

Catenator-*n* thus attaches a VP to the preceding clause, not VP. In fact, the catenated VP itself will be considered to be a *clause*, which shares its subject with the main clause. This analysis is supported by the existence of clearly parallel constructions using ka in place of catenator-*n* 22.3. Catenation is a closer relationship than complementisation; mood and aspect are mostly determined by the first VP, and the catenation behaves as one unit with regard to focus 27.1.2.1.

There are similarities with "catenative" constructions in English. CGEL pp1176ff reanalyses many traditional auxiliary verbs as taking non-finite clauses (with or without their own subjects) as "catenative complements." There is evidence for catenator-*n* originating as a non-finite marker. Olawsky describes the Dagbani structure *n*+verb as an "infinitive", presumably meaning that it is used as the citation form, though he gives no examples of usage. Both Niggli and Zongo describe the same construction in Mooré as an *infinitif*, and Canu, who calls it the "*état neutre*" (p272), confirms that it is used in citation and in one-word answers to questions (p175) and in constructions like *ēm dátā ndī* "*je désire manger*." Moreover, catenator-*n* may be historically related to nominaliser-*n* <u>24</u>; the particles differ tonally, and in Toende Kusaal they are even distinct segmentally: nominaliser-*n* is *n*, whereas catenator-*n* is *ø*. However, this might be attributed to the effect of a preceding subject NP, in a way analogous to L spreading in NP structure <u>7.4</u>.

Normally only the first VP carries tense and polarity particles, which apply to the entire catenation, but (especially in *n*-catenation) each retains discontinuous-past n^{ϵ} , and while initial irrealis mood marking applies to the whole chain, a VP following

an indicative may be in the irrealis, in which case it will be marked itself. The preverb $t\hat{i}$ is often found with non-initial VPs in *n*-catenation.

Catenation seems always to involve semantic subordination; the equivalent in translation in European languages would often be a participle modifying the main verb subject. However, it may be the *first* component which is semantically subordinate; many verbs have characteristic subordinate "auxiliary" rôles in *n*-catenation, and whether they precede or follow the "main" verb depends on their own semantics. Moreover, in catenation the order of events, if they are not simultaneous, must always be mirrored in the order of the VPs <u>19.2.2</u>.

Common *n*-catenation patterns with verbs without specialised rôles are (a) main VP + imperfective VP expressing accompanying events:

Ka Ninsaal Biig la kena dit ka nuud...Kà Nīn-sáàlBīigkēnnāødítkà nūud ...And Person-smooth:sg child:sg come:IPFV hither CAT eat:IPFV and drink:IPFV..."And the Son of Man comes eating and drinking ..." (Mt 11:19)

(b) perfective VP expressing prior event + main VP

Ka dapa ayi' yε fupiela zi'e ba san'an. Kà dāpá_àyí' yέ fū-píəlà_ ø zì'e bà sā'an. And man:PL NUM:two dress shirt-white:PL CAT stand 3PL among. "Two men dressed in white were standing with them." (Acts 1:10)

(c) main VP + perfective VP in irrealis or imperative mood, expressing purpose. The preverb ti is commonly seen in the second VP.

Amaa m pv mor antu'a zugv o yɛla na sobi tis na'atita'ar laa. Àmáa m pv mor ántù'a zúgú ò yɛlá ø nà sobi ø tís But 1sg NEG.IND have case:sg upon 3AN about CAT IRR write CAT give ná'-tītā'ar láa +ø. king-great:sg ART NEG. "But I have no case about him to write to the Emperor." (Acts 25:26)

 $K \epsilon m_{\phi} t i$ $N \pi e d u' a t a$. "Go and see the doctor." Go:IMP CAT after see doctor:sg.

Man ya'a pv kεεn na tu'asini ba ...
Mān yá' pv kēε-n nā ø tú'asī-ní bā...
ISG.CNTR if NEG.IND come-DP hither CAT talk-DP 3PL.OB...
"If I had not come to talk to them ..." (Jn 15:22): Note DP on both verbs.

(d) $H\bar{a}l(+ "until" can precede$ *n*-catenated clauses as a prelinker adjunct <u>20.2.1</u>.

Catenated VPs can be coordinated with kà "and":

ka keŋ ... n ian'asid ka pian'ad n du'osid Wina'am yu'ur su'uŋa.
kà kēŋ ... n iāň'asíd kà piāň'ad n dū'osíd Wínà'am yú'ùr súŋā.
and go ... CAT leap:IPFV and praise:IPFV CAT elevate:IPFV 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. Sógià-sō' kā'e n túm kà yōɔd ò mēŋá +ø. Soldier-INDF.AN NEG.BE CAT WORK:IPFV and pay:IPFV 3AN self NEG. "No soldier works and pays for himself." (1 Cor 9:7, 1976)

22.2 Auxiliary verbs in *n*-catenation

Certain verbs have characteristic specialised meanings in n-catenation. Dualaspect verbs agree in aspect with the main VP verb.

22.2.1 Preceding the main VP

 $b\dot{\epsilon}^+$ "exist, be somewhere" + $\dot{a}n(n\bar{a})$ "there" + imperfective "be in the process of ..."

Ò bè ànínā n ňwé'èd bīig lā.
3AN EXIST ADV: there CAT beat: IPFV child:SG ART.
"He's currently beating the child."

àcň^a "be something/somehow" can be used in foregrounding by clefting <u>27.1.1</u>:

Li anε o sidi sv'oe li. Lì á nέ ò sīdι ø sú'v_lī. 3INAN COP FOC 3AN husband:sg CAT own 3INAN.OB. "It's her husband who owns it." (1 Cor 7:4)

 $m\bar{i}$ ⁺ "know", $z\bar{i}$ ⁺ "not know": $nam m\bar{i}$ n + perfective "always have X-ed", $nam z\bar{i}$ n + perfective "never have X-ed":

Makir banε buudi paadi ya la nan mi' paae sieba mɛn. Mākír bànı būudı pāadí yā lā nám mī ø pāe sīəba mɛ́n. Testing REL.PL sort reach:IPFV 2PL.OB ART still know CAT reach INDF.PL also. "Trials of the kind that have reached you have always reached others too." (1 Cor 10:13) M nám zī' ø ňyē gbīgımne +ø.
1SG still NEG.KNOW CAT see lion:SG NEG.
"I've never seen a lion." SB

 zan^{ϵ} and $n5k^{\epsilon}$ "pick up, take" with object "using" (of a literal object as instrument)

M nók sú'ugù ø kiá nīm lā.
15G pick.up knife:sg cat cut meat:sg art.
"I cut the meat with a knife."

M záŋ(m nú'ugò ø sī'ıs dāká lā.
1SG pick.up 1SG hand:SG CAT touch box:SG ART.
"I touched the box with my hand."

mɔ̄r^a/ "have" + object "bringing" with motion verbs:

 $D\bar{a}b\dot{a}_{\dot{a}}\dot{y}\dot{p}\dot{p}\dot{p}$ $k\dot{a}$ $f\dot{v}$ $m\bar{j}r\cdot\dot{o}_{a}$ \emptyset $k\bar{\epsilon}$ $n\bar{a}$. Day:PL NUM:seven and 2SG have 3AN.OB CAT come hither. "Bring her here in a week." WK

dɔ̃l^{la/} "accompany in subordinate rôle, attend"

Bà dòll·ō ø kēŋ Bók. "They went to Bawku with him." 3PL follow 3AN.OB CAT go Bawku.

"Beginning" verbs naturally precede:

Ka Pita pin'ili pa'ali ba ... Kà Pita pīň'il ø pá'alì bā ... And Peter begin CAT teach 3PL.OB ... "Peter began to tell them." (Acts 11:4)

Tì $d\epsilon\eta$ ϕ $ts \cdot \phi \phi$ lsr.1PL precede CAT give 3AN.OB car. "We previously gave him a car." ($d\epsilon\eta^{\epsilon}$ "do/go first")

Ka dau sɔ' duoe zi'en la'asug la suugin ... Kà dàu-sɔ̄' dūe_ø zí'èn là'asug lā súugū-n ... And man-INDF.AN rise cAT stand.up assembly ART among-LOC ... "And a man (having risen) stood up in the synagogue ..." (Acts 5:34) $k\bar{\epsilon}n^+$ "come" and $k\bar{\epsilon}n^{\epsilon/}$ "go" can be used similarly as initiators:

 \dot{M} kéŋì σ pī ∂ nú'ùs. "I went and washed my hands." 1SG go CAT wash hand:PL.

su'**ā**^a "conceal" is used in this construction for "secretly":

Ka Na'ab Herod su'a buol baŋidib la ...Kà Nà'ab Herod sự'ā ø búèl bāŋıdıblā ...And king:sg Herod conceal cat ask understander:PL ART..."Herod secretly called for the wise men ..." (Mt 2:7)

nìŋ wālá⁺ literally "do how?" is used in catenation for "how can ...?" (see also <u>22.3</u>):

Ninsaal na niŋ wala an pupiel Wina'am tuonne? Ninsaal biig na niŋ wala pu mor taal Wina'am tuonne? ná nīŋ wālá ø àň pú-pìəl Wínà'am túènne +ø? Nīn-sáàl Person-smooth:sg IRR do how CAT COP inside-white:sg God before co? Nīn-sáàl bîg nà nĩŋ wālá 🧔 pū mōr táàl Person-smooth:sg child:sg IRR do how CAT NEG.IND have fault:sg Wínà'am túènnɛ +ø? God before co? "How can a human being be pure before God? How can the child of a human being not have sin before God?" (Job 25:4)

 $nya\eta^{\epsilon/}$ means "overcome" as a main verb:

Ka m nyaŋ dunia."I have overcome the world." (Jn 16:33)Kà m̀ ňyāŋ dūnıya.And 1sg overcome world:sg.

As a *n*-catenation auxiliary it means "carry out successfully, prevail in":

M pv ňyāŋı ø záb nà'ab láa +ø.
1SG NEG.IND prevail CAT fight chief:SG ART NEG.
"I wasn't able to fight the chief."

Unlike English "can", $ny\bar{a}\eta^{\epsilon}$ expresses events and not states. Thus, to express present ability or inability, the auxiliary is in the irrealis mood; if the main verb is imperfective the auxiliary is imperfective too. M kú ňyāŋı ø záb nà'ab láa +ø.
1SG NEG.IRR prevail CAT fight chief:SG ART NEG.
"I can't fight the chief." ("I won't succeed in fighting the chief.")

wad line nyaŋedin ketin ka nidib voen, wād-línì ňyāŋídī-n ø kētí-n kà nīdıb vūv-n law-REL.INAN prevail:IPFV-DP CAT cause:IPFV-DP and person:PL be.alive-DP. "a law which could make people live." (Gal 3:21, 1996)

tūň'e means "be able"; it is a stative single-aspect verb. As a main verb

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 sī'əm 3PL TNS give and 3INAN become.equal 3PL strength NZ IRR be.able INDF.ADV "They gave as much as their strength would permit" (2 Cor 8:3)

Because of its stative meaning, when $t\bar{u}n'e$ is used as a *n*-catenation auxiliary both indicative and irrealis moods can express present ability or inability.

ka li ku tun'e su'a. kà lì kú tūň'e ø su'āa +ø. and 3INAN NEG.IRR be.able CAT hide NEG. "which cannot be hidden" (Mt 5:14)

Ya na tun'e zin' teŋin la nɛ ti. Yà ná tūň'e_ ø zíň'i tēŋι-n lā né tì. 2PL IRR be.able CAT be.sitting land:SG-LOC ART with 1PL. "You can dwell in the land with us." (Genesis 34:10)

Fo tun'e nyɛt si'ela? Fò túň'e_ ø ňyɛt sí'əlàa +ø? 2SG be.able CAT see:IPFV INDF.INAN PQ? "Can you see anything?" (Mk 8:23)

O pv tun'e pian'ada. Ò pō tūň'e g pįāň'adá +g. 3AN NEG.IND be.able CAT speak:IPFV NEG. "He could not speak." (Lk 1:22) With $nyag^{\epsilon}$ as the main verb in the sense "overcome":

bozugo ba ku tun'e nyane ba mena. bɔ̄ zúgɔ̄ bà kù tūň'e ø ňyāní bà mɛ̄ná +ø. because 3PL NEG.IRR be.able CAT control 3PL self NEG. "because they cannot control themselves." (1 Cor 7:5, 1996)

22.2.2 Following the main VP

tis^ε "give" is used for "to, for"; the meaning may have nothing to do with "giving", and is simply a way of adding an indirect object. This can be used to put an indirect object after a direct, or to have both direct and indirect bound pronoun objects.

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Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Suŋ.
Fò pō má' n tìs nīn-sáalā +ø, àmáa fò mà'
2SG NEG.IND lie CAT give person-smooth:SG NEG but 2SG lie
n tís nē Wínà'am Sí-sòŋ..
CAT give FOC God Spirit-good:SG.
"You have not lied to a human being; rather, you have lied to God's Holy Spirit." (Acts 5:4, 1996)
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M dāa kúès bùŋu ø tís dự'átà.
1SG TNS sell donkey:SG CAT give doctor:SG.
"I sold a donkey to the doctor."
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 $gaad^{\epsilon}$ "pass, surpass" can be used in comparisons:

Isaac kárìm_ ø gát John. Isaac read:IPFV CAT pass:IPFV John. "Isaac reads better than John." SB

À-Wīn gím ø gát À-Bōgor. PERS-Awini be.short CAT pass:IPFV PERS-Abugri. "Awini is shorter than Abugri." SB

Fu sid noŋ mam gat bamaa? Fù síd nòŋ mām ø gát bámmáa ⁺ø? 2SG truly love 1SG CAT pass:IPFV DEMST.PL PQ? "Do you really love me more than these?" (Jn 21:15) $galls^{\epsilon}$ "get to be too much" (*Sāa gális yā* "There's too much rain"):

Ò dì n gálìs. "She's eaten too much." 3AN eat CAT exceed.

Dā kárìm gbánà ø gálisìdā ⁺ø. NEG.IMP read:IPFV book:PL CAT exceed:IPFV NEG. "Don't read books too much."

bàs^ε "send/go away" is used for "away, off, out":

Anɔ'ɔn nwaa yisid nidib tuumbɛ'ɛdi basida? Ànɔ´'ɔn_ø ňwáa_ø yīsıd nīdıb túùm-bɛ̄'ɛdı_ø básıdà +ø? Who cat this cat expel:IPFV person:PL deed-bad:PL cat throw.out:IPFV cQ? "Who is this who drives people's sins out?" (Lk 7:49)

Ending verbs naturally follow the main VP:

Ò dìı ø nāe. "He's finished eating."
 3AN eat CAT finish.

 \dot{O} $d\iota \not g$ tig. "She's eaten to satisty." 3AN eat CAT become.satiated.

Motion verbs occur in *n*-catenation with meanings like local prepositions e.g.

Ò kàt k(kīr-bɛ́'ɛ̀d-nàm n yīisíd nīdıb.
3AN drive:IPFV fairy-bad-PL CAT expel:IPFV person:PL.
"He drives evil spirits out of people."

Èňrugum_ ø páa_m. "Shift along up to me." (*pāe*^{+/} "reach") Shift.along:IMP CAT reach 15G.OB.

Jesus ban'ad buŋ n kpen'ed Jerusalem Jesus ø bāň'ad búŋ n kpźň'żd Jerusalem Jesus Nz ride:IPFV donkey:SG CAT enter:IPFV Jerusalem "Jesus riding a donkey into Jerusalem" (picture caption, NT 1976)

 $w\bar{\epsilon}n^{na/}$ "be like" is very common in *n*-catenation. $W\bar{\epsilon}n^{na/}$ + complement sequences are often treated like prepositional phrases <u>18</u>. As a main verb:

Ka o nindaa wenne nintaŋ ne.
Kà ò nīn-dáa wēn nē nīntāŋ nē.
And 3AN eye-face:sg resemble with sun:sg like.
"His face is like the sun." (Rev 10:1, 1996: KB Ka o nindaa nwɛnɛ winnig nɛ)

 $W\bar{\epsilon}n^{na/}$ takes a prepositional phrase with $w\bar{\nu}\nu$ "like" or $n\bar{\epsilon}$ "with" as complement. Any object without the article $l\bar{a}^{+/}$, even a pronoun or proper name, must be followed by a meaningless $n\bar{\epsilon}$. Before numbers and measurements $w\bar{\epsilon}n^{na/}$ means "about, approximately"; numbers appearing alone are not followed by $n\bar{\epsilon}$:

Li anε woo maila ayi' nε. Lì à nε̄ woo maila àyí' nε̄. 3INAN COP FOC like mile NUM:two like. "It's about two miles." (Jn 11:18)

but ka ba kal an wvv k>biga nε pisi.
kà bà kāl áň wvv k>bigā nē pīsí.
and 3PL number:sG COP like hundred with twenty
"and their number was about 120." (Acts 1:15)

 $l\dot{a}$ 'am^m "together" is also found as a preverb <u>19.7.2</u> and in the compound preposition $l\dot{a}$ 'am $n\bar{\epsilon}$ "together with" <u>18</u>. As a main verb it means "associate with":

... ye labasuŋ moolug la ket ka buudi wusa la'amid ne taaba pudugid Wina'am piini. ... yē lábà-sòŋ mɔɔlòg lā két kà būudı wūsa lá'amìd ... that news-good:sg proclamation ART cause:IPFV and tribe all gather:IPFV $n\bar{\epsilon}$ tāaba_ ø pūdıgıd Wínà'am píinì. with each.other CAT share:IPFV God gift. "....that the proclamation of the good news is making every tribe gather with one another to share God's gifts." (Eph 3:6, 1996)

 $y\dot{a}'as^{\epsilon}$ or $y\dot{a}'as^{a}$ "again" usually lacks *n* and has effectively become an adverb, preposable with $k\dot{a}$ 27.2. 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 m gōs ...
 Again and 1sG look ...

Catenated clauses

22.3 Kà-catenation

Certain constructions with a clause introduced by ka have clear affinities with catenation using n. They never have alternate forms with the linker $y\bar{\epsilon}$. With few exceptions, they either have different subject from the preceding clause or differ in polarity. They resemble n-catenation in that they have the aspect and mood of the preceding VP.

 $K\bar{\epsilon}^+$ "let, leave off" is used with $k\dot{a}$ -catenation in the sense "let, cause that." The subject of the catenation cannot be the same as the main clause subject (in the whole KB, the only counterexample is Titus 2:7 *kɛl ka fv mɛŋ an zanbinnɛ tisi ba* "Let you yourself be a sign to them", where the pronoun *fv* is formally a predependent.) The mood of the catenation matches the VP containing $k\bar{\epsilon}^+$, though imperative often replaces irrealis mood.

Li da kɛ ka ba **pu** nyaŋi kuu o. Lì dà kɛ̀ kà bà pū ňyāŋı ø kú·o ø ⁺ø. SINAN TNS cause and 3PL NEG.IND prevail CAT kill 3AN.OB NEG. "This caused them not to be able to kill him." (2 Kings 11:2)

Ba kvdim niŋidi lin ye li kɛ ka ba **da** nyɛ Kristo kum dapuudir namisvg laa. Bà kvdim níŋìdī_lí yɛ́ lì kɛ́ kà bà dā ňyɛ̃ Kristo kúm 3PL ever do:IPFV 3INAN.OB that 3INAN cause and 3PL NEG.IMP see Christ death dà-pvvdír námisvg láa +ø.

wood-cross:sg suffering Art NEG.

"They have always been doing this so that they will not experience the suffering of the cross of the death of Christ." (Gal 6:12)

dinε **na** kε ka ba **da** kpi'ilim. Dīnı Ø ná kέ kà bà dā kpī'ılímm ⁺Ø. 3INAN.CNTR CAT IRR cause and 3PL NEG.IMP finish NEG. "That will cause them not to come to an end." (Genesis 6:20)

After $k \epsilon \epsilon n k \dot{a}$, with discontinuous-past n^{ϵ} , the catenated clause generally had n^{ϵ} in the 1976 Bible, but this is no longer invariable. Aspect usually matches:

Ka li anε wada la kεt ka tυυmbε'εd nyεt paŋ. Kà lì à nέ wādá lā ø kέt kà từυm-bɛ̄'εd ňyɛ̄t páŋ. And 3INAN COP FOC law ART CAT cause:IPFV and deed-bad see:IPFV power:SG. "It is the law which makes sin find power." (1 Cor 15:56) Catenated clauses

The irregular imperative $k\hat{\epsilon}l^a$, followed by a $k\hat{a}$ -clause with imperative mood, creates a way of expressing commands to third or first persons:

Kèlkà ògōstēŋi-n.Cause:IMP and 3AN look ground:SG-LOC."Let him look down."

Dā kέ kà dàbīəm bέε ⁺ø! NEG.IMP cause and fear EXIST NEG. "Don't be afraid." ("Let fear not exist.")

Kèl[or Kèlí ø] kà tì pú'ùs Wínà'am.Cause:IMPcause:IMP 2PL.SUB and 1PL greet God."Let us praise God."

 $K\dot{\epsilon}l k\dot{a} \dots$ is often ellipted informally, leaving the lack of independency marking as the only sign that the clause is a command:

	Ѝ gós nīf lā.	"I've looked at the eye."
	1sg look.at eye:sg art.	Independency marked: tone overlay on <i>g5s</i>
but	Ѝ gวs nīf lā.	"Let me look at the eye." (Overheard in clinic)
	1SG look.at eye:SG ART.	No tone overlay on <i>gɔ̃s</i>
	Μ̀ dígınὲε +ø?	"Am I to lie down?" (Overheard in clinic)
	1SG lie.down pq?	No independency imperative -m ^a
	Ò záb nà'ab lā.	"He should fight the chief."
	заn fight chief:sg art.	M spreading after <i>ò,</i> not <i>záb</i> <u>19.6.1.2</u>

Mit is a defective verb used only in the imperative <u>19.5.1</u>. Much its most common use is with $k\dot{a}$ -catenation as "see that it doesn't happen that ...". In this sense it never appears with the postposed 2pl subject ^{ya}, suggesting that it is impersonal.

Mid ka ya maali ya tuum suma nidib tuon ye ba gos.
Mit kà yà máalì yà tùum-sùma nīdıb túàn yé bà gōs.
NEG.LET.IMP and 2PL make 2PL deed-good:PL person:PL front that 3PL look.at.
"Don't do your good deeds in front of people so they'll look." (Mt 6:1)

X nìŋ wēlá n...? "how can X ...?" has an impersonal variant using a dummy subject in the main clause and the effective subject in ka-catenation.

Li niŋ wala ka o an David yaaŋa? Lì nìŋ wĒlá kà ò áň David yáàŋa ⁺ø? 3INAN do how and 3AN COP David descendant:sg cq? "How can he be David's descendant?" (Mt 22:45)

Where there is no change of subject, *n*-catenation is overwhelmingly more common, but a few cases of the personal type do appear with ka:

M na niŋ wala ka nyε faangirε?
M ná nīŋ wɛlá kà ňyɛ fāaňgírὲ +ø?
1SG IRR do how and find salvation co?
"How can I find salvation?" (Acts 16:30)

 $K\dot{a}$ usually replaces *n* when there is a change of polarity in catenation:

Ka dau daa zin'i Listra ni ka pu tun'e kenna. Kà dāu dāa zíň'i Listra ní kà pō tūň'e ø kēnná ⁺ø. And man:sg TNS sit Lystra LOC and NEG.IND be.able CAT go:IPFV NEG. "There was a man in Lystra who could not walk." (Acts 14:8, 1996)

Ka Joon kena lood noor ka pu nuud daam Kà Joon kā nā ø lood noor kà pū nūud dáamm ⁺ø. And John come hither CAT tie:IPFV mouth:SG and NEG.IND drink:IPFV beer NEG. "John came, fasting and not drinking beer." (Mt 11:18)

Change from positive to negative can nevertheless occur with *n*:

Ya sieba bε kpɛla ku kpii ... Yà sīəba bέ kpɛlá ø kú kpīi ⁺ø ... 2PL INDF.PL EXIST here CAT NEG.IRR die NEG There are some of you here who will not die ..." (Lk 9:27)

An **adnominal** $k\dot{a}$ -catenated clause follows, usually directly, a NP anchor other than the main clause subject, and contains a pronoun referring to it, which is ellipted if it is an object <u>19.8.1</u>. The sense resembles a non-restrictive relative clause:

Anina ka o nyε dau ka o yv'vr buon Aneas. Àníná kà ò ňyε̄ dáu kà ò yū'vr búèn Aneas. ADV:there and 3AN see man:sg and 3AN name:sg call:IPFV Aeneas. "There he found a man whose name was Aeneas." (Acts 9:33) Li anɛ ya taaba banɛ pu'usid Wina'am ka li nar ka ya kad saria. Lì à nɛ́ yà tāaba bánì pù'usıd Wínà'am kà lì nár 3INAN COP FOC 2PL fellow REL.PL greet:IPFV God and 3INAN must kà yà kád sàríyà. and 2PL drive judgment. "It is your fellow-worshippers of God whom you must judge." (1 Cor 5:12)

If the main clause is a verbless identificational clause 21.4.1, the NP of the main clause can be the anchor:

YEI boo nwa ka Wina'am ke ka li paae ti? YEI-boo ø ňwá kà Wínà'am ké kà lì páa tì +ø? Matter-what CAT this and God cause and 3INAN arrive 1PL.OB CQ? "What is this that God has made to come to us?" (Genesis 42:28)

Adnominal $k\dot{a}$ -catenation is the basis of $k\dot{a}$ -clefting and $k\dot{a}$ -preposing <u>27.2</u>. The subject of the catenated clause does not normally refer to the anchor; if it does, the $k\dot{a}$ -catenation is a resultative predicate <u>19.8.2</u>:

...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:IPFV dumb:PL and 3PL hear:IPFV and speak:IPFV. "...and even makes the dumb hear and speak." (Mk 7:37, 1976)

With $ny\bar{\varepsilon}^+$ "see", this construction has the predicative sense "see *as*":

M dāa ňyē dāu lá kà ò áň ná'àb.
1SG TNS see man:SG ART and 3AN COP chief:SG.
"I saw the man as a chief." KT: not possible as "who was a chief"

M dāa pū ňyē dāu 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

As expected, KT rejected constructions with tense marking in the $k\dot{a}$ catenation. He also rejected focus- $n\bar{\epsilon}^{+/}$ in the catenated clause:

* \dot{M} $d\bar{a}a \ p\bar{v}$ $ny\bar{e} \ d\bar{a}u$ la ka \dot{o} a $n\bar{e}$ $na'ab\bar{a}$ +a. 1SG TNS NEG.IND See man:SG ART and 3AN COP FOC chief:SG NEG.

23 Conditional clauses

23.1 Overview

Conditional clauses have a subordinate $y\dot{a}$ '-clause as a postlinker adjunct before the subject of the main clause, after any other adjuncts. $Y\dot{a}$ '-clauses cannot be coordinated with each other, though they may contain coordinated subclauses, and a main clause may contain more than one $y\dot{a}$ '-clause:

Fù yá' bòɔd, m yá' lèb nā, m ná yóɔ_f.
2sG if want, 1sG if return hither, 1sG IRR pay 2sG.OB.
"If you want, when I return, I will pay you."

The main clause must have an unellipted subject. Direct commands keep a subject pronoun in place; some speakers require a free pronoun form in such cases:

Fv ya'a mor pu'a, fvn da mood ye fv bas oo.
Fv ya' moor pu'ā, fvn dā mood yé fv bas oo.
sc if have wife:sc, 2sc NEG.IMP struggle:IPFV that 2sc abandon-3AN.OB NEG.
"If you have a wife, don't try to leave her." (1 Cor 7:27)

but Bung ya'a bood ye o lubuf, fu po nyeti o tubaa.
Bùŋ yá' bòod yé ò lūbú f, fù pū ňyētí ò tùbāa ⁺ø.
Donkey:sg if want that 3AN throw.off 2SG.OB, 2SG NEG.IND See:IPFV 3AN ear:PL NEG.
"If a donkey wants to throw you off, you don't see his ears." KSS p44

Occasionally, the $y\dot{a}$ '-clause appears clause-finally because of extraposition due to weight, notably in constructions meaning "it would be better if ...":

Dinzug li naan a su'um ba ya'a pu du'an dau kaŋaa. Dìn-zúg lì nāan áň súm bà yá' pū dú'ā-n dáu-kàŋáa ⁺ø. Thus 3INAN then COP good:ABSTR 3PL if NEG.IND bear-DP man-DEMST.SG NEG. "So it would have been better for that man not to have been born." (Mk 14:21, 1996)

The main clause can be of any type, including a command, as above, or a question; it may have elements preposed with ka 27.2:

Fò yá' gōs kpēlá, bó kà fò ňyētá +ø?
2sG if look here, what and 2sG see:IPFV CQ?
"If you look here, what do you see?"

23.1

 $Y\dot{a}$ '-clauses express tense independently. They can have irrealis mood, but an indicative event-perfective need not have past reference in a $y\dot{a}$ '-clause:

Fu ya'a na dollimi keŋ, m na keŋ.Fù yá' nà dollímī ø kēŋ, m ná kēŋ.25G ifIRR accompany 15G CAT go, 15G IRR go."If you will go with me, I will go." (Judges 4:8)

M ya'a pv keŋε, Svŋid la kv kɛɛn ya ni naa.
M yá' pv kɛŋɛ +ø, svŋıd lā kú kɛɛň 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)

23.1.1 Discontinuous-past n

The left-bound liaison word n^{ϵ} can express a discontinous today-past <u>19.3.3</u>, but much more often has a meaning analogous to the modal remoteness expressed by the use of the English preterite in non-temporal usage (CGEL pp148ff.) It expresses a hypothetical or unlikely state of affairs; if it is accompanied by post-subject $n\bar{a}an(\iota)$, the sense is contrary-to-fact. It can attach to any verb form in indicative or irrealis mood, but is incompatible with the imperative. In *n*-catenation, if n^{ϵ} is found in the first VP it is usually repeated in all. It appears most often in $y\dot{a}$ '-clauses, but occurs both with and without $n\bar{a}an(\iota)$ in other clause types; without $n\bar{a}an(\iota)$ this is most often in the expression $b\dot{c}d\bar{\iota}-n$ "might wish":

m pa'ati nye ka ya pu wenne wuu man boodin ye ya aan si'em laa. m pá' tì ňyé kà yà pū wēn nē 1SG perhaps see and 2PL NEG.IND resemble with wūu mán bòɔdī-n yé yà áa-n sī'əm láa +ø. like 1SG:NZ want-DP that 2PL COP-DP INDF.ADV ART NEG. "I will perhaps find you not as I might wish." (2 Cor 12:20, 1996)

Man bɔɔdin nɛ yanamɛ naan aan ma'asiga bɛɛ yanamɛ naan aan tuuliga.Mānbɔ́ɔdī-n nɛ̄ yānámì @ nāan áa-n mā'asígā bɛɛISG.CNTR want-DP that 2PLNZ then COP-DP cold:ADV oryānámì @ nāan áa-n tūulígā.2PLNZ then COP-DP hot:ADV."I might wish you had been cold or you had been hot." (Rev 3:15)

23.1.2 *Nāan(ι)* "in that case"

Post-subject $n\bar{a}an(\iota)$ is distinct from $n\bar{y}aan$ "next, afterwards, then", but $n\bar{y}aan$ itself has a frequent alternative form $n\bar{a}an$. Thus, in parallel NT passages:

Fu na ki'is noor atan' ye, fu zi' ma, ka noraug nyaan kaas.
Fù ná kī'ıs nóor àtáň' yế fừ zí'ı mā ⁺ø,
2SG IRR deny occasion:SG NUM:three that 2SG NEG.KNOW 1SG.OB NEG,
kà nō-dáùg 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 [KB nyaan] kaas noor ayi.

Fu na ki'is man noor atan' ka noraug naan [KB nyaan] kaas noor ayi.
Fù ná kī'ıs mān nóor àtáň' kà nō-dáùg
2SG IRR deny 1SG.CNTR occasion:SG NUM:three and hen-male:SG
nāan kāas nóor àyí'.
next cry occasion:SG NUM:two.
"You will deny me three times before the cock crows twice." (Mk 14:30, 1996)

The distinct particle $n\bar{a}an(\iota)$ has a core verbal sense "be(ing) there/thus"; it can appear with its own locative complement, typically before a *n*-catenated clause:

M nye ka Sutaana naane arazana ni n lu wenne saa yiti iank si'em la.
M ňyé kà Sūtáanà nāaní ø àrazánà ní n lù ø wēn nē
1sg see and Satan be.there cat sky LOC CAT fall CAT resemble FOC sáa ø yīt ø jāňk sī'əm lā.
rain:sg NZ emerge:IPFV CAT leap INDF.ADV ART.
"I saw Satan in heaven fall like lightning." (Lk 10:18, 1996)

dap banɛ gur ye ba zugdaan naan pu'adiir di'ema zin'igin kul na dàp-bànı gūr yɛ´ bà zūg-dáàn nāan pu̯'á-dīır dí'əmà man-REL.PL wait that 3PL head-owner:sg be.there wife-taking:sg feast:PL zíň'igī-n_ ø kūl nā place:sg-Loc cAT go.home hither. "men who are waiting for their lord at a wedding feast to return ..." (Lk 12:36)

Ka nwadbibis na naan agɔla lit teŋin na.Kà ňwād-bíbìs ná nāan àgɔ́là ø lít tɛŋι-n nā.And moon-small:PL IRR be.there ADV:above CAT fall:IPFV ground:SG-LOC hither."And the stars [being] above will fall to earth." (Mk 13:25)

Conditional clauses

 $N\bar{a}an\iota$ evidently originated in $n\bar{a}an$ followed by catenator-*n*, but I will omit CAT in the interlinear glossing henceforward.

Most cases of modal $n\bar{a}an(\iota)$ appear in conditional main clauses. In other main clauses $n\bar{a}an$ without n^{ϵ} is often a by-form of $n\bar{y}\bar{a}an$ as described above; if not, the meaning is "in that case, matters being thus." Examples of $n\bar{a}an(\iota)$ in subordinate clauses are uncommon in KB, which usually simply shows the irrealis marker $n\dot{a}$ where older versions have $n\bar{a}an$.

 $N\bar{a}an(\iota)$ without n^{ε} is often effectively equivalent to $y\dot{a}'$ "if/when."

Li an sum ye dau yinne naan kpi nidib la yɛla gaad ... Lì àň súm yɛ̄ dāu̯ yīnní nāan kpí nīdıb lā yɛ́là ø gàad ... 3INAN COP good that man:sg one then die person:PL ART about CAT pass ... "It is better if one man should die for the people than ..." (Jn 11:50)

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 bē'ɛd kà bà sīgısú f nē kpísìnkpìl 2SG:NZ then do bad and 3PL put.down 2SG.OB with fist:SG kà fù sín kà mɔ̄r sūgurú, 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)

Noŋir lem kae' gaad nidi naan kpi o zuanam zugo. Nòŋır lém kā'e_ø gáàd nīdí_ ø nāan kpí ò zuà-nàm zúgō +ø. Love again NEG.BE CAT pass person:SG NZ then die 3AN friend-PL upon NEG. "There is no love greater than if a person dies for his friends." (Jn 15:13, 1996)

Ba wenne zunzoŋ naani ve'ed zunzoŋ ne.Bà wēnnēzúnzòŋø nāanı vē'ɛdzúnzòŋnē.3PL resemble with blind.person:sg Nz thenlead:IPFV blind.person:sg like."They are like when a blind person leads a blind person." (Mt 15:14, 1996)

When $n\bar{a}an(\iota)$ is accompanied by discontinuous-past n^{ε} the meaning is contraryto-fact, as in conditional clauses:

Li su'm ka fu daa naan zaŋin m ligidi n su'an banki ni. Lì sù'm kà fù dāa nāan záŋ(-n_m līgıdı n sū'a-n bánkì ní. 3INAN be.good and 25G TNS then take-DP 15G money CAT hide-DP bank:SG LOC. "You should have put my money in the bank." (Mt 25:27, 1976)

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Yà' nāan(ι) means "if only":
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 M zugdaan la ya'a naan siaki keŋ nyɛɛn nɔdi'es la bɛ Samaria la!

 M zūg-dáàn
 lā yá' nāan si̯ákì ø kɛŋ ø ňyɛɛ-n

 Isg head-owner:sg ART if then agree cAT go cAT see-DP

 nɔ´-dí'às
 lá ø bɛ̀ Samaria lā!

 mouth-transmitter:sg ART NZ EXIST Samaria ART!

 "If only my lord would agree to go to see the prophet in Samaria!" (2 Kings 5:3)

23.2 Open

Conditional clauses without discontinuous-past n^{ε} or $n\bar{a}an(\iota)$ express "if", and also "when" with a main clause with present or future reference. With main clauses with past reference, $y\dot{a}$ ' is only used for conditionals; for the meaning "when", an absolute clause with time reference is used as a postlinker or VP adjunct <u>24.2</u>.

Nid ya'a tum tuuma, o di'ed yood. Nīd yá' tùm tūuma, ò dì'əd yōod. Person:sg if work:IPFV work, 3AN receive:IPFV pay. "If a person works, he gets pay." (Rom 4:4)

Ka Kristo ya'a da po vo'og kuminɛ, alaa ti labasoŋ la mɔɔlog la anɛ zaalim.
Kà Kristo yá' dà pō vō'og kūmι-nɛ́ +ø, àláa tì làba-sòŋ
And Christ if TNS NEG.IND come.alive death-LOC NEG, ADV:thus 1PL news-good:sG *lā mɔ́ɔlòg 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)

Fù yá' siàk, tì ná dīgılí 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.]"

Bεog ya'a nie fu na wum o pian'ad.
Bε̄og yá' nìe, fù 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."

23.3 Hypothetical

If discontinuous-past n^{ε} occurs in the $y\dot{a}$ '-clause and the main clause does not have $n\bar{a}an(\iota)$, the meaning is hypothetical. The main clause has irrealis mood; in the 1976 NT, but not later Bible versions, it also has n^{ε} .

Nobir ya'a yelin ye, on pu a nu'ug la zug, o ka' ningbin nii, lin ku nyanin keen ka o ka' ningbin nii. Nóbìr yá' yèlī-n yē, ón áň nú'ùg lā zúg, рū Leq:sg if say-DP that 3AN:NZ NEG.IND COP hand:sg ART upon, ò kā' nín-gbīŋ níi +ø, līn kύ ňyāŋı-n ø 3AN NEG.BE body-skin:sg loc Neg, dem.inan Neg.irr accomplish-dp cat kà ò kā' nín-qbīn níi +ø. kēɛ-n Cause-DP and 3AN NEG.BE body-skin:SG LOC NEG. "If the leg said, 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)

2016: Nɔbir ya'a yɛlin ye, "Man ka' nu'ug la zug, m ka' niŋbiŋ la nii," lin kυ nyaŋi kɛ ka o ka' niŋgbiŋ la nii.

Later versions also use open conditionals with irrealis mood in the main clause:

Wief ya'a sigin li ni, li zuluŋ na paaen o salabir.
Wìəf yá' sīgí-n lì nī, lì zùluŋ ná páa-n ò sàlıbır.
Horse:sg if descend-dp 3INAN LOC, 3INAN depth IRR reach-dp 3AN bridle:sg.
"If a horse went down in it, its depth would reach its bridle." (Rev 14:20, 1976)

2016: Ka wief ya'a sigi li ni, li zuluŋ na paae o salibir.

23.4 Contrary-to-fact

If the main clause has $n\bar{a}an(\iota)$, there is a contrary-to-fact implication. Both main and $y\dot{a}$ '-clause have discontinuous-past n^{ε} :

Man ya'a pv kɛɛn na tu'asini ba, ba naan kv mɔrin taalɛ. Mān yá' pv̄ kɛ̃ɛ-n nā ø tú'asī-ní bā, bà nāan kú ISG.CNTR if NEG.IND come-DP hither CAT talk-DP 3PL.OB, 3PL then NEG.IRR mɔ̄rı-n táàllɛ̄ +ø. have-DP fault:SG NEG. "If I had not come to speak to them, they would not have been guilty." (Jn 15:22)

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Ya'a ka'anε alaa, m naan kv yɛlinɛ ya ye ...
Yà' kā'a-ní àlá, m nāan kú yɛli-ní yā yɛ̄ ...
If NEG.BE-DP ADV:thus, 1SG then NEG.IRR say-DP 2PL.OB that...
"If it were not so, I would not have told you that ..." (Jn 14:2)

Ba ya'a daa mi'inɛ li, ba naan ku kpa'an Zugsɔb onɛ an na'atita'ar la dapuudir zugɔ. Bà yá' dāa mī'i-ní_ lī, bà nāan kú kpā'a-n Zūg-sɔ́b ɔ́nì 3PL if TNS know-DP 3INAN.OB, 3PL then NEG.IRR fasten-DP head-EMPTY.AN REL:AN àň ná'-tītā'ar lā dá-pūvdá zùgɔ̃ +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 ya'a mi'in linɛ na tisi ya sumbugusum zina nwa, li naan aan su'um!
Yà yá' mī'i-n línì nà tīsı yá súmbūgusím zīná ňwá,
2PL if know-DP REL.INAN IRR give 2PL.OB peace today this, *nāan āa-n súm!*3INAN then COP-DP good:ABSTR.
"If you had known this day what would have brought you peace, that would have been good." (Lk 19:42)

Contrary-to-fact conditions in the past are also sometimes marked by combining the irrealis mood with preverbal past tense markers in the main clause; the ya'-clause has n^{ϵ} as usual:

B>zugɔ Josua ya'a da tisini ba vu'usum zin'ig, Wina'am da ku lɛm pian' dabis-si'a yɛla ya'asɛ.
Bō zúgō Josua yá' dà tìsī-ní bā vū'usím zíň'ìg, Wínà'am dá kù
Because Joshua if TNS give-DP 3PL.OB resting place:sG, God TNS NEG.IRR
lɛm pi̯āň' dábìs-sī'a yɛ́là yà'asɛ̄ +ø.
again speak day-INDE.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, without a $y\dot{a}$ '-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."

24 N-clauses

24.1 Overview

Kusaal transforms complete clauses into AdvPs or NPs by inserting the postsubject particle \dot{n} . (For the realisation of the particle, see <u>7.2</u>.) The \dot{n} by itself is a nominaliser, which turns the original clause "X" into an "absolute" clause signifying "it being the fact that X." \dot{N} -clauses also form the basis of Kusaal relative clauses, though in the commonest type the nominaliser has fused with a preceding demonstrative pronoun to create what is synchronically simply a relative pronoun.

Nominaliser- \dot{n} may be historically related to catenator-n <u>22.1</u>.

All types of \dot{n} -clause have independent tense marking (but relative to the *narrative* timeline within narrative <u>19.3.5</u>.)

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 nɛ̄ yɛ́ yà nɔ́ŋ tāaba.
2PL NZ IRR have debt-INDF.INAN COP FOC that 2PL love each.other.
"Any debt which you are to have is to love each other." (Rom 13:8)

 \dot{N} -clauses cannot contain focus particles, but relative pronouns are often preposed with $k\dot{a}$ <u>24.3.2</u>. Dependents of \dot{n} -clauses may only be articles or predependent NPs <u>15.6.2</u>, but \dot{n} -clauses can be predependents themselves.

Absolute \dot{n} -clauses almost always take the article $|\bar{a}^{+/}$, but the function of the article after relative clauses is similar to its usage elsewhere. Absence of the article after a relative clause does duty for what with nouns is expressed by dependent indefinite pronouns.

JnsJbánĒdáu-kànısàkĒnāsú'èslā.3AN.CNTR EMPTY.AN COP FOC man-REL.SG TNS come hither yesterday ART."That one's the man who came yesterday."

Dàp-bànı bòod yé bà ňyéɛ_f ké nā. Man-REL.PL want that 3PL see 25G.OB come hither. "Some men who want to see you have come."

one du'a ne Siig"someone born of the Spirit" (Jn 3:8) ∂ni $d\mu'a$ $n\bar{e}$ $S\bar{i}ig$ REL.AN bear with spirit:sg

onε tυmi m la na				"he who sent me hither" (Mk 9:37)
ònι	tùmı_m	lā	nā	(ว้ทเ = REL.AN; contrast ว์ท 35G:NZ)
REL.AN	send 1sg.or	B ART	hither	

The article is not repeated a second time after an \dot{n} -clause which ends in a NP with $|\bar{a}^{+/}$. If the clause contains the VP-final particles $n\bar{a}^{+/}$ "hither" $s\dot{a}^{+}$ "hence", these may follow an article belonging to the \dot{n} -clause <u>19.10</u>.

If the \dot{n} -clause has a negative VP, it only shows a final LF if the \dot{n} -clause is itself clause-final in the superordinate clause:

Nīn-bánì pū dít ná kpī. Person-REL.PL NEG.IND eat:IPFV IRR die. "People who don't eat will die." WK

M ňyć nīn-bánì pū dítā +ø.
1SG see person-rel.PL NEG.IND eat:IPFV NEG.
"I've seen some people who don't eat."

24.2 Absolute clauses

N-clauses without relative pronouns or indefinite pronouns used as relatives are **absolute clauses**, meaning "it being the fact that ...":

Dāu lā dāa záb nà'ab lā. Man:sg art tns fight chief:sg art. "The man has fought the chief."

dāu lá ø dāa záb nà'ab lā Man:sg ART NZ TNS fight chief:sg ART "the man having fought the chief"

The most characteristic use of absolute clauses is as AdvPs of time or circumstance. They are the usual way of expressing past "when", used as postlinker adjuncts 20.2.1 or as VP adjuncts, generally preposed with ka 27.2. Kusaal is stricter than English in requiring constituent order to reflect event order (cf catenation 22.1), so the VP-final adjunct position is usually confined to cases where the absolute clause expresses a state of affairs rather than a single event:

Dn dāa ňyēt súŋā, ´n dāa áň bí-līa láa ⁺ø?
 3AN.CNTR TNS see:IPFV good:ADV, 3AN:NZ TNS COP child-baby:SG ART PQ?
 "Did she see well when she was a baby?"

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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 yεli ba ... Kà bán dìt lā, Yesu yέlì_bā ... And 3PL:NZ eat:IPFV ART, Jesus say 3PL.OB "As they were eating, Jesus said to them ..." (Mt 26:21)

Ka ban yi la, ka Zugsob malek nie o meŋ ...Kà bán yīlā, kà Zūg-sźbmáljāk níeòmēŋ ...And 3PL:NZ emerge ART and head-EMPTY.AN angel:sG appear 3AN self"After they had left, an angel of the Lord showed himself ..." (Mt 2:13, 1996)

Like other AdvPs, absolute clauses have limited use as verb arguments, most often as the complement of $a e n^a$ "be", though occasionally as subjects:

Kristo da kpii ti yɛla la kɛ ka ti baŋ nɔŋilim an si'em. Kristo_ø dà kpìi_ tì yɛlá lā kɛ́ kà tì báŋ nòŋılím_ø àň sī əm. Christ Nz TNS die 1PL about ART cause and 1PL realise love NZ COP INDF.ADV. "Christ dying for us makes us understand what love is like." (1 Jn 3:16)

Dine ke ka m a saalbiis zua la ane mam pu sa'amidi ba la'ad ka me pu diti ba ki la. kà mà án sáàl-bīis Dìni kế zuá lā á nē mán REL.SG cause and 1SG COP smooth-child:PL friend:SG ART COP FOC 1SG:NZ sáň'amìdí bà lā'ad kà mé pū dítí bà kī láa +ø. рū NEG.IND Spoil: IPFV 3PL goods:PL and also NEG.IND eat:IPFV 3PL millet ART NEG. "What makes me a friend of human beings is that I don't spoil their property or eat their millet." BNY p20

Absolute clauses are not used as objects of verbs of perception or communication; either relative clauses with indefinite pronouns as relatives or content clauses <u>25.2</u> appear in this function.

Absolute clauses with $s\bar{a}d\iota g(m$ "since, because" immediately following nominaliser- \dot{n} occur as postlinker adjuncts expressing "reason why":

Tinamε sagidim aan o biis la, ti da tɛn'ɛs ... Tīnámì ø sādıgím áaň ò bīis lā, tì dā tēň'ɛs ... IPL NZ since COP 3AN child:PL ART, 1PL NEG.IMP think ... "Since we are his children, we should not think ..." (Acts 17:29)

Amaa on sadigim kpi la, bɔ ka m lɛm lɔɔd nɔɔr ya'asɛ? Àmáa ɔ́n sādıgím kpí lā, bɔ́ kà m̀ lɛ́m But ȝẠN:NZ since die ART, what and ュsɕ again lɔ̄ɔd nɔ̄ɔr yá'asɛ̀ +ø +ø? tie:IPFV mouth:sɕ again NEG CQ? "But since he has died, why should I still be fasting?" (2 Samuel 12:23)

For absolute clauses with post-subject $n\bar{a}an(\iota)$ see <u>23.1.2</u>.

Absolute clauses occur after $h\bar{a}li$ $n\bar{\epsilon}$ or $h\bar{a}li$ $l\dot{a}$ 'am $n\bar{\epsilon}$ "although, even as" <u>18</u>, and $h\bar{a}li$ n tì $p\bar{a}a$..."up until the time when ..." <u>20.2.1</u>.

Before the postposition $z\bar{u}g^{3/}$ "on account of", or $b\bar{z} z u d g \bar{z}$ "because", absolute clauses form reason-why AdvPs used as adjuncts:

Ka ba la'as taaba n deni 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'aten la na zug. n $d\epsilon \eta i g$ ϕ $n \gamma \bar{e}$ Blestus $\delta n i$ Kà bà lá'às tāaba àň ná'àb Herod And 3PL gather each.other CAT do.first CAT see Blastus REL.AN COP king:sg Herod lā n máàl sūør yć ò ňwć' nà'ab sāmán-nà'ab nú'ùg, courtvard-chief:sg ART CAT make way:sg that 3AN strike king:sg hand:sg, bà dī bà yīt ná'-tēŋ lā nā zúg. 3PL food NZ emerge: IPFV king-country: SG 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 as usual need to be preposed with ka 27.2 to match the word order to event order 19.2.2:

Mán ňwè' dāu lā zúg kà police gbáň'a_m. 1SG:NZ strike man:SG ART upon and police seize 1SG.OB. "Because I struck the man the police arrested me."

It is commoner for causation to be simply implied by an absolute clause as postlinker adjunct or $k\dot{a}$ -preposed VP adjunct, or simply by coordination with $k\dot{a}$:

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Mán ňwè' dāu lā, kà police gbáň'a_m.
1SG:NZ strike man:SG ART and police seize 1SG.OB.
"I having struck the man, the police arrested me."

M ňwé' dāu 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."

 $Y\bar{\epsilon}l\dot{a}^+$ "concerning" appears after absolute clauses in NT section headings:

Jesus n kpen' Jerusalem la yela Jesus n kpɛ̀ň' Jerusalem lā yɛ́là Jesus Nz enter Jerusalem ART about "[about] Jesus entering into Jerusalem."

However, the NT uses absolute clauses alone as picture captions:

Ban meed yir"A house being built"Bán mèɛd yīr3PL:NZ build:IPFV house:SG

24.3 Relative clauses

Relative clauses are usually restrictive in meaning, though not invariably, especially when relative pronouns are not compounded with the preceding head. (See also on adnominal $k\dot{a}$ -catenation, which typically has non-restrictive meaning <u>22.3</u>.)

Structurally, Kusaal relative clauses are of two distinct types: those which use relative pronouns, and those which use indefinite pronouns in the rôle of relatives. The relative clause subject is followed by \hat{n} in the indefinite-pronoun type; diachronically, the unitary relative pronouns have arisen from fusion of a clause-initial short demonstrative pronoun with a following \hat{n} .

A relative clause introduced by a relative pronoun may contain indefinite pronouns with their normal meaning, and a relative clause with an indefinite pronoun as relative may contain other indefinite pronouns in their normal function so long as they precede the pronoun which appears with the relative meaning. Short demonstrative pronouns are never relatives when non-initial, and long demonstratives are never relatives at all:

```
Wina'am onε gaad si'el wusa la
Wínà'am śnì gàad sī'əl wūsa lā
God RELAN pass INDF.INAN all ART
"God who surpasses everything." (Lk 1:35)
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wvv baŋi gban'ad **si'el** si'em la wvv bāŋ(____ø gbāň'ad si'əl ___si'əm lā like trap:sg NZ seize:IPFV INDF.INAN INDF.ADV ART "like a trap seizes something" (Lk 21:35)

O pa'al nɛ'ɛnam nyain tis sɔ' wusa on vu'ug nin**kan** kumin la zug. Ò pà'al nɛ̄'-nám ňyāe ø tís sɔ̄' wūsa ón vū'ug nīn-kán 3AN show DEM.INAN-PL clearly CAT give INDF.AN all 3AN:NZ revive person-DEM.SG kūmι-n lā zúg. death-LOC ART upon. "He has shown this clearly to everyone because he has raised that person from death." (Acts 17:31)

o na tom toomnyalima gaad dau **kaŋa** tom si'el laa? ò nà tōm tóòm-ňyālımá @ gàad dàu-kàŋá @ tòm sī'əl láa ⁺ø? 3AN IRR work work-grand:PL CAT pass man-DEMST.SG NZ work INDF.INAN ART PQ? "Will he do miracles greater than this man has?" (Jn 7:31)

24.3.1 With indefinite pronouns

Relative clauses using indefinite pronouns as relatives are **internally headed**. The pronoun may occur as a head, functioning as the clause antecedent, or as a dependent after a cb which is then the clause antecedent; in either case it remains *in situ* within the relative clause. The pronoun is thus followed not only by the article belonging to the whole clause, but by any adverbial elements and catenated clauses:

ye Wina'am nodi'esidib n daa yel si'el n sob Wina'am gbauŋin la, ane ameŋa.
yē Wínà'am nó-dí'àsıdıb n dāa yél si'əl n sōb
That God mouth-receiver:PL NZ TNS say INDF.INAN CAT write
Wínà'am gbáuŋū-n lā á né àmēŋá.
God book:sg-loc ART COP FOC truly.
"So that what God's prophets said and wrote in God's book is true."
(Mt 26:56, 1996)

The indefinite pronoun or noun-pronoun compound usually follows the verb directly, but this is not invariable:

... fon yɛlim fon niŋ li si'el. ... fūn yɛ́lìm fún nìŋì lī sī'əl. ... 2SG.CNTR say:IMP 2SG:NZ do 3INAN INDF.INAN. "... that you say where you have put it." (Jn 20:15)

Instead of analysing these clauses as internally headed, one might try to take such trailing elements as modifying the relative clause; however, this cannot explain cases where the pronoun appears in a subordinate clause within the relative clause, or is a predependent within a NP or AdvP (see below.)

The antecedent of a relative clause using an indefinite pronoun is most often a direct object:

Ón yèl sī'əl lā kā' sídāa +ø.
3AN:NZ say INDF.INAN ART NEG.BE truth NEG.
"What he says is not true" SB

on gaŋ **dau sɔ'** la ón gāŋ dáu̯-sɔ̄' lā заN:NZ choose man-INDF.AN ART "**the man** whom he has chosen" (Numbers 16:5)

M mi' man gaŋ **sieba** la. M mi' mán gāŋ sīəba lā. 1SG know 1SG:NZ choose INDF.PL ART. "I know **those** whom I have chosen." (Jn 13:18)

Ka ban tum **sɔ'** la ku gaad onε tum o la. Kà bán tùm sɔ̄' lā kú gāad ɔ́nì tùm·o_ø láa +ø. And spl:nz send indf.an art neg.irr surpass rel.an send san.ob art neg. "**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 gbáu̯ŋ-sī'a n tís Efesus dím lā Paul nz write letter- INDF.INAN CAT give Ephesus EMPTY.PL ART "**the letter** which Paul wrote to the Ephesians" (NT heading)

Man mi' **si'el** nan anε bi'ela. Mán mī sī'əl nān á nε bī'əlá. 1SG:NZ know INDF.INAN now COP FOC small.ADV. "**What** I know now is small." (1 Cor 13:12) N-clauses

The head can be part of a subordinate clause within the relative clause, or it can be a predependent in a NP or AdvP:

Fun bood ye fu ku dau so' la ya'a kpi...
Fún bood yé fù ku dáu-so' lā yá' kpì...
25G:NZ want that 25G kill man-INDEAN ART if die...
"If the man whom you are seeking to kill dies ..." (2 Samuel 17:3)

ya na baŋ man yɛl ye m an **sɔ'** la. yà ná bāŋ mán yɛ́l yɛ́ m̀ àn̆ sɔ̄' lā. 2PL IRR understand 1SG:NZ say that 1SG COP INDF.AN ART. "you will understand **who** I say that I am." (Jn 8:28)

Gosim ye fu na baŋ la'abama an **so'** bunnεε? Gòsim yé fù ná bāŋ lá'-bàmmá Ø àň sō' búnnὲε ⁺Ø? Look:IMP that 2SG IRR understand item-DEMST.PL NZ COP INDF.AN thing:SG PQ? "Can you see if you can find out **whose** property these things are?" (Genesis 38:25)

Alaa mam mε kv yεli ya mam nyε nɔɔr la **sɔ'** san'anε. Àláa mām mέ kv̀ yɛlı yá mán ňyɛ nɔ̄ɔr lā sɔ̄' sá'anɛ̄ +ø. Thus 1sg.cntr also neg.irr say 2pl.ob 1sg:nz see mouth:sg art indf.an among neg. "Thus I too will not tell you from **whom** I derived the authority." (Mt 21:27)

M na tomi m Ba' zi'el nɔɔr **sɔ**' yɛla la tisi ya M ná tōmí m Bá' ø zì'əl nɔ̄ɔr sɔ̄' yɛ́là ø tísì yā. ISG IRR send ISG father:SG NZ stand mouth:SG INDF.AN about CAT give 2PL.OB. "I will send **whom** my Father made a promise about to you." (Lk 24:49)

Indefinite pronouns as relatives may be omitted before ordinal expressions:

ka fun gban'e **ziiŋ si'a yiiga** la, fun ya'am o nɔɔr ... kà fún gbāň'e zīŋ-sí'a yīigá lā, fūn yá'àm ò nɔ̄ɔr ... and 2sg:Nz catch fish-INDF.INAN firstly ART, 2sg.CNTR open:IMP 3AN mouth:sg "and the first fish you catch, open its mouth..." (Mt 17:27)

but Paul n sob gbauŋ yiiga daan n tis Korint dim la nwa.
Paul n s5b gbáuŋ yīigá dāan n tís Korint dím lā ø ňwá.
Paul Nz write letter:sg firstly owner:sg cAT give Corinth one.PL ART CAT this.
"This is the first letter which Paul wrote to the Corinthians." (NT heading)

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In most relative clauses using indefinite pronouns the pronoun is itself the head of the clause. It then usually keeps the indefinite-specific sense of indefinite pronouns in other contexts (the main exception in KB is a sequence in Rev 2-3 of *man nye so' la* "the one I saw.") In the 1996 NT, out of 33 examples of $s\bar{j}'^+$ used in this way, 20 involve constructions where the relative clause is the complement of a verb of cognition, reporting, or perception. Relative clauses with indefinite pronouns as relatives are strongly preferred in clauses which correspond to what CGEL calls "subordinate interrogative clauses" (pp1070ff, pp972ff), and may be obligatory when such a clause follows a verb as its complement and the pronoun is not the subject of the subordinate clause. Such cases account for the great majority of relative clauses with uncompounded indefinite pronouns.

Examples from the 1996 NT and KB:

o naan baŋin po'a kane si'is o la a so' ò nāan báŋī-n pu̯'á-kànì sī'ıs·ó ø lá øàň sɔ̄'. 3AN then realise-DP woman-REL.SG touch 3AN.OB ART NZ COP INDF.AN. "He would know **what** [kind of] woman it is who touched him" (Lk 7:39, 1996)

m na pa'ali ya on wen so'. m̀ ná pā'alı yá ón wɛ̄n sɔ̄'. ISG IRR teach 2PL.OB 3AN:NZ resemble INDF.AN. "I will teach you **what** he is like." (Lk 6:47, 1996)

 M mi' fun a so'.
 "I know who you are." (Lk 4:34, 1996)

 M mí' fún àň sɔ̄'.
 15G know 25G:NZ COP INDE.AN.

David da tum sɔ' ye o bu'osi baŋ pu'a la an sɔ'. David dá tùm sɔ̄' yɛ́ ò bū'əsı ø báŋ pu̯'ā lá ø àň sɔ̄'. David TNS send INDF.AN that 3AN ask CAT understand woman:SG ART NZ COP INDF.AN. "David sent someone to ask and find out **who** the woman was." (2 Samuel 11:3)

... baŋi ba yaanamε an sieba ... báŋὶ bà yāa-námὶ ơ àň sīəba ... understand 3PL ancestor-PL NZ COP INDF.PL

"... discover **who** their ancestors were." (Ezra 2:61)

Relative clauses headed by $s\vec{r} \partial l^a$ account for most occurrences of $s\vec{r} \partial l^a$ in the 1996 NT. Again, most cases (75 out of 130 in Matthew, Mark, Luke and John in the

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1995 NT) show either $s\vec{r} \partial l^a$ or the entire relative clause (or both) as the complement of a verb of cognition, reporting, or perception:

Mam mi' si'el ane ye, m daa ane zu'om ka yu'un nyet. Mán mī' sī'əl á nē yē, m dāa á nē zū'em, kà yū'un ňyēt. 1SG:NZ know INDF.INAN COP FOC that, 1SG TNS COP FOC blind:SG, and after see:IPFV. "What I know is, that I was blind and now I see." (Jn 9:25, 1996)

Kem yeli Joon yanam wum ka nye si'el. KÈm ø yĒl ø Joon yānám ø wùm kà ňyē sī'əl. Go:IMP CAT say 2PL.SUB John 2PL Nz hear and see INDF.INAN. "Go and tell John what you have heard and seen." (Mt 11:4, 1996)

Ya baŋ man niŋ si'el laa? Yà báŋ mán nìŋ sī'əl láa ⁺ø? 2PL understand 1SG:NZ do INDF.INAN ART CQ? "Do you understand what I have done?" (Jn 13:12, 1996)

Of the remaining 55 examples, 22 have $s\vec{r} \partial l^a$ in a locative meaning "where, whither"; neither the pronoun nor the relative clause have the locative particle:

One keŋ likin zi' on ken si'ela. Ĵnι kēŋ līkι-n zī' ´n kēn sī'əla +ø. REL.AN go darkness-LOC NEG.KNOW 3AN:NZ go:IPFV INDF.INAN NEG. "He who walks in darkness does not know where he is going." (Jn 12:35, 1996)

In the remaining 33 examples, *srəl*^a consistently has an abstract uncountable meaning, often shading into "whatever":

Ka o niŋ on tun'e si'el. Kà ò níŋ ón tūň'e sī'əl. And ʒan do ʒan:nz be.able INDF.INAN. "She has done what she could." (Mk 14:8,1996)

In 14 of these cases it is followed by *wosa*⁺ "all":

M na tis uf fun bood si'el wusa. M ná tīsı f fún bòod sī'əl wūsa. ISG IRR give 2SG.OB 2SG:NZ want INDF.INAN all. "I will give you anything you want." (Mk 6:23, 1996)

 $S\vec{r}
ightarrow m^{m}$, the form of the indefinite pronoun system with the mass m^{m} class suffix, appears in adverbial use as "somehow." As Kusaal frequently uses manneradverbs as predicative complements, relative clauses with $s\vec{r}
ightarrow m$ are, once again, 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 yɛlá lā kɛ́ kà tì báŋ nòŋılím_ø àň sī'əm. Christ Nz TNS die IPL about ART cause and IPL realise love Nz COP INDF.ADV "Christ dying for us makes us understand what love is like." (1 Jn 3:16)

The article $|\bar{a}^{+/}$ has its usual function with $s\bar{r} \partial m$ -relative clauses:

À mí' mán nà nīŋ sī'əm. "I know what to do." 1SG know 1SG:NZ IRR do INDF.ADV.

Ň mí mán nà nīŋ sī əm lā.

 $\texttt{1SG}\ know\ \texttt{1SG:NZ}\ \texttt{IRR}\ do\ \texttt{INDF.ADV}\ \texttt{ART.}$

"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 $s\bar{r} \partial m$ and past tense marking have $l\bar{a}^{+/}$; 75% lacking $l\bar{a}^{+/}$ have irrealis mood. Cf the two standing expressions

́эп	bòɔd sī'əm	"as he wishes"				
3AN:NZ want INDF.ADV						
lín	àň sĩəm lā	"as things are"				
3INAN:NZ COP INDF.ADV ART						

 $Y \dot{\epsilon} I^{\epsilon}$ "say, tell" tends to take a $s\bar{r} \partial m$ -relative clause with $l\bar{a}$ in its sense of "say, tell how something is" and without $l\bar{a}$ in the sense "say how to do something":

Bà yèl·ō_ø bán nìŋ sī əm lā. 3PL say 3AN.OB 3PL:NZ do INDF.ADV ART "They told him what they'd done"

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Bà nà yɛlı_f fún nà nīŋ sī'əm.
3PL IRR tell 2SG.OB 2SG:NZ IRR do INDF.ADV.
"They'll tell you what to do."
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 $P\dot{a}'al^{\epsilon}$ "teach, inform", surprisingly, takes a relative clause object without $l\bar{a}$:

Bà pà'al·ō ø bán nìŋ sr əm. 3PL inform 3AN.OB 3PL:NZ do INDF.ADV. "They informed him of what they'd done."

Verbs of other types also take $s\vec{r} \rightarrow m$ -clauses as complements. Gàad^{ϵ} "pass, surpass" is used with a $s\vec{r} \rightarrow m$ -clause for comparing actions:

Mam tum bɛdegu gaad ban tum si'em la. Mām túm bɛ́dugū_ø gáàd bán tùm sī'əm lā. ISG.CNTR work much CAT pass 3PL:NZ work INDF.ADV ART "I've worked much harder than (how) they have." (2 Cor 11:23)

Gbāň'*e*^{+/} "catch" is used with a *sī əm*-clause for "decide what to do":

M gbáň'e mán nà nīŋ sī'əm.
1SG seize 1SG:NZ IRR do INDF.ADV.
"I've decided what to do."

With verbs of doing, a *si*'*əm*-relative clause can be a manner-adverb:

Bà nìŋ ón yèlı bā sī əm lā. 3PL do 3AN:NZ tell 3PL.OB INDF.ADV ART. "They did as he'd told them."

Like other AdvPs, *srəm*-relative clauses can be verb subjects:

Man noŋi ya si'em la ane bedego. Mán nòŋı yā sī'əm lā á nē bédugū. 1SG:NZ love 2PL.OB INDF.ADV ART COP FOC much. "How much I love you, is a lot." (2 Cor 7:3, 1976)

Sī'*əm*-relative clauses occur often as objects of *wūv* "like", *wɛ̃n*^{na/} "resemble"

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...ka ya na kɛ ka nidib dɔl man wvv ziiŋgba'adibi gban'ad zimi si'em la. ...kà yà ná kɛ́ kà nīdıb dɔ̄l mān wvv zīiŋ-gbáň'adìb ø ...and <code>3PL IRR</code> cause and person:PL follow <code>1SG.CNTR</code> like fish-catcher:PL NZ gbāň'ad zīmí sī'əm lā.

 $catch: {\sf IPFV}\ fish: {\sf PL}\ {\sf INDF}. {\sf ADV}\ {\sf ART}$

"... you will make people follow me like fishermen catch fish." (Mt 4:19)

 $H\bar{a}li(l\dot{a}'am) n\bar{\epsilon}$ "although" can take a $s\bar{r}\partial m$ -relative clause in the sense "despite how..." 18.

Relative clauses with an indefinite dependent pronoun are comparatively uncommon. Only one case occurs in the 1996 NT with $s\bar{j}'^+$ or $s\bar{i}\partial ba^+$, though KB has several examples; $s\bar{i}'a^+$ is commoner, but in the great majority of cases follows a cb expressing a place or time. However, when indefinite pronouns do appear after cbs as relatives, they are not limited to indefinite-specific senses:

Nidib la da wum Yesu n tum **tuum sieba** ... Nīdıb lā dá wòm Yesu n tòm tòvm-sīəba ... Person:PL ART TNS hear Jesus NZ work work-INDF.PL ... "The people heard of the deeds that Jesus had performed... " (Mk 3:7, 1996)

Ban da ku **ninsieba** da ka' bi'elaa. Bán dà kū nīn-síəbà dá kā' bī'əláa ⁺ø. ^{3PL:NZ TNS} kill person-INDF.PL TNS NEG.BE few NEG. "Those they had killed were not few." (1 Samuel 4:10)

ka ban nε ban tom ninsieba la dol taaba keŋ David san'an...
kà bān nε bán tòm nīn-síəbà lā dōl tāaba ø
and 3PL.CNTR with 3PL:NZ send person-INDF.PL ART accompany each.other CAT
kēŋ David sá'àn...
go David among ...

"They and those whom had been sent went together with David" (1 Sam 25:42)

Kem tu'us Samaria na'abi tum **ninsieba** la na ... Kèm ø tū'us Samaria ná'abí ø tùm nīn-síəbà lā nā ... Go:IMP CAT greet Samaria king:SG NZ send person-INDF.PL ART hither ... "Go and greet the men sent by the king of Samaria ..." (2 Kings 1:3)

ka fun gban'e **ziŋ si'a** yiiga la, fun ya'ami o noor kà fún gbāň'e zīm-sí'a yīigá lā, fūn yá'amí_ò nɔ̄ɔr. And 2sg:Nz grab fish-INDF.INAN firstly ART, 2sg.CNTR open:IMP 3AN mouth:sg. "The first fish that you catch, open its mouth ..." (Mt 17:27, 1996) Ka bugum n dit teŋtita'ar si'a la nyo'os dut ne agol saŋa dine ka' benne.Kà bùgúm_n dìttéŋ-tītá'-sī'alā ňyź'żs dùtnéAnd fireNz eat:IPFV land-big-INDF.INAN ART smoke ascend:IPFV FOCàgźlsāŋádìnıkā'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 timewithout end." (Rev 19:3), referencing the ongoing topic of the previouschapter Babilon teŋ tita'ar "the great city of Babylon" (Rev 18:21, 1996)

Nannanna, yaname daa sob **gbauŋ si'a** la ka m ye m sob lebisi ya. Nānná-nā, yānámì Ø dāa sɔ̃b gbáuŋ-sī'a lá kà m̀ yé Now, 2PL NZ TNS write letter-INDF.INAN ART and 1SG that m̀ sɔ̃b Ø lébìsì yā. 1SG write CAT answer 2PL.OB. "Now, it's the letter you wrote that I'm going to write back to you about." (1 Cor 7:1, 1996)

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... li pu nar ye m zaŋ Zugsob la tisi m paŋ si'a la n tum ne sutoogo.

... lì pū nār yć m̀ záŋ Zūg-sɔ́b lá @ tìsì m

... JINAN NEG.IND be.necessary that ISG pick.up Head-EMPTY.AN ART NZ give ISG.OB

páŋ-sī'a lā n túm nɛ̄ sūň-tɔ́ɔgɔ̄ +ø.

power-INDF.INAN ART CAT work with heart-bitterness NEG.

"... it's not necessary that I use the power which the Lord gave me in acting

with harshness." (2 Cor 13:10, 1996)
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Yaname na mor sam si'a ane ye ya noŋ taaba.
Yānámì ø nà mɔ̄r sām-sí'a á nē yé yà nóŋ tāaba.
2PL NZ IRR have debt-INDF.INAN COP FOC that 2PL love each.other
"Any debt which you are to have is to love each other." (Rom 13:8, 1996)

Cases of the "subordinate interrogative clause" type also occur:

Tiig wela bigisid lin a **tisi'a**. Tìig wélà ø bìgisid lín àň tí-sĩa. Tree:sg fruit:PL CAT show:IMPF 3INAN:NZ COP tree-INDF.INAN. "It's the fruit of the tree that shows **what tree** it is." (Mt 12:33, 1996)

Of 56 relative clauses with $s\bar{r}a^+$ in the 1996 NT, 33 involve cbs of nouns referring to places:

Ka bugum nie on be doog si'a la ni.Kà bùgúm níeónbè dó-sī'alā ní.And fireappear 35G:NZ EXIST room-INDF.INAN ART LOC."And fire illuminated the room where he was." (Acts 12:7, 1996)

Nine cases out of the remaining 23 involve $s\bar{a}n-si'a^+$ "sometime", e.g.

Abraham da nan kae' **saŋsi'a** la, ka man pun be. Abraham dá nàm kā'ẹ sān-sí'a lā, kà mān pún bὲ. Abraham TNS still NEG.BE time-INDF.INAN ART, and 1SG.CNTR already EXIST. "When Abraham still did not exist, I already existed." (Jn 8:58, 1996)

24.3.2 With relative pronouns

The commonest type of relative clause begins with a relative pronoun or an NP with a relative pronoun as a dependent. In origin, these pronouns are short demonstrative pronouns followed by \dot{n} . When the head is the subject of the relative clause, this produces the forms $\dot{\partial}n\iota$ kànι lìnι bànι (always written onɛ kanɛ linɛ banɛ in KB) where the final - ι is due to liaison before the nominaliser, which is itself invariably realised \emptyset in this case.

M ňyć dáu-kànı ø zàb nà'ab lā.
1SG see man-DEM.SG NZ fight chief:SG ART
"I saw the man who fought the chief."

When the pronoun is not the subject of the relative clause, but is either another constituent preposed by ka, or belongs to a predependent of the subject, one might expect the n 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 bé lā house-dem.sg and 1sg.cntr Paul exist Art "the house where I, Paul, am" (Rom 16:23, 1976)

on buudi ka Jew dim kis òn būudí kà Jew dím kīs DEM.AN tribe:sg and Jew EMPTY.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 kanε ka dau la sɔb la for gbàu̯ŋ-kàn kà dāu lā sɔ̄b lā letter-REL.SG and man:SG ART write ART "the letter which the man has written"

In dau **kanɛ** yadda **niŋiri** pv zu'oe dàu̯-kànı yàddā-níŋìrı ø pv̄ zú'e lā man-REL.SG assent-doing:SG NZ NEG.IND become.great ART "a man whose faith is not great..." (Mt 14:31)

the nominaliser occurs after the actual relative clause subject.

In view of all this, it seems best to regard the forms $\partial n i k \partial n i l n i b \partial n i$ synchronically as subordinating relative pronouns rather than demonstrative + nominaliser combinations, and where sources use the historically expected forms $\partial n i h \partial n$ 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.

M ňyć dáu-kànı zàb nà'ab lā.
1SG see man-REL.SG fight chief:SG ART
"I saw the man who fought the chief."

bàn(ı) kà nà'ab lā záb lā
REL.PL and chief:SG ART fight ART
"those whom the chief fought."

Toende Kusaal shows the same development. Nominaliser- \dot{n} is *ne* in Toende; thus Abubakari 2011 (using her orthography):

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N sa nye buraa **kanne** da da'a gbana la. "I saw the man who bought the book."

Buraa **kanne ka** fo bor la kiŋ tuma. "The man you are looking for is gone to work"

N sa nye buraa **kanne ka** Ayi da nye la. "I saw the man that Ayi saw."

As a cb is a word, not a word fragment, and compounded forms are not necessarily bound tighter than uncompounded forms syntactically <u>15.1</u>, there is no need to regard the pronoun-initial type of relative clause as internally-headed.

If the antecedent is the subject within a relative clause, or a predependent of the subject, a relative pronoun must be used:

bàni zàb nà'ablā"those who fought the chief"REL.PL fight chief:SG ART

M ňyć dáu-kànı zàb nà'ab lā.
1SG see man-REL.SG fight chief:SG ART
"I saw the man who fought the chief."

nimbanεyuda sob Pɛbil la gbauŋun linɛ an nyovupaal dim gbauŋ lanīn-bánìyūdásōbPē'-bíllāgbáuŋū-nlínìperson-REL.PL name:PL write Lamb:sg ART book:sg-LOC REL.INANàňňyó-vū-páàldímgbáuŋlācop breath-alive-new:sg EMPTY.PL book:sg ART"those whose names are written in the Lamb's book of new life" (Rev 21:27)

A relative pronoun can also relativise a complement or adjunct, or an antecedent extracted from a prepositional phrase or from a subordinate clause. The antecedent is preposed with ka and a resumptive pronoun is placed in any gap left by extraction, or for an indirect object, and occasionally for a human-reference direct object. *Kà*-preposing has no foregrounding sense in this context.

Kà-preposed relative pronouns are commoner than indefinite pronouns used as relatives, except when the clause corresponds to an English subordinate interrogative clause, or expresses time, place or manner <u>24.3.1</u>.

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N-clauses

Gbauŋ kane ka Jerusalem kpeenmnam daa sob la nwa. Gbàuŋ-kànι kà Jerusalem kpέἑňm-nàm dāa sɔ̄b lā_ø ňwá. Letter-REL.SG and Jerusalem elder-PL TNS write ART CAT this. "This is the letter that the elders of Jerusalem wrote." (Acts 15:23, 1996)

m antu'a linε [1996 lin] ka ba mɔr na m̀ àntù'a lìnı 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 yɛl-tɔ́ɔd àyɔ́pɔ̀e bánì kà màli̯āk-námá_àyɔ́pɔ̀e 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)

niŋkanɛ[1996 niŋkan] ka ba gban'e o lanīn-kánìkà bà gbáň'·o_Ølāperson-REL.SG and 3PL seize3AN.OB ART"a person whom they have seized" (Acts 25:16) (human VP object)

One ka ba tis **o** ka li zu'oe, ba mɛ mɔr putɛn'ɛr ye o na lɛbis linɛ zu'oe. ∂ni kà bà tís·ò_Ø kà lì zú'e, bà mɛ̀ mòr REL.AN and 3PL give 3AN.OB and 3INAN become.much, 3PL also have pú-tɛ̀n̆'ɛr yɛ́ ò nà lɛ̃bıs 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 bế ànīa, ôn kà mān néōn dāa túm lā. Būrá-sɔ̄' dāa bέ ànínā, òn kà mān nē ɔ̄n dāa túm lā. Man-INDF.AN TNS EXIST ADV:there, REL.AN and 1SG with 3AN TNS work:IPFV ART. "There was a man there **whom** I used to work **with**." ILK

ninkanε ka Na'ab Aretus kε ka o sv'oe Damaskus la
nīn-kánì kà nà'ab Aretus kε kà ò sv̄'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)

nimbanεka ya tɛn'ɛs yeba anɛ tuongatib lanīn-bánìkà yà tēň'ɛs yé bà à nē túèn-gātíblāperson-REL.PL and 2PL thinkthat 3PL COP FOC ahead-passer:PL ART"those whom you consider to be leaders"(Gal 2:6)

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If the antecedent is a predependent in an NP which is not the subject, that entire NP is $k\dot{a}$ -preposed, but obviously no resumptive pronoun is needed:

Samaritan nid (**on** buudi ka Jew dim kis) Samaritan níd, òn būudí kà Jew dím kīs Samaritan person:sg REL.AN tribe:sg and Jew EMPTY.PL hate "a Samaritan, **whose** tribe the Jews hate" (Lk 10:33, 1996)

bikanε [1996 biig kan] pvvg ka o mɔr la bì-kànι púòg kà ò mɔ̄r lā child-REL.SG belly:SG and 3AN have ART "the child **which** she is pregnant with [whose belly she has]" (Mt 1:20)

Relative clauses with locative reference do not take the locative $n\bar{\iota}^{+/}$:

yikan ka mam Paul be la yidaan yī-kán kà mām Paul b£ 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)

24.3.3 Uncompounded antecedents

Written materials generally avoid $kan\epsilon kan\iota$ as a relative pronoun for human reference (invariably so after proper names), substituting $on\epsilon \partial n\iota$, which cannot be preceded by a cb:

o sid onε da bε nε o la ò sīd ´nì dà bὲ nέ ò lā 3AN husband:SG REL.AN TNS EXIST with 3AN ART "her husband, who was there with her" (Genesis 3:6)

Relative pronouns naturally cannot be compounded with heads which lack cbs or with coordinate structures. Uncompounded relative clauses are also preferred when the preceding head has any other dependents apart from the article, and to avoid ambiguity resulting from reduction of the head to a cb. Mam Paul nε Timoti banε an Yesu Kristo tumtumnib laMāmPaul nēTimotibánì àň Yesu Kristo túm-tūmníbIsg.CNTRPaulwith Timothy REL.PL COP Jesus Christ work-worker:PL ART"I, Paul, and Timothy, the servants of Jesus Christ" (Phil 1:1)

kokor kaŋa lini yi arazana ni la na kùkār-káŋā línì yí àrazánà ní lā nā voice-DEMST.SG REL.INAN emerge sky:SG LOC ART hither "this voice which came from heaven" (2 Pet 1:18, 1976)

sanlima laas ayopoi line ka Wina'am one be saŋa line ka' ben la sunpeen pe'eli ba la

sālīma láàs àyźpżę línì kà Wínà'am *śn*ì bὲ qold vessel:pl num:seven rel.inan and God REL.AN EXIST lā súň-péèn sāņá lìni kā' bēn pé'elì bā lā time:sg rel.inan neg.have end:sg art heart-whiteness fill 3PL.OB ART "the seven gold bowls filled with the anger of God who exists for time without end" (Rev 15:7)

nimbanɛ yvda sɔb **Pɛbil la gbauŋvn linɛ** an nyɔvvpaal dim gbauŋ la nīn-bánì yūdá sɔ̄b Pɛ̄'-bíl lā gbáu̯ŋʊ̈-n línì person-REL.PL name:PL write Lamb:sg ART book:sg-LOC REL.INAN àň ňyɔ́-vʊ̄-páàl dím gbáu̯ŋ lā cop breath-alive-new:sg EMPTY.PL book:sg ART "those whose names are written in the Lamb's book of those with new life" (Rev 21:27)

ba ba'ar linε buon Dagon la bà bà'ar línì bùon Dagon lā 3PL idol:sg REL.INAN call:IPFV Dagon ART "their idol which was called Dagon" (1 Samuel 5:3)

ka dv'vs **fuug linε** bε anrvŋ la tuon la kà dū'əs fūūg línì bὲ áňrờŋ lā túèn lā and raise cloth REL.INAN EXIST boat:SG ART front ART "and raised the sail in the front of the ship" (Acts 27:40)

25 Complementised clauses

Complementised clauses are usually introduced by the clause linker $y\bar{\epsilon}$. Both types may appear with $k\dot{a}$ instead, but usually much less often, and never exclusively; constructions which only permit $k\dot{a}$ and never $y\bar{\epsilon}$ must be coordination or catenation. Complementised clauses follow any catenated clauses. Complementised clauses can be coordinated with $k\dot{a}$:

ka lin anɛ **ye** fv kv maali ti bɛ'ɛdɛ nwɛnɛ tinamɛ daa pv maalif bɛ'ɛd si'em la asɛɛ sv'vm ma'aa, **ka ye** fv yim nɛ sumbvgvsvm la.

kà lĩn á nē vé fù kù māalí tì bē'edi ø wēn nē and SINAN.CNTR COP FOC that 2SG NEG.IRR make 1PL bad CAT resemble with tīnámì ø dāa pū máalì f bē'ed sī'əm lá àsée sùm má'àa. 1PL NZ TNS NEG.IND make 2SG.OB bad INDF.ADV ART except good only kà yế fù yīm nē súmbūgusím lā. and that 2SG emerge: IMP with peace ART. "Which is that you will not do us harm, as we did not do you harm but only good, and that you will depart in peace." (Genesis 26:29)

25.1 Purpose clauses

Purpose clauses lack independency marking and have imperative mood. As there is no $-m^a$ flexion with dual-aspect verbs, the imperative is apparent only in the use of $d\bar{a}$ as the negation particle. The term "purpose clause" is convenient but such clauses are also used as complements of verbs expressing necessity and permission, and elsewhere the "purpose" sense can be very attenuated.

Purpose clauses may be VP adjuncts:

Bà tìs·ō_ø kú'èm yź ò nū.
3PL give 3AN.OB water that 3AN drink.
"They gave him water to drink. ("So that he might drink it.")

 $\dot{M} n \acute{a} t \bar{\iota} f t (\dot{\iota} m y \acute{e} f \dot{v} n \bar{\iota} f d \bar{a} z \acute{a} b \bar{e} + ø.$ 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."

 \dot{O} vòl tíìm kà ò nóbìr dā záb $\bar{\varepsilon}$ + ϕ . 3AN swallow medicine and 3AN leg:SG NEG.IMP fight NEG. "She took medicine so her leg wouldn't hurt." WK

An "attenuated" example is

Ka ba gban'e ba kpɛn'ɛs sanrega ni ye bɛog nie.
Kà bà gbáň'a_bā_ ø kpɛ́ň'ɛ̀s sārugá nù yē bɛ̃og níe.
And βPL seize βPL.OB CAT put.in prison:sg Loc that morning appear.
"They seized them and put them in prison until tomorrow came." (Acts 4:3)

Purpose clauses can be coordinated without repetition of $y\bar{\varepsilon}$:

M bóòd yē dāu lā kēŋ dá'a-n, kà pu̯'ā lā dūg dīıb.
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

Purpose clauses appear as complements of particular verbs, e.g $b \dot{2} \partial d^a$ "want"; or $y \dot{\epsilon} l^{\epsilon}$ "tell." Negative raising occurs with $b \dot{2} \partial d^a$ but not with $y \dot{\epsilon} l^{\epsilon}$.

 \dot{M} býżd yć ò kūl. "I want her to go home." 15G want that 3AN go.home.

M pū bóòd yć m kūlɛ +ø.
1SG NEG.IND want that 1SG go.home NEG.
"I don't want [me] to go home."

M yélī f yé fò dā kūlɛ +ø.
1SG tell 2SG.OB that 2SG NEG.IMP go.home NEG.
"I've told you not to go home."

The verb $g\bar{u}r^{a/}$ "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 introduced by $y\bar{\epsilon}$, again with an attenuated sense:

Nidib la daa gur Zakaria yiib na.
Nīdıb lā dāa gūr Zakaria yîb nā.
Person:PL ART TNS watch Zechariah emerge:GER hither.
The people were watching for Zechariah's coming out. (Lk 1:21)
... gur ye pu'a la du'a ka o onb biig la.
... gūr yē pu'ā lā du'á kà ò óňb bīig lā.
...watch that woman:sG ART bear and BAN eat child:sG ART.
"...waiting for the woman to give birth so he could devour her child." (Rev 12:4)

Purpose-clause complements follow expressions of **necessity** or **permission** such as $n\bar{a}r^{a/}$ "be obliged to" (negated "be obliged not to"); $m\bar{o}r \ s\bar{u}er$ "be allowed to"; *l*i à $[n\bar{\varepsilon}] t\bar{l} \dot{a}s$ "it is necessary":

 $F \dot{v} \ p \bar{v}$ $n \bar{a}r$ $y \dot{\varepsilon}$ $f \dot{v} \ n in \dot{n} \dot{a} l \dot{a} \dot{a}$ $+ \phi$.2SG NEG.IND must that 2SG doADV:thus NEG."You're not allowed to do that."

Lì nàr yé/kà fừ kūl. "You must go home." 3INAN must that/and 25G go.home.

In KB there are 258 examples of *nar ye* to 45 of *nar ka*.

Yà mór sūør yć yà kūl. "You may go home." ^{2PL} have way:sG that ^{2PL} go.home.

Sūør	bé yé/kà	tì k	īūl.	"We may go home."
Way:sg	EXIST that/and	d 1PL go	o.home.	(" There's a way that we go home.")

Li anɛ tilas ye m keŋ Jerusalem. Lì à nɛ̄ tīlás yɛ́ m̀ kɛ̄ŋ Jerusalem. 3INAN COP FOC necessity that 1sg go Jerusalem. "I must go to Jerusalem." (Mt 16:21, 1996)

Li ane tilas ka m niŋid ala. Lì à nē tīlás kà m̀ níŋìd àlá. 3INAN COP FOC necessity and 1SG do:IPFV ADV:thus. "I must do that." (1 Cor 9:16, 1996); there are no examples kà with in KB

 $N\bar{a}r^{a/}$ is occasionally used in a personal construction "deserve that":

babayi' la nar ye ba kvv ba bà bàyí' lā nár yć bà kúv_bā 3PL NUM:two ART must that 3PL kill 3PL.OB "both of them must be killed" (Leviticus 20:12)

Anɔ'ɔnɛ nar ka na nyaŋi lak titabir la ... Ànɔ´'ɔnì_ø nár kà ná ňyāŋı_ø lāk tītābır lā ...? Who cat must and IRR prevail cat unstick glue ART ...? "Who is worthy to open the seal ...?" (Rev 5:2)

25.2 Content clauses

Complementised clauses with independency marking <u>19.6</u> on the VP are content clauses. They are downranked main clauses, and show all the structural features possible for main clauses. They occur very frequently representing passages of indirect speech, but are also found much more generally after verbs of cognition, reporting, and perception.

Verbs taking content clauses as complements include, for example $y\dot{\epsilon}^{\epsilon}$ "say", $w\dot{\nu}m^{m}$ "hear", $n\ddot{y}\bar{\epsilon}^{+}$ "see", $t\bar{\epsilon}n\ddot{\epsilon}s^{\epsilon}$ "think", $m\ddot{r}^{+}$ "know", $b\dot{a}\eta^{\epsilon}$ "come to know", $p\dot{a}'al^{\epsilon}$ "teach, show", $k\dot{a}r\iota m^{m}$ "read", $z\bar{\iota}^{+}$ "not know" and $s\dot{a}k^{\epsilon}$ "agree":

ban mi' ye biig la kpi**ne** la zug bán mī' yē bīig lā kpí nē lā zúg 3PL:NZ know that child:SG ART die FOC ART upon "because they knew that the child was dead" (Lk 8:53): focus-nē^{+/}

Bùŋ-bāň'ad $z\overline{\iota}$ ' $y\overline{\varepsilon}$ $t\overline{\varepsilon}\eta$ $t\acute{\upsilon}ll\overline{a}$ +ø. Donkey-rider:sg NEG.KNOW that ground:sg be.hot NEG. "The donkey-rider doesn't know the ground is hot." Tone overlay: $T\overline{\varepsilon}\eta$ $t\acute{\upsilon}l$. "The ground is hot." cf $t\overline{\upsilon}l^{|a|}$ "be hot"

Fune siak ye fu ya'a ti kae, o na zin'ini fu na'am gbauŋ la zugɔɔ?Fūnø siák yé fù yá' tì kā'e, ò nà zīň'inífù nā'am2SG.CNTR CAT agree that 2SG if after NEG.BE, 3AN IRR sit2SG chieftaincygbáuŋ lā zúgóo +ø?skin:SG ART upon PQ?"Did you agree that when you are no more, he will sit on your throne?"(1 Kings 1:24): postlinker adjunct

Absolute clauses 24.2 cannot be used as objects of such verbs, but another possibility apart from content clauses is NP + $y\bar{\epsilon}/\dot{a}$ "about" 16.6.

Except in indirect speech (see below), content clauses are usually declarative. There are exceptions, possibly characteristic of verbs of opinion and judgment:

Ya tɛnɛs ka m aan anɔ'ɔnɛ? Yà tɛ́ň'ɛ̀s kà m̀ áaň ànɔ́'ɔ̀nɛ +ø? 2PL think and 1SG COP who cQ? "Who do you think I am?" (Acts 13:25)

WK usually has $y\bar{\varepsilon}$ before content clauses, but prefers $k\dot{a}$ after $t\bar{\varepsilon}\bar{n}'\varepsilon s^{\varepsilon/}$ "think." KB has 219 examples of *tenes ye* to 31 of *tenes ka* and shows $k\dot{a}$ after other verbs too: Ya pun wum ka ba da yɛl ye...
Yà pún wùm kà bà dá yɛl yē ...
2PL previously hear and 3PL TNS say that...
"You previously heard that they had said ..." (Mt 5:43)

 $K\dot{a}$ + content clause is the only context where $k\dot{a}$ is followed by independency marking, and where $k\dot{a}$ does not delete a following subject pronoun with the same reference as the preceding subject:

À téň'ès kà *m* lú yā. "I think I've fallen" WK 1sg think and 1sg fall PFV.

There are a few examples in KB of $n\varepsilon$ for $y\varepsilon y\overline{\varepsilon}$ "that" (cf Mampruli *ni id*):

Man boodin nɛ yanamɛ naan aan ma'asiga bɛɛ yanamɛ naan aan tuuliga.Mānbóodī-n nē yānámì @ nāan áa-nmā'asígā bɛɛISG.CNTR want-DP that 2PLNZ then COP-DP cold:ADV oryānámì @ nāan áa-ntūulígā.2PLNZ then COP-DP hot:ADV."I might wish you had been cold or you had been hot." (Rev 3:15)

The verb $y \dot{\epsilon} l$ is frequently ellipted before $y \bar{\epsilon}$:

Ka Zugsob la ye ..."And the Lord said: ..." (Genesis 18:28)Kà Zūg-sóblā yē ...And head-EMPTY.AN ART that ...

Pronouns are changed throughout in the content clause to reflect its setting, on the same basis as in English "indirect speech." The free 3rd person pronouns have **logophoric** sense. In contexts where bound pronouns could have occurred instead (i.e. where they are contrastive) they replace 1st persons of the original utterance:

Festus tans Paul ye o geem ne ... ka Paul lebis ye on pu geem.
Festus táňs Paul yé ò gèɛňm nē ... kà Paul lébìs
Festus shout Paul that 3AN go.mad Foc ... and Paul reply
yē ɔn po géɛňmm +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, 1976)

Bound 3rd persons may also have this sense, but the free pronouns are much commoner as subjects. Thus "He1 said he1 would kill them." is usually

 \dot{O} yèl yē $\bar{2}n$ ná kúv bā. 3AN say that 3AN.CNTR IRR kill 3PL.OB.

It is possible to say *Ò yèl yé ò nà kúv bā*, but this is much more likely to mean "He₁ said he₂ would kill them."

Tense and mood marking is always the same as in the equivalent main clause. Pluperfect and future-in-the-past meanings may result:

Ò dāa yél yé bà dāa kūl.
3AN TNS say that 3PL TNS go.home.
"She said that they had gone home."

Tì dāa tēň'ɛs yé ò nà zāb ná'àb lā.
1PL TNS think that 3AN IRR fight chief:sG ART.
"We thought he was going to fight the chief."

25.2.1 Reported speech

After a speech-verb $y\bar{\varepsilon}$ may introduce the words of the speech itself, unaltered except for "resumptive" $y\bar{\varepsilon}$ at intervals (see below.) This is uncommon in older texts, and in the 1976 NT is mostly confined to utterances of Jesus. Usually the original speech is downranked to a content clause or series of coordinated content clauses, with personal pronouns altered throughout as in English indirect speech, and free personal pronouns used logophorically. All other features of the original main clauses, including tense marking and independency marking, are unchanged. Such passages of indirect speech may be kept up for very long stretches; the 1976 NT version has examples extending over several pages. Later Bible versions consistently replace all indirect speech with direct.

Indirect speech may include questions and commands:

Ka Peter bu'os o ye, Ananias, ye bo ka o ke ka Sutaana kpen' o suunrin... Kà Peter bū'os·ó ø yē Ananias, yē bó kà ò ké kà Sūtáanà And Peter ask 3AN.OB that Ananias, that what and 3AN cause and Satan $kp\check{r}i' \grave{o} s \bar{u} u \check{n}r(-n ... + ø?$ enter 3AN heart:SG-LOC ... cQ? "Peter asked him: Ananias, why did you let Satan enter your heart ...?" (Acts 5:3, 1976) In indirect commands the usual deletion of a 2nd sg subject and change of 2pl subject to postposed ^{ya} does not occur, even if the addressee is the same as in the original utterance and the pronoun remains 2nd person. Some speakers keep the postposed ^{ya} after the verb even when there is a preceding pronoun subject <u>21.3</u>.

Indirect speech is an alternative to catenation with $k\bar{\epsilon}^+$ <u>22.3</u> for expressing third/first person commands; main clause and linker may again be ellipted informally:

[M yél yé] ò gòsım tēŋı-n.
1SG say that 3AN look:IMP ground:SG-LOC.
"[I said] she should look down."

[M téň'ès kà] tì pú'usìm Wínà'am.
15G think and 1PL greet:IMP God.
"[I think] we should praise God."

A main clause with no VP can also appear in indirect speech:

Ò yèl yē báp. "She said Bap!"
3AN say that Bap.

Pronouns are changed even within a vocative:

Ka m wum Wina'am kokor ka li yi arazana ni na ye, o nidiba, ye ba yimi teng la ni na. Kà m wúm Wínà'am kúkór kà lì уī áràzánà ní nā γē, And 1sg hear God voice:sg and 3INAN emerge heaven LOC hither that ò nīdıbá +ø, yέ bà yìmī ø tēŋ lā ní nā. 3AN person:PL VOC, that 3PL emerge:IMP 2PL.SUB land:SG ART LOC hither. "And I heard God's voice coming from heaven, saying 'My people, come out of the land!'" (Rev 18:4, 1976)

Passages of direct or indirect speech longer than two or three clauses insert **resumptive** $y\bar{\epsilon}$ at intervals of roughly every third clause, after any prelinker adjuncts but before clause-linker $k\hat{a}$:

amaa **ye** ba yaanam da pu bood ye ba siak o noore àmáa yé bà yāa-nám dá pū bóòd yé bà siák·ò ø nōoré ⁺ø. but that 3PL ancestor-PL TNS NEG.IND want that 3PL agree 3AN.OB mouth:SG NEG "But their ancestors did not want to obey him" (Acts 7:39, 1976) **Ye ka** Paul yel ye o bood ye o kpelim sarega ni. Yé kà Paul yél yé ò bòod yé ò kpélìm sārīgá nì. That and Paul say that 3AN want that 3AN remain prison:SG LOC. "But Paul said he wanted to remain in prison...(Acts 25:21, 1976)

Amaa **ye ka** on yeli ba ye ... Àmáa yé kà ɔ̄n yélì_bā yē... But that and 3AN.CNTR say 3PL.OB that... "But he [the speaker] had said to them ..." (Acts 25:16, 1976)

Alazug **ye ka** on ke ka ba mor o ba sa'an na ... Àlá zùg yé kà ɔ̄n ké 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)

Resumptive $y\bar{\epsilon}$ may be placed between a postlinker adjunct and the subject, or between a vocative and the following clause:

Ka nanana **ye** o niŋi ba Wina'am ne o popielim pia'ad la nu'usin... Kà nānná-nā yć ò nìŋī bá Wínà'am nć ò pò-pìəlım And now-hither that 3AN do 3PL.OB God with 3AN inside-whiteness piáň'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 zuà-nàm né ò sàam-nàmā ⁺ø, yé bà kèlısım! 3AN friend-PL with 3AN father-PL VOC that 3PL listen:IMP! "His friends and his fathers should listen." (Acts 7:2, 1976)

26 Negation

Negation of clauses is achieved by using a negative particle in the VP, $p\bar{v}$ for indicative, $d\bar{a}$ for imperative, $k\dot{v}$ for irrealis *replacing* the positive marker $n\dot{a}$ <u>19.5</u>, along with a clause-final negative prosodic clitic <u>7.1</u>:

Ti pv bood ye dau kaŋa aan ti na'aba.
Tì pv bóòd yē dáu-kàŋā áaň tì nà'abā +ø.
IPL NEG.IND want that man-DEMST.SG COP IPL king:SG NEG.
"We don't want this man to be our king." (Lk 19:14)

Amaa man pian'ad la **ku** maligim **gaadε**. Àmáa mān pi̯áň'àd lā kú mālıgım gáadē ⁺ø. But 1sg.cntr speech ART NEG.IRR again pass NEG. "But my words will not pass away. (Mt 24:35)

The negative prosodic clitic appears at the end of the clause containing the negated verb, passing over all subordinate clauses:

Ti pv bood ye dau kaŋa aan ti na'aba.
Tì pv bood yē dáu-kàŋā áaň tì nà'abā +ø.
IPL NEG.IND want that man-DEMST.SG COP IPL king:SG NEG.
"We don't want this man to be our king." (Lk 19:14)

There are no unequivocal examples in my materials of a negative clitic placed before a subordinate clause to exclude it from the scope of a negation. Thus, in

Nidib be ka **pu** tum **si'ela** ye ba a popielim dim... Nīdib bé kà pō túm sī'əla ⁺ø yé bà áň pú-pìəlim person:PL EXIST and NEG.IND WORK:IPFV INDF.INAN NEG that 3PL COP inside-whiteness dím ...

"There are people who haven't done anything that they become blessed" (Rom 4:5, 1976); revised completely in the 1996 version.

the adjunct $y\bar{\epsilon}$ -clause has probably been extraposed, while in

Ka li **pv yuugε** ka o pu'a mɛ kena.
Kà lì pv̄ yúugē +ø, kà ò pu'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 $k\dot{a}$ -clause can be taken as a coordinate clause carrying on the narrative.

The negative clitic is dropped after \dot{n} -clauses containing a negative unless they are themselves clause final in the main clause, and before the article $|\bar{a}^{+/}$:

m bi'emnam banε **pv** bood ye m an na'abi sv'oe ba la *m* bì'əm-nàm bánì pū bóòd yέ *m* áň ná'abì ø sú'v bā lā 1SG enemy-PL REL.PL NEG.IND want that 1SG COP king:SG CAT OWN 3PL.OB ART "my enemies who do not want me to be king over them" (Lk 19:27)

Clauses with $y\dot{a}$ ' "if" keep their own negative clitics:

Ba ya'a **pv** niŋ **si'ela**, o pv'vsim dɔɔg la na lieb zaalim. Bà yá' pv̄ níŋ sī'əla ⁺ø, ò pv'vsım dɔ́ɔ̀g lā ná līəb zāalím. 3PL if NEG.IND do INDF.INAN NEG 3AN worship house:SG ART IRR become empty:ABSTR. "If they don't do anything, her temple will become of no account." (Acts 19:27)

Apparent exceptions in the NT probably all involve $y\dot{a}$ '-clauses ending in words with final vowels or final -*m*, and do in fact end with a negative clitic.

Negative raising, a poorly understood phenomenon cross-linguistically, seems to operate in Kusaal in a way generally analogous to English. It takes place with complement clauses after verbs expressing opinions or judgments:

Li pu nar ye fu di fu ba'abiig po'a Herodiase. Lì pō nār yć fò dí fò bā'-bîig pu'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)

Ti pv bood ye dau kaŋa aan ti na'aba.
Tì pv bood yē dáu-kàŋā áaň tì nà'abā +ø.
IPL NEG.IND want that man-DEMST.SG COP IPL king:SG NEG.
"We don't want this man to be our king." (Lk 19:14)

mam pv tɛn'ɛs ye o na kɛligi m pian'adɛ.
Mām pv tɛn'ɛs yɛ́ ò nà kɛlıgí m piàň'ad +ø.
ISG NEG.IND think that JAN IRR listen ISG word:PL NEG.
"I do not think that he will listen to my words." (Job 9:16)

It does not occur with verbs of knowing or informing:

linzug ka ti baŋ ye o pυ yi Wina'am san'an naa. Lìn-zúg kà tì báŋ yέ ò pῦ yī Wínà'am sá'àn náa +ø. Therefore and IPL realise that 3AN NEG.IND emerge God with hither NEG. "Therefore we realise he has not come from God." (Jn 9:16)

ka o lee pu baŋ ye li ane one. kà ò lée pū báŋ yé lì à nē 5ne +ø. And san but neg.IND realise that SINAN COP FOC SAN.CNTR NEG. "but she didn't realise it was him." (Jn 20:14)

Constituent negation is commonly achieved by clefting, 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"

Sɔ' kae na nyaŋi dɔl zugdaannam ayi'...
Sɔ̄' kā'e ø ná ňyāŋι ø dɔ̄l zūg-dáàn-nàm àyí' ...
INDF.AN NEG.BE CAT IRR prevail cat follow head-owner:PL NUM:two ...
"Nobody can serve two masters." (Mt 6:24)

Sogia so' kae' n tum ka yood o meŋa. Sógià-sɔ̄' kā'e n tứm kà yɔ̄ɔd ò mēŋá ⁺ø. Soldier-INDF.AN NEG.BE CAT WORK:IPFV and pay:IPFV 3AN self NEG. "No soldier works and pays for himself." (1 Cor 9:7, 1976)

Di lɛn ka' fun yɛl si'el la zug, ka ti niŋ o yadda.

Lì lèm kā' fún yèl sī'əl lā zúg kà tì níŋ·ò g yáddáa ⁺g. 3INAN again NEG.BE 25G:NZ say INDF.INAN ART upon and 1PL do 3AN.OB assent NEG. "It is no longer because of what you said that we believe in him." (Jn 4:42)

Similarly, relative clauses can be used:

Da mor noor yinne nɛ banɛ ka' yadda niŋidib la ye ya niŋ si'ela. Dā mor noor yīnní nɛ̄ bánì kā' yáddā-níŋìdıb 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)

Negation

The particle báa (Hausa bâa "not exist") appears in báa bī $\partial a^{\dagger} = da^{\dagger}$ "not at all", báa $y\bar{i}nni^{\dagger}$ "not one", which are both used with a negative VP. Báa $y\bar{i}nni^{\dagger}$ can be used as a NP head, or as a postdependent.

Da tumi si'el baa bi'elaa. Dā túmī ø sī'əl báa bī'əláa ⁺ø. NEG.IMP WORK 2PL.SUB INDF.INAN at.all NEG. "Do no work at all." (Leviticus 23:31)

Amaa ba pv nyaŋi nyɛ linɛ tu'al baa yinne. Àmáa bà pv̄ ňyāŋı ø ňyɛ̄ línì tù'al [+ø] báa yīnní. But 3PL NEG.IND prevail CAT find REL.INAN condemn [NEG] not one. "But they couldn't find anything condemning, not one thing." (Mt 26:60)

Ka nid baa yinne pv yɛl ye on mɔr si'el la, onɛ sv'oe lii. Kà nīd báa yīnní pv̄ yɛ́l yɛ̄ ɔ́n mɔ̄r and person:sg not one NEG.IND say that JAN:NZ have sī'əl lā, ɔ̄nı ø sú'v líı +ø. INDF.INAN ART JAN.CNTR CAT OWN JINAN.OB NEG. "Not one person said that what he had, he owned." (Acts 4:32)

Fu du'adib baa yinne kae ka o yu'ur buon alaa. Fù dū'adıb báa yīnní kā'é kà ò yū'ur búèn àláa ⁺ø. 2SG relative:PL not one NEG.BE and 3AN name:SG call:IPFV ADV:thus NEG. "Not one of your relatives is named thus." (Lk 1:61)

27 Information packaging

27.1 Focus

As a starting point, I adopt the formulation from Lambrecht 1994: "[Focus] is the UNPREDICTABLE or pragmatically NON-RECOVERABLE element in an utterance. The focus is what makes the utterance into an assertion."

A distinction is made between **ordinary** and **contrastive focus**.

Separate from the notion of focus is the concept of **foregrounding**, the usual function of it-clefting in English; as pointed out in CGEL p1424, foregrounded elements in English need not be focussed.

Two syntactic devices in Kusaal relate to focus: subject focussing with catenator-*n*, and the use of the particle $n\bar{\epsilon}^{+/}$. Clefting constructions with the clause linker $k\dot{a}$ and corresponding ellipted types relate to foregrounding rather than focus, or are motivated simply by ordering constraints.

Main clauses without any special syntactic marking of focus have ordinary focus on the predicate by default.

The usage of the article $|\bar{a}^{+}|$ interacts with these focus mechanisms.

27.1.1 With catenator-n

N-clefting uses a *n*-catenation in the sense of a relative clause with the subject as antecedent, after a main clause with $L\iota a n\bar{\epsilon}$ "It is ..." The sense resembles that of the formally analogous "it-clefting" of English, *foregrounding* the clefted element and backgrounding the rest:

Ka dau mε pv sv'oe o mɛŋ niŋgbinaa. Li anɛ o pu'a sv'oe li.
Kà dāu mɛ́ pv̄ sv'v ò mɛŋ nín-gbīnáa +ø.
And man:sg also Neg.IND own 3AN self body-skin:pL Neg.
Lì á nɛ́ ò pu̯'ā ø sv'v lī.
3INAN COP FOC 3AN wife CAT own 3INAN.OB.
"And a husband, too, does not own his own body. It is his wife who owns it." (1 Cor 7:4)

Like English it-clefting (CGEL p1416) the construction has an implicature of exhaustiveness and exclusiveness: the wife (only), not the husband, is the owner.

The main clause may be a verbless identificational clause 21.4.1:

Anɔ'ɔn nwaa yisid nidib tuumbɛ'ɛdi basida? Ànɔ´'ɔn_ø ňwáa_ø yīsıd nīdıb túùm-bɛ̄'ɛdı_ø básıdà +ø? Who cat this cat expel:IPFV person:PL deed-bad:PL cat throw.out:IPFV cQ? "Who is this who drives people's sins out?" (Lk 7:49) *N*-focus of subjects presumably arose from *n*-clefting by ellipsis. The focussed subject stands first, with the rest of the clause introduced by *n*, phonologically identical to catenator-*n*. The clause lacks independency marking but has independent tense marking; compare tense marking in ellipted indirect commands $\underline{19.3.1}$.

The meaning of this construction is *focus* rather than foregrounding:

Wáafù_ ø dúm·ō_ø. "A snake bit him." WK Snake:sg cat bite 3an.ob.

would be a felicitous reply to "What's happened?" as well as "Did a dog bite him?"

Focus rather than foregrounding is demonstrated by the fact that interrogative pronouns as subjects are always *n*-focussed. As a subject an j' jn "who" thus always appears as an j' n [ang:ni] (always NT *ano'one*, KB *anj'ne*.)

Ànɔ´'ɔnì_ø kābırídà +ø? Who cat ask.for.entry:IPFV cQ? "Who is asking permission to enter?"

Clauses containing interrogative pronouns may not contain focus- $n\bar{\epsilon}^{+/}$, an incompatibility which is most readily explained by analysing interrogative pronouns as intrinsically focussed, though this is only syntactically manifested when they are subjects.

Furthermore, the focus particle $n\bar{\epsilon}^{+/}$ in all its rôles is excluded from clauses which are *n*-focussed, with the corresponding VP aspect distinctions present but unmarked, as in other cases of formal exclusion of the marker <u>27.1.2.1</u>:

	Μ̀ zūgv_ø zábìd.	"My head is hurting."
	1SG head CAT fight: IPFV.	(Reply to "Where is the pain?")
cf	Ѝ zūg lā pú'alìm nē.	"My head is hurting."
	1SG head ART damage: IPFV FOC.	(Reply to "What's the matter with you?")

Accordingly, the ellipted construction with catenator-*n* after the subject represents focus, filling the gap caused by the fact that a clause subject cannot be focussed with $n\bar{\epsilon}^{+/}$.

27.1.2 With *nē*

As a constituent-focus particle $n\bar{\epsilon}^{+/}$ has two distinct rôles, readily distinguishable by position: preceding a VP-constituent, $n\bar{\epsilon}^{+/}$ focusses that constituent, while VP-final $n\bar{\epsilon}^{+/}$ focusses the entire VP contrastively.

The focus particle is homophonous with the preposition $n\bar{\epsilon}$ "with, and" and with the empty particle $n\bar{\epsilon}$ which follows objects of comparisons when they do not have the article <u>18</u>; on distinguishing constituent-focus $n\bar{\epsilon}^{+/}$ from the preposition see <u>19.8.4</u>.

Greater difficulty arises over the distinction from the $n\bar{\epsilon}^{+/}$ which is bound to the verb <u>19.2.1</u>, and which represents a specialised use of the same particle for temporal focus: this *aspectual* marker is subject to the same formal constraints on appearance as the constituent-focus marker, and $n\bar{\epsilon}^{+/}$ cannot appear twice in a clause in both constitutent-focus and aspectual senses. The aspectual sense normally prevails wherever semantically and formally possible; otherwise, the particle is interpreted as constituent focus. When aspectual $n\bar{\epsilon}^{+/}$ is excluded only by formal constraints, the different aspectual meanings still appear but are unmarked.

27.1.2.1 Restrictions

 $N\bar{\epsilon}^{+/}$ cannot appear in constituent-focus sense if it could be interpreted as aspectual.

It cannot appear in either constituent-focus or aspectual senses

- (a) if the subject has *n*-focus
- (b) in nominalised clauses
- (c) in content questions

$N\bar{\epsilon}^{+/}$ may only occur *once* in a clause or series of catenated clauses:

Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Suŋ.
Fò pō má' n tìs nīn-sáalā +ø, àmáa fò mà'
2SG NEG.IND lie CAT give person-smooth:SG NEG but 2SG lie
n tís nē Wínà'am Sí-sòŋ..
CAT give FOC God Spirit-good:SG.
"You have not lied to a human being, but you have lied to the Holy Spirit."
(Acts 5:4, 1996)

When $n\bar{\epsilon}^{+/}$ marks constituent focus, aspect distinctions elsewhere expressed by $n\bar{\epsilon}^{+/}$ are unmarked, showing that aspectual $n\bar{\epsilon}^{+/}$ is a specialised use of focus- $n\bar{\epsilon}^{+/}$. Examples of exclusion of $n\bar{\epsilon}^{+/}$:

Exclusion with *n*-focussing of the subject:

Ѝ zūgv_ø zábìd.	"My head is hurting/hurts." (No aspectual $n\bar{\epsilon}^{+/}$)
1SG head CAT fight: IPFV.	Reply to "Where is the pain?"

Ànɔ´'ɔnì_ø dít sá'abɔ̀ +ø? Who cat eat:IPFV porridge cq? "Who eats/is eating millet porridge?" (No aspectual $n\bar{\epsilon}^{+/}$)

Exclusion of $n\bar{\epsilon}^{+/}$ in nominalised clauses:

	<i>Ò dāa á nē bīig.</i> 3AN TNS COP FOC child:sg.	"She was a child."
but	<i>ón àň bīig lā zúg</i> 3an:nz cop child:sg art upon	"because she's a child"
	<i>Ѝ yí nē Bók.</i> 1sg emerge ғос Bawku.	"I come from Bawku." SB
but	Meeri one yi Magdala Meeri ɔ́nì yī Magdala Mary REL.AN emerge Magdala	"Mary who came from Magdala" (Mk 16:9, 1996)

Focus- $n\bar{\epsilon}^{+/}$ can occur in complementised clauses, including purpose clauses:

Pian'am ka m bood ye fu nyε**nε** buud.
Pi̯àň'am kà m̀ bóod yέ fu ňyē nē buud.
Speak: IMP and 1sG want that 2sG see FOC innocence.
"Speak, for I want you to be vindicated." (Job 33:32)

Exclusion of $n\bar{\epsilon}^{+/}$ in content questions: aspectual $n\bar{\epsilon}^{+/}$:

Bó kà fừ kứmmà ⁺ ø?	"Why are you crying?"
What and 2SG cry:IPFV cq?	
Fù níŋìd bó +ø?	"What are you doing?"
2SG do:IPFV what CQ?	
Fù wá'e yáa ⁺ ø?	"Where are you going?"
2SG go where cq?	

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Bùgúm lā yítyáa ní ná +ø?FireART emerge:IPFV where LOC hither cq?"Where is the light coming from?" SB

Exclusion of $n\bar{\epsilon}^{+/}$ in content questions: constituent-focus $n\bar{\epsilon}^{+/}$:

	<i>À á nĒ dāỵ.</i> 1SG COP FOC man:SG.	"I am a man."
but	<i>Mām áň bó +ø?</i> 1SG.CNTR COP what CQ?	"What am I?"
	<i>Fù áaň_ànɔ́'ɔnὲ ⁺ø?</i> 2sg cop who cq?	"Who are you?"
	Fù bóòd bó +ø? 2sg want what cq?	"What do you want?"
but	<i>Fù bóòd nē bó +ø?</i> 2sg want with what cq?	"What do you want it with?" <i>Nē must</i> be interpreted as preposition (WK)

Certain words do not prevent focus- $n\bar{\epsilon}^{+/}$ from being used in the clause (unlike interrogative proforms, see above), but cannot themselves be focussed with $n\bar{\epsilon}^{+/}$. Words which behave like this include $s \partial \eta \bar{a}^{+/}$ "good", $s \partial m^{m}$ "good", $b \bar{\epsilon}^{+} \epsilon d^{\epsilon}$ "bad" $s \partial a^{+}$ "truth" when used as adverbs, and the "two, three exactly" quantifier forms $\partial y i \eta \bar{a}^{+/}$ $\partial t \dot{a} \eta \bar{a}^{+/}$. AdvPs formed by coordinating such words and NPs with these quantifiers as dependents share the same property.

 Lì àň súŋā.
 "It's good."

 BINAN COP good:ADV.
 "It's bad."

 Lì àň bɛ̄'ɛd.
 "It's bad."

 BINAN COP bad:ABSTR.
 "It's bad."

[ye ka] o sariakadib a sum ne sida.
ò sàríyà-kādıb áň súm nē sídà.
3AN law-drive:GER COP good:ABSTR with truth.
"His judgment is good and true. (Rev 19:2, 1976)

If $n\bar{\epsilon}^{+/}$ does occur before such constituents it must be interpreted aspectually, limiting the state described to a particular time period, even with stative verbs where there is no explicit time marker in the clause <u>19.2.3</u>.

27.1.2.2 VP constituent focus

The use of $n\bar{\epsilon}^{+/}$ to focus a VP constituent, as opposed to the entire VP, is possible only in statements and polar questions. The aspectual sense of $n\bar{\epsilon}^{+/}$ must be impossible and the constituent in question must permit $n\bar{\epsilon}^{+/}$ -focus.

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:

<i>À dá' búŋ.</i>	"I've bought a donkey."
1sg buy donkey:sg.	("What have you done?")
<i>À dá' nĒ búŋ.</i>	"I've bought a <i>donkey</i> ."
1sg buy ғос donkey:sg.	("What have you bought?")
Nīigí òňbıd nē mōod.	"Cows eat <i>grass</i> ."
Cow:pl chew:IPFV FOC grass:pl.	("What do [generic] cows eat?")

However, under the scope of a negative, focus is likely to be **contrastive**:

Ň	рū	dá'	bù	јā	+ø.	"I haven't bought a donkey."
1SG	NEG.IND	buy	dor	nkey:sg	NEG.	
Ň	рū	dá'	nē	búŋā	+ø.	"I haven't bought a <i>donkey</i> ."
1SG	NEG.IND	buy	FOC	donkey	7 NEG.	("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 $n\bar{\epsilon}^{+/}$ before a definite object is usually aspectual:

Nīigí lā ɔ́n̆bìd nē mɔ̄ɔd lā. Cow:pl art chew:IPFV FOC grass:pl art. "The cows are eating the grass."

Nā'-síəbà óňbìd nē mɔɔd lā. Cow-INDF.PL chew:IPFV FOC grass:PL ART. "Some cows are eating the grass." If focus does occur with old-information arguments, it is **contrastive**.

Linɛ ka ba'amaannib maannɛ tisid bada la, ba maannɛ tisid**nɛ** kikiris, ka pʊ maannɛ tisid Wina'am.

Lìni kà bà'-māannib máànni ø tísìd bádà lā, bà màanni REL.INAN and idol-sacrifice::PL sacrifice::PFV cAT give::PFV idol:PL ART 3PL sacrifice::PFV ø tísìd nē kíkīris kà pū máànni ø tísìd Wínā'amm +ø. CAT give::PFV FOC fairy:PL and NEG.IND sacrifice::PFV CAT give::PFV 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 $\partial e n^a$ "be something/somehow" in its ascriptive sense <u>19.11.2</u> is non-referring and prototypically "unpredictable or pragmatically non-recoverable", and therefore is naturally preceded by $n\bar{\epsilon}^{+/}$ for **ordinary** focus:

<i>Ò à nē bīig.</i> 3AN COP FOC child:sg.	"She is a child."
<i>Ò dāa á nē bīig.</i> 3AN TNS COP FOC child:SG.	"She was a child."
Dĩıb á nẽ būn-súŋ. Food cop foc thing-good:sg.	"Food is a good thing."
<i>Ò à nĒ bāaňlím.</i> 3AN COP FOC quiet:ABSTR.	"She is quiet."
<i>Lì à nẽ būgusígā.</i> 3inan cop foc soft:adv.	"It's soft."

While such complements are characteristically indefinite, this is not invariable; the non-recoverability may instead lie in the internal structure of the complement:

Ka bumbuuda bane lu gon'os suugin la ane bane wum pian'ad la, ka...Kà būn-búudàbànı lù gòň'os súugū-n lā á nēAnd thing-planting:PL REL.PL fall thorn:PL among-LOC ART COP FOCbánì wùm piàň'ad lā, kàREL.PL hear speech ART, and..."And the seeds which fell among thorns are those who heard the word, but..."(Lk 8:14)

Biis la diemid nε dua gbinin. Ba zamisid nε bula wa'ab. Ba anε Apam biis.
Bīis lā dí'əmìd nē dúaň gbínnī-n. Bà zàmısıd nē
Child:PL ART play:IPFV FOC dawadawa:SG base:SG-LOC. 3PL learn:IPFV FOC
būla wá'àb. Bà à né À-Pām bîis.
shoot:PL dance:SG. 3PL COP FOC PERS-Apam child:PL.
"The children are playing under a dawadawa tree. They are learning the dance of the young shoots. They are Apam's children." KKY p6
(Apam and the children have been mentioned already, but the relationship between them is new information.)

In this context proper names are non-referential (cf CGEL p402):

O yυ'υr na anε Joon. "His name will be John." (Lk 1:60) Ò yū'υr ná ā nε 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 $k\bar{a}'e^+$ "not be") focus is difficult to interpret in the "ordinary" sense, so that if $n\bar{\epsilon}^{+/}$ is present at all the result is normally **contrastive**:

Ѝ á nē dỵ'átà.	"I'm a doctor."
1SG COP FOC doctor:SG.	
M kā' du̯'átāa +ø.	"I'm not a doctor."
1SG NEG.BE doctor:SG NEG.	
Ѝ kā' nē du̯'átāa +ø.	"I'm not a <i>doctor</i> ." ("I'm a lab assistant.")
1SG NEG.BE FOC doctor:SG NEG.	

Focus on a **locative complement** typically involves either a place name or a definite predependent of a locative postposition, where the fact that a referent is at a known place is new information; this is another instance of non-recoverability arising from the internal structure of a constituent. (Place names have internal structure because they include a zero allomorph of the locative particle <u>16.3</u>.)

Dāu lā bé nē dó-kàŋā lā púugū-n.
Man:sg ART EXIST FOC hut-DEMST.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 p8Mām bé nē mōɔgʋ-n.ISG.CNTR EXIST FOC grass:SG-LOC.

 \dot{M} yí $n\bar{\epsilon}$ B5k. "I come from Bawku." SB 1SG emerge FOC Bawku.

Yadda niŋir yitnε labaar la wummug ni.Yàddā-níŋìr yítnē lábāar lā wúmmug ní.Assent-doing emerge:IPFV FOC newsART hearing LOC."Faith comes from hearing the news."(Rom 10:17)

Contrast the existential use of $b\dot{\epsilon}^+$, where the locative is an adjunct:

Dàu-sɔ̄' bέ dɔ́-kàŋā lā púυgū-n. Man-INDF.AN EXIST hut-DEMST.SG ART inside:SG LOC. "There is a certain man in that hut."

There are few examples of $n\bar{\varepsilon}^{+/}$ -focus on an adjunct in my data; one is

Tì dít sā'ab nē záàm. "We eat millet porridge *in the evening.*" 1PL eat:IPFV porridge FOC evening. ("When do you eat porridge?")

27.1.2.3 VP focus

Focus on the VP as a whole is always contrastive, because non-contrastive focus on the VP is the default. It uses VP-final $n\bar{\epsilon}^{+/}$. It occurs not only in statements and polar questions but also in direct commands, which do not permit focus on a VP constituent. For $n\bar{\epsilon}^{+/}$ to mark focus, aspectual interpretation must be impossible.

Aspectual sense ruled out by the position of $n\bar{\varepsilon}^{+/}$:

Ò kùesid sūmma lā nē. "She sells/is selling the groundnuts." 3AN sell:IPFV groundnut:PL ART FOC. ("They're not free.")

Aspectual sense ruled out by mood:

Gòsım nē. "Look!" ("Don't touch." WK) Look:imp foc.

Stative verbs without an explicit time indicator:

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<i>Ò gìm nē.</i> 3an be.short foc.	"He's <i>short</i> ." ("I was expecting someone taller.")			
Lì zùlım nē. 3inan be.deep foc.	"It's deep."			
<u>Ѝ bɔ́ɔdī_f nē.</u> 15g want 25g.0в гос.	"I really <i>love</i> you." WK			
Imperfective passives:				
<i>Dāam lā núùd nē.</i> Beer art drink:IPFV FOC.	"The beer is for <i>drinking</i> ." ("Not washing with!")			
Lì mà'an nē. 3INAN get.cool:IPFV FOC.	"It gets <i>cooled</i> ." (ipfv of <i>māʿal+/</i> "make cool") ("Not heated!")			
<i>Dāká lā záňl nē.</i> Box:sg art carry.in.hands foc.	5			
	"The box is for carrying <i>on the head</i> ." . ("Not carrying in the hands.")			
Perfectives which cannot be interpreted as resultative:				
<i>Ò dìgıl nē.</i> 3AN lay.down foc.	"He's <i>laid it down</i> ." ("I thought he'd pick it up.")			
Kà lì bódìg nē.	"It's <i>lost</i> ."			
And 3INAN get.lost FOC.	Contradicting "someone hid it." <u>19.3.5</u>			
<i>Ò dìgın nē.</i> 3AN lie.down foc.	"He's <i>lain down.</i> " 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			

An idiomatic use (marking a euphemism) is seen in

Ò	zì'ən	nē.	"She's pregnant." (Not "She has stood still.")
3AN	ı stand.s	still foc.	

replying: He's been lying down."

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27.2 Clefting and preposing with kà

Kà-clefting arises from constructions with adnominal ka-catenation 22.3 in much the same way that *n*-clefting arises by ellipsis from *n*-catenation. Kà-clefting has a similar implicature of exhaustiveness and exclusiveness.

The preposed element may be extracted from a subordinate clause:

Li anɛ ya taaba banɛ pv'vsid Wina'am ka li nar ka ya kad saria. Lì à nɛ́ yà tāaba bánì pv'vsɪd Wínà'am kà lì nár 3INAN COP FOC 2PL fellow REL.PL greet:IPFV God and 3INAN must kà yà kád sàríyà. and 2PL drive judgment. "It is your fellow-worshippers of God whom you must judge." (1 Cor 5:12)

Again, the main clause may be a verbless identificational clause 21.4.1:

Dn Ø lá kà fừ dāa ňyēt.
3AN.CNTR CAT that and 2SG TNS see:IPFV.
"This is he whom you saw." WK

Ànɔ´'ɔnì ø ňwá kà tì ňyētá +ø? Who cat this and 1pL see:IPFV cQ? "Who is this that we can see?"

Bɔ̄ɔ_ø lá kà m̀ ňyɛ̄tá +ø? What CAT that and 1SG see:IPFV CQ? "What is that that I can see?"

Once again, there is a construction with ellipse of all the main clause except the NP. Independent tense marking is possible in the ellipted structure, as with n-focus. Preposed direct objects leave a null-anaphora gap <u>19.8.1</u>.

Asεε linε an bε'εd ma'aa ka m na tun'e niŋ. Àsέε línì àň bɛ̄'εd má'àa kà ṁ ná tūň'e_ ø níŋ. Only REL.INAN COP bad only and 1SG IRR be.able CAT do. "It's only that which is bad that I can do." (Rom 7:21)

*B*5 *kà fù kúesìda* +*ø*? "What are you selling?" What and 2sg sell:IPFV cq? The effect of $k\dot{a}$ -preposing remains *foregrounding*, not focus. It is compatible both with *n*-focus and with the occurrence of the focus particle $n\bar{\epsilon}^{+/}$:

Dinzug ka mam Paul n be sarega ni Yesu Kiristo zug yanam buudbane ka' Jew dim la yela. Dìn-zúg kà mām Paul n bé sārıgá nì Yesu Kiristo zúg yānám That-upon and 1sg.cntr Paul cat exist prison:sg Loc Jesus Christ upon 2PL.cntr búùd-bànı kā' Jew dím lā yélà. tribe-REL.PL NEG.BE Jew EMPTY.PL ART about. "Therefore, I, Paul, am in prison for Jesus Christ because of you whose tribe is not Jewish." (Eph 3:1, 1996)

Brəl brəl kà kolug pé'èl nē.
Little little and river:sc get.full Foc.
"Little by little, and a river is full." (Proverb)

Kà-foregrounding of VP objects containing interrogative pronouns is very common. There is no syntactic movement rule for interrogative pronouns/proforms:

Bùgóm lā yítyáa ní ná +ø?FireART emerge:IPFV where LOC hither CQ?"Where is the light coming from?" SB

but $b\bar{j}$ "what?" is very often preposed with $k\dot{a}$, as in the example above; preposing is *required* if the sense is "why?" rather than "what?":

	Bó kà fù kúmmà?	"Why are you crying?"
cf	*Fù kúm bó?	*"What are you crying?"

B5 ka... is by far the most frequent way of rendering "Why?", and usually has this meaning, but foregrounding of b5 in the normal sense "What?" also occurs:

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B> ka ti na niŋε?"What are we going to do?" (Acts 21:22)B5kàtì ná nìŋε +ø?What and 1PL IRR do CQ?
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Other queried NP objects in content questions are often preposed with *kà*:

Nū'-bíbisáàlákà fù ňyētá+ø?Hand-small:PL NUM:how.many and 2SG see:IPFV CQ?"How many fingers can you see?" SB

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 svnf da pɛlig nɛ ba yvma piisnaasi la? Kà ànɔ´'òn-nàm kà Wínà'am súňf dá pɛ̀lıg nɛ́ bà And who-pL and God heart:sg τNs whiten with 3pL yòma pīs nāasí lá +ø? year:pL forty 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 ka, are best regarded as foregrounding, not focus.

Preposing the complement of a single-aspect verb is uncommon, and interrogative pronouns in such cases usually remain *in situ*, probably necessarily so in the case of $\partial e \ddot{n}^a$ "be something":

Niŋgbiŋ bɔ buudi ka ba na ti mɔra? nìn-gbīŋ bɔ´-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)

but Fù bóòd bó +ø? "What do you want?"
2sg want what cq?
Mām áň bó +ø? "What am I?"
1sg.CNTR COP what cq?
Kà fù áaň_ànó'ɔnè +ø? "Then who are you?"
And 2sg COP who cq?

VP adjuncts are often preposed with $k\dot{a}$; there is probably a contrast between foregrounding with $k\dot{a}$ and focussing with $n\bar{\epsilon}^{+/}$:

Ňwādısá_àtáň' kà fù ná lɛ̃b nā. Month:PL NUM:three and 25G IRR return hither. "You're to come back in three months." (Instructions, not a reply.)

Tì dít sā'ab nē záàm.

IPL eat:IPFV porridge Foc evening.
"We eat millet porridge in the evening." ("When do you eat porridge?")

 $K\dot{a}$ -preposed elements cannot be clause subjects, as is to be expected if the construction has arisen from ellipsis, because an adnominal $k\dot{a}$ -clause normally has a different subject from its main clause.

The only structure other than a NP (including \dot{n} -clauses) or AdvP that I have found preposed with $k\dot{a}$ is $w\bar{v}v$ "like" + object:

Wōv búŋné kà ò zót.Like donkey:sG like and 3AN run:IPFV."It's like a donkey that he runs."

*Né m nú'ùg kà m sī'ıs.
*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 <u>24.3.2</u>. Manner, place and reason adjuncts can *only* precede the subject by *kà*-preposing, and absolute clauses in adjuncts must often precede the main clause subject so that constituent order parallels event order <u>24.2</u>:

Mán ňwè' dāu lā zúg kà police gbáň'a_m.
1SG:NZ hit man:SG ART upon and police seize 1SG.OB.
"Because I hit the man, the police caught me." ILK

27.3 Extraposition

A NP or AdvP placed after a distinctively phrase-final verb form must have been extraposed. The commonest cases involve manner-adverbs, where the effect seems to be to intensify the adverb:

Ya yidigya bɛdegʊ.	"You are very much mistaken." (Mk 12:27)
Yà yídìg yā bédvgū.	
2PL go.astray PFV much.	
Μ̀ pύ'ὺs yā bέdυgū.	"Thank you very much."
1SG greet PFV much.	

Objects, other than pronouns, can be extraposed; the sense seems to be that the extraposed element is contrary to expectation:

	Ò ňyὲ yā ná'àb lā. 3an see pfv chief:sg art.	"He's seen the chief." ("of all people!")
	Ò dà' yā múị. 3AN buy PFV rice.	"She's bought rice." ("of all things!")
cf	Ò dà' nẽ múị. 3AN buy Foc rice.	"She's bought rice." (reply to "What did she buy?")
	Lì à nẽ múị kà ò dá'. 31NAN COP FOC rice and 3AN buy.	"It's rice that she's bought." ("not millet.")

Leftward extraposition of objects and complements on the basis of **weight**, without clefting or $k\dot{a}$ -preposing, occurs in e.g.

Wilkane bee m ni ka pu wanna, m Ba' nwaadi li ne [sic: 1996 n] basid.Wil-kànıbèe_m ní kà pūwénnā+ø,Branch-REL.SG EXIST 1SG LOC and NEG.IND bear.fruit:IPVF NEG.mBā'ňwá'adī_línbásìd.1SG father:SG cut:IPFV3INAN.OB CAT throw.out:IPFV."A branch which is in me and does not bear fruit, my father cuts out."(Jn 15:2)

One ka ba tis o ka li zu'oe, ba me mor puten'er ye o na lebis line zu'oe. $\hat{O}ni$ kà bà tís \hat{o} kà lì zú'e, bà mè mòr REL.AN and 3PL give 3AN.OB and 3INAN become.much, 3PL also have $p\hat{v}$ -tèň'er yé ò nà lēbis línì zù'e. inside-mind:sg that 3AN IRR return REL.INAN become.much. "Whom they have given much to, they expect he will return much." (Lk 12:48)

A heavy indirect object is extraposed 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.

MāmPaul ... tísìdgbáuŋ-kàŋāWínà'am nídìbbànı àňISG.CNTRPaul ... give:IPFV book-DEMST.SGperson:PL REL.PL COPsídà dímkà áň yīnní nēJesus Christ Efesustéŋī-nlā.truth EMPTY.PL and COP onewith Jesus Christ Ephesus land:SG-LOC ART"I, Paul ... give this letter to God's people who are truthful and one in JesusChrist in Ephesus." (Eph 1:1, 1976; KB ...gbauŋ kaŋa tisid Wina'am...)

27.4 Presentational constructions

A number of constructions are employed to introduce new entities into discourse. The NPs referring to the entities are indefinite; it is in this context that absence of the article $|\bar{a}^{+/}$ typically reflects an indefinite but *specific* rather than generic reference <u>15.7.5</u>. The NP head may (but need not) be followed by an dependent indefinite pronoun or by a number as a determiner.

The verb $b\dot{\epsilon}^+$ "be somewhere/exist" is frequent in presentational clauses, often with a following *n*-catenation <u>22</u> or adnominal $k\dot{a}$ -catenation <u>22.3</u>.

Dau da be mori o po'a yimmir Dāu dá bè ø mɔ̄rí ò pu̯'à-yīmmír Man:sg TNS EXIST CAT have 3AN wife-single:sg "There was a man who had one wife." KSS p26

Pu'a sɔ' da bɛ mɔr o bipuŋ ka kikirig dɔl o.
Kà pu̯'à-sɔ̄' dá bɛ̀ ø mɔ̄r ò bī-púŋ kà kìkīrıg dɔ̄ll·ó ø.
And woman-INDF.AN TNS EXIST CAT have 3AN child-girl:sg and fairy:sg follow 3AN.OB.
"There was a woman whose daughter was oppressed by a devil." (Mk 7:25)

Dapa atan' n da be."There were once three men." KSS p16Dāpá_ àtáň' n dá bè.Man:PL NUM:three CAT TNS EXIST

Other verbs expressing location can introduce the subject as a new topic, and verbs of finding, seeing etc can introduce their objects in a similar way.

Ka dau daa zin'i Listra ni ka pu tun'e kenna. Kà dāu dāa zíň'i Listra ní kà pō tūň'e ø kēnná ⁺ø. And man:sg TNs sit Lystra LOC and NEG.IND be.able CAT go:IPFV NEG. "There was a man in Lystra who could not walk." (Acts 14:8, 1996)

Anina ka o nyε dau ka o yv'vr buon Aneas. Àníná kà ò ňyε̄ dáu kà ò yū'vr búèn Aneas. ADV: there and 3AN see man:SG and 3AN name:SG call:IPFV Aeneas. "There he found a man whose name was Aeneas." (Acts 9:33)

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27.5 Free personal pronouns

In some contexts only free pronoun *forms* are possible, and they are then simply allomorphs of the bound pronouns:

Isolation:	Mánè?	"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 $y\dot{a}$ '-clause 23. In other contexts, the choice of a free pronoun over bound implies *contrast*. For the special case of **logophoric** use see 25.2.

A personal pronoun which is focussed must be contrastive; conversely, contrastive pronouns are normally focussed where possible:

Manε an konbkem suŋ la.Mānι ø áň kóňb-kìm-sùŋlā.1SG.CNTR CAT COP animal-tender-good:SG ART."I am the good shepherd." (Jn 10:11)

But Li nar ka on dv ka man sie. Lì nàr kà ɔ̄n dv̄, kà mān sīe. SINAN must and SAN.CNTR rise, and ISG.CNTR lower. "He must increase and I must decrease." (Jn 3:30)

Contrastive pronouns can be subjects of \hbar -clauses <u>15.3.1</u>:

wuu man**e** a si'em la. "as I am." (1 Cor 7:7, 1996) wūu **mánì** Øàň sī'əm lā. like 1sg.cntr nz cop indf.adv art.

27.6 Emphatics

I have borrowed the term "emphatic" from Jeffrey Heath's Songhay grammars (Heath pp202ff.) Emphatics resemble CGEL's "Focussing Modifiers" (pp586ff), but this "focus" is not "informational focus" of the kind discussed in <u>27.1</u> but "scopal focus", the semantic element which the particle applies to: this need not be either the syntactic head of the NP or the informational focus of the clause. Emphatics relate a NP or AdvP to the discourse context. They follow top-level NPs or AdvPs within clauses, with the exception of $h\bar{a}l(+, which precedes its phrase.$

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 $m\dot{\epsilon}$ DK KT SB NT $m\dot{\epsilon}n$ WK; clause finally (all sources) $m\dot{\epsilon}n^{\epsilon}$ "also, too"

bɔzugɔ o anε fu biig mɛn. bɔ̄ zúgɔ́ ò à nɛ́ fù bīig mɛ́n. Because 3AN COP FOC 2SG child:SG also. "Because he is your child too." (Genesis 21:13)

O pu'a mε kena. "His wife also came." (Acts 5:7)
Ò pu'ā mέ kὲ nā.
3AN wife:sg also come hither.

The particle may follow $k\dot{a}$ + ellipted subject pronoun <u>20.3</u>.

$m\dot{a}'aa$ (LF $m\dot{a}'an\bar{\epsilon}$) "only"

Asεε linε an bε'εd ma'aa ka m na tun'e niŋ. Àsέε línì àň bɛ̄'εd má'àa kà m̀ ná tūň'e ø níŋ. Only RELINAN COP bad only and ISG IRR be.able CAT do. "It's only that which is bad that I can do." (Rom 7:21) (Kà-foregrounding of the NP, which also implies exclusiveness <u>27.2</u>.)

gòllīmm (LF gòllιmnε) "only"

Li ka'anɛ Wina'am gullim nɛ? Lì kā' nɛ̄ Wínà'am gúllìmnɛɛ +ø +ø? 3INAN NEG.BE FOC God only NEG PQ? "Is it not God alone?" (Lk 5:21)

kòtàa^{nε} "at all"

Áyìı kòtàa. "Not at all."

nɔ̃ɔ⁼ "just, exactly"

dàa-kàn lā nɔ̄ɔ

"that very day"

Fv ya'a mor ya'am, fvn noo na dii li malisim.
Fv ya' mor yā'am, fvn noo ná díu lì mālisím.
25G if have sense, 25G.CNTR exactly IRR eat 3INAN joy.
"If you have wisdom, it is you who will have joy of it." (Proverbs 9:12)

 $h\bar{a}li^+$ can be used as an emphatic, preceding a NP or AdvP with the meaning "even":

Hali tvombɛ'ɛd dim niŋid ala. Hālí tòvm-bɛ̄'ɛd dím níŋìd àlá. Even deed-bad:PL EMPTY.PL do:IPFV ADV:thus. "Even sinners do that." (Lk 6:33)

Before a manner-adverb it effectively means "very":

Lì the hālí bédug \overline{v} . "It's very difficult." SINAN be.bitter until much.

The adverb itself may be ellipted:

Lì tòẹ hālí. "It's very difficult."

Hālí in this sense may be preposed with $k\dot{a}$:

Hali ka nidib mɔr ban'adnam na. Hālí kà nīdıb mɔ̄r báň'àd-nàm nā. Even and person:PL have sick.person-PL hither. "People even brought the sick" (Acts 5:15)

Hālí báa is also used for "even" before a NP:

Hali baa lampɔdi'esidib mɛ niŋid ala. Hālí báa làmpɔ̄-dí'əsìdıb mɛ́ nìŋıd àlá. Even tax-receiver:PL also do:IPFV ADV:thus. "Even tax-collectors do that." (Mt 5:46)

Hali baa bama wusa ya'a na zo ka basif, man ku basi fo.
Hālí báa bàmmā wūsa yá' nà zó kà básì f,
Even DEMST.PL all if IRR run and abandon 25G.OB,
mān kú bāsı fó +ø.
15G.CNTR NEG.IRR abandon 25G.OB NEG.
"If even they all run away and leave you, I will not leave you." (Mt 26:33)

Lexicon and texts

28 Greetings and other formulae

(a) Enquiries after health.

Gbís wēlá?	"How did you sleep?"
Dúə wēlá?	literally "How did you get up?"
	both usual greetings on meeting
	for the first time in the morning.
Nīntāŋ á wēlá?	"How is the day/afternoon?"
Υύ'υŋ á wēlá?	"How is the evening?" literally "night"
Fù yī-dímàa?	"[How are] your household?"
Nìn-gbīnáa?	"[How is your] body?" i.e. "How are you?"
Fù sìdaa?	"[How is your] husband?"
Pu̯'ā nē bíisɛ̀ɛ?	"[How are your] wife and children?"

... and so on, often at great length. Replies may be

Àláafù bé.	literally "There is health."
	(Also a general purpose greeting itself.)
Àláafù b£∙o.	for him/her.
Àláafù bée bá.	for them.

(b) Blessings

These follow the pattern

Bárıkà nź fù	"Blessing with your"
Durtha ne ro	Diessing with your

with the introductory words usually ellipted; the reply to all of these is *Náa*.

	Kēn kēn.	"Welcome!" <i>Kɛ̃n,</i> gerund of <i>kɛ̃ň</i> "come"
		cf Hausa: <i>Barkà dà zuwàa.</i>
	Nē záàm záàm.	"Good evening."
	Tōvma!	
or	Tūvma tūvma!	literally "(Blessing on your) work!"
		Interpreted to include practically anything
		which could be regarded as work, and hence
		probably the commonest daytime greeting.

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	Nē sóňsıgā.	"(Blessing on your) conversation." to greet a group of people talking; also to greet a perso sitting quietly alone, assumed to be converse with his or her own $w\bar{\iota}n^{n\epsilon/}$ (spiritual essence personal <i>genius</i>)	on ing
	Né fù būrıyá-sùŋ.	"Merry Christmas." (<i>b⊽ııyá</i> + ← * <i>bvrũya</i> ← Twi/Fante <i>bronya</i> , of unclear ultimate orig	Jin)
	Né fù yùum-pāalíg.	"Happy New Year."	
(c) P	rayers. Reply Àmí! "Amen!"		
	Wīn ná lēbısı f nē láafiya.	"Safe journey!" literally "[I pray that] God will bring you back in health."	
	Wīn ná sūŋı f.	"God will help you."	

Wīn ná tā'así f."Safe journey!" ("God will help you travel.")

(d) Statements of fact and commands. Reply T i "OK", or as appropriate.

"See you tomorrow!" ("That's tomorrow.")
"See you on Monday."
"Sleep well."
"Remain (ye) well."
Said by departing person to those remaining.
"Greet (those) at home." i.e. "Goodbye."
reply Tɔ̀ "OK", or Bà nà wōm "They will hear."

Generally used to express thanks.

(e) Miscellaneous formulae

Ѝ pύ'ὺs yā.	"Thankyou."
	reply Tò, or Pù'usug kā'e.
	"No thanks (sc. needed.)"
Ѝ pú'ùs yā bέdυgū.	"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.

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	Kābır kābırí!	Formula asking admission to a house or compound. "Knock, knock!" Twi <i>agoo</i> is also used. (Actual knocking is for robbers trying to find out if anyone is at home.)		
	Dìm sūgvrú.	"Please forgive me."		
	À bέlìm nē.	"I beg you." Not "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 Dīıb má'àa.		
		"Only food." i.e. "good"		
	Ѝ mวr kú'èm náa?	literally "Shall I bring water?"		
		Traditional first words to guest.		
		Reply for "No, thank you" is Kù'øm á súm.		
		("Water is good.")		
	Wīn yέl sídà.	"Bless you!" (after a sneeze.) Literally		
		"God speaks truth"; WK explained: "If you		
		sneeze, it means someone elsewhere is praising you."		
	Fù wúm Kūsáalὲɛ?	"Do you understand [literally "hear"] Kusaal?"		
	Ēεň, ṁ wúm.	"Yes, I do."		
	Áyìı, ṁ pō wúmmā.	"No, I don't."		

29 Selected lexical fields

29.1 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.

1•1 y		
Father	is my	sàam ^{ma} , less formally bā' ^{+/}
Father's elder brother		sàam-kpɛ̄ɛňm ^m
Father's younger broth	ner	sàam-pīt ^{a/}
Father's sister		pùgudıb ^a
My		
Mother	is my	mà+
Mother's elder sister		
or senior co-wife		mà-kpēɛňm ^m
Mother's younger siste	er	
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	áňsì b ^a

I am my mother's brother's $\bar{a}ns(\eta^a)$; to all the other relatives above I am $b\bar{i}ig^a$ "child" or specifically dakboondown broken are not matrilineal, the mother's brother is felt to be a particularly close relation witha 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-dáu̯+	♀ yāa-pu̯'áª
Grandchild		yáaŋ ^a	

These words are also used for ancestor/descendant.

Mv

My Elder sibling of my own sex is my $b\bar{\imath} = r^{\epsilon/}$ Younger sibling of my own sex is my $p\bar{\imath}t\dot{\upsilon}^+$ Sibling of opposite sex is my $t\bar{a}\mu\ddot{n}^{+/}$

These words are also used for cousins, with seniority, as always, going by family branch.

My			
Wife	is my	<i>yī-pu្</i> 'á ^a or simply	pu̯'āª
Wife's parent		dìəm ^{ma}	Sex can be specified as
		♂ dìəm-dāỵ+	♀ dìəm-pỵāk ^a
Wife's sibling		dàkīig ^a	Sex can be specified as
		ď dàkì-dāỵ+	♀ dàkì-pųāk ^a

 $Diam^{ma}$ is also used in polite address to an unrelated person of opposite sex and similar or greater age to oneself but not old enough to be called \dot{m} mà "my mother" or \dot{m} $b\bar{a}$ ' "my father." Parents-in-law are greatly respected, but with siblingsin-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 $Bug\acute{o}m-t\bar{c}$, 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 sīda dàváam^{ma} Husband's parent Sex can be specified as ď dàyāam-dáu+ Q dàyāam-puák^a sìd-kpēɛňm^m Husband's elder brother Husband's younger brother sìd-bīl^a sìd-puāk^a Husband's sister

I am my husband's parents' $b\bar{i}ig^a$ "child"; all my husband's siblings (of both sexes) call me $py'\bar{a}^a$ "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 $daki-tua^+$ to the other; two women married to brothers are $nin-t\bar{a}as^{\epsilon}$, "co-wives." "Fiancée" is $p\mu'a-\bar{\epsilon}l(\eta^a)$.

29.2 Personal names

See Haaf pp87ff for a detailed account of Kusaasi personal naming practices.

Personal names are preceded by the personifier particle, \dot{A} - by default but \dot{N} before adjective stems, where \dot{N} - is a syllabic nasal assimilated to the point of articulation of a following consonant. Most names are based on common nouns, but a few are based on adjectives, and some on whole VPs, or even clauses.

On the form in which Kusaal personal and place names appear in Englishlanguage contexts see 1.1.

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; \dot{A} - $W\bar{i}n$ and \dot{A} - $B\bar{v}gvr$ are especially common male names. Identification of particular individuals often requires further enquiries about kindred or residence.

Many names allude to a guardian spirit $(s\bar{i}g\iota r^{\epsilon/})$ assigned to a newborn child through the father's consultation with a diviner $(b\bar{a}'a^{=})$; this may be the $w\bar{\iota}n^{n\epsilon/} \underline{1.1}$ of an ancestor, or of a spiritually powerful tree:

Awini	wīn ^{nɛ/}	person with a <i>sīgır^{ɛ/}</i> from father's
Abugri	būgur ^ε	side of the family person with a $s\bar{i}gir^{\epsilon/}$ from mother's
		side of the family
Atiga	tìıg ^a	"tree", as <i>sīgır^{ɛ/}</i>
Akudugu	kūdvg ^o	"piece of iron" (sc. as a marker on
		a tree- <i>sīgır^{ɛ/}</i>); displaced as a
		common noun by the pl-as-sg $k\bar{u}t^{\epsilon}$
	Abugri Atiga	Abugri <i>būgυr</i> ^ε Atiga <i>tìιg</i> ^a

A younger sibling of \dot{A} - $W\bar{\iota}n^{n\epsilon/}$ with the same $s\bar{\iota}g\iota r^{\epsilon/}$ is called \dot{A} - $W\bar{\iota}n$ - $b\ell/a^{a}$ "Awimbillah", of \dot{A} - $K\bar{\iota}d\upsilon g^{2}$, \dot{A} -Kud- $b\bar{\iota}l^{a}$ "Akudibillah" etc. Names for girls may follow the pattern \dot{A} - $W\bar{\iota}n$ - $p\mu\dot{a}k^{a}$ "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	tùlιg ^ε	"invert" for breech-delivered child

A whole clause is seen as a birth-circumstance personal name in

À-Tìım bódìg yā	"The medicine has got lost."

Many names relate to customs intended to break a cycle of stillbirths. One such custom is the apotropaic practice of throwing away the dead child or just burying it in a pot to avoid attracting malevolent spiritual attention; the next surviving child may then be called e.g.

À-Tàmpūur ^ɛ	Tampuri	tàmpῦυr ^ε	"ashpit, rubbish tip"
À-Dūk ^{ɔ/}	Aruk	dūk ^{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-dύ ⁺	Sandow	sāan ^{a/}	"guest" + <i>dā</i> µ ⁺ "man"
À-Zàngbèog ^o	Azangbego	Zàngb <i></i> cog ⁵	"Hausa person"
À-Nàsà-pỵāk ^a	Anasapoaka	L	"European woman"; also a birth-
			circumstance name: "child
			delivered by a European midwife"

Names based on adjectives:

Ň-Dāυg ^ͻ	Ndago	dāvg ^o	"male"
Ň-Puāk ^a	Mpoaka	pųāk ^a	"female"
Ň-B īl ^a	Mbillah	bīl ^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 SAbdu-r-Raħma:n.

KKY p6 has the interesting girl's name *Amɔryam*, perhaps an adaptation of the Arabic مريم *Maryam* "Mary" as *À-Mɔ̄r Yām* "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."

29.3 Places

For the form in which Kusaal personal and place names appear in English-language contexts see 1.1.

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:

B <i>àk</i> ^a	Bawku	"pit, geographical depression"
Kūk ^{a/}	Koka	"mahogany tree"
Kùkpàrıg ^a	Kokpariga	"palm tree"
Τὲmpáan ^{nε}	Tempane	perhaps "new villages"
Mu̯'à-nɔ̄ɔr ^{ε/}	Mogonori	"lakeside" ("lake-mouth")
Bàs-yɔ̄n ^{nε/}	Basyonde	"abandon sacks" ?reason for name
Kūgυr ^{ε/}	Kugri	"stone"
Būgur ^ε	Bugri	<i>būgυr</i> ^ε , object housing
		a <i>wīn^{nɛ/} "spirit"</i>
Wìdì-ňyá'aŋ ^a	Woriyanga	archaic for wìd-ňyá'aŋ ^a "mare"
Bì-nà'ab ^a	Binaba	"prince"
Gàarv ⁺	Garu	Hausa <i>gàaruu</i> "wall around a town
		or compound"
Wìid-nà'ab ^a	Widinaba	"chief of the clan <i>Wìid</i> a"
Pūsıg ^{a/}	Pusiga	"tamarind"
Τīl ^{lε/}	Tilli	"tree trunk" cf Toende Kusaal <i>tíl id</i>
		(Hasiyatu Abubakari, p.c.)
Dènnug ^o	Denugu	No known meaning
Pùlıma Kú'èm ^m	Pulimakom	"water by <i>pùlıma</i> + (grass sp)"
Wìdāan ^a	Widana	for <i>Wìd-dāan</i> ^a "Horse-Owner", title
		of a chief's <i>nɔ̄-dí</i> 'ə̀s ^a "linguist."
		Usual informal name for
		Pulimakom, as the seat of this
		particular linguist.

Mì'isıg ^a	Missiga	Explained locally as from "mission" i.e. the Assemblies of God mission around which the village grew; perhaps influenced by <i>milisug²</i> "dunking" (not in my materials, but cf Toende <i>milisuk</i> "baptism", KED <i>milis</i> "duck someone")
Sā-bíl ^a	Zebilla	"small grass"?
Sā-píəlìg ^a	Sapeliga	" <i>Isoberlinia Doka</i> " ("white grass")
Kòl-tā'amís ^ɛ	Kultamse	"dog almonds" ("river shea trees")

WK thought that the first component of the names $S\bar{a}$ -bíl^a and $S\bar{a}$ -píəlìg^a was a plant used in making brooms. $S\bar{a}a^{=/}$ does not occur in my data (only $s\bar{a}a^{=}$ "rain") or in Niggli's dictionary, but the cognate $s\acute{a}ag\acute{a}$ is glossed in his Farefare dictionary as "a kind of grass used for making brooms", and the Mampruli/Dagbani cognate saa refers to a grass *Sporobolus subglobosus A. Chev* (Dagomba Plant Names Blench 2006) used for binding materials together to make mats and traps, and presumably also brooms. Compounds need not have the literal sense of their components 15.7.1, especially with names for plant and tree species: John Turl has located a careful report by an assistant agricultural officer in 1935 which lists among local trees in the Farefare/Nabit area *sapelaga Isoberlinia doka*; it seems likely that this is the meaning of $s\bar{a}$ -píəlìg^a. The report also lists *ta-anga* "Butyrospermum parkii" (Kusaal *tá'aŋ^a*), and *kulta-anga* "Andira inermis", so $k\dot{2}$ -*tá'aŋ^a* is probably this "dog almond."

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Kὑlugúŋ<sup>5</sup> Kulungungu ?? kɔ́l-gùŋ<sup>a</sup> "river-kapok"
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Turl cites a Bisa-speaking informant who suggests a more plausible origin in Bisa "Kuurgongu", "Crooked Sheanut Tree." Prost's grammar of Bisa confirms that Bisa adjectives follow head nouns, and his dictionary cites $k\acute{u}r$ "karité." The second element is probably a simplex form of Prost's gongeda "arqué" ($ng = [\eta]$); 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 <i>àgزاز^{اد} "</i> upwards"; for the
		H toneme see <u>7.3</u> .
Τùθn ^{nε}	Toende	Kusaasi area west of the White
		Volta; cf <i>tùθn^{nε} "in front", "West"</i>

For points of the compass, WK gave as accepted terms

Ν	Bārvg ^{ɔ/}	"Bisa country"
Е	Ňyá'aŋ ^a	"behind"
S	Zuēya+	"hills" (i.e. the Gambaga Escarpment)
W	Τùθn ^{nε}	"in front"

reflecting the traditional Kusaasi West-facing orientation. For "South" and "North", KB has respectively *ya-dagɔbug yà dàgɔ̀bug*^a "your left hand" and *ya-datiuŋ yà dàtìuŋ*^o "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 $-g^{2}$. These can be nonce-formations and need not necessarily refer to any established political entity or permanent settlement:

Kùtāỵŋ ^{ɔ/}	any place inhabited by the clan <i>Kòtām^{ma/}</i>
Kūsáùg ^o	"Kusaasiland"
Мว்วg ^ว	"Mossi country"
	(<i>Mòɔg Ná'àb</i> ª "Moro Naba, King of the Mossi")

Places outside $K\bar{v}s\dot{a}\dot{v}g^{2}$ generally do not have Kusaal names (an exception is $S\bar{a}nk\dot{a}\check{a}ns^{\epsilon}$ "Sankanse" in Burkina Faso.) For "Accra" the Twi-derived name Ankara is usual. Niggli's dictionary has Toende Wa'arvk for "Ouagadougou", but I could not elicit any Agolle equivalent. The form looks like $*W\bar{a}'ad\dot{v}g^{2}$ "Place of the Dancers $(w\bar{a}'ad(b^{a}))$ ", 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 $k\bar{j}lvg^a$ "river"; presumably this is simply because it is the only real river within $K\bar{v}s\dot{a}\dot{v}g^{3}$.

29.4 Ethnic groups and clans

Names for the group belong to the ${}^{a}|b^{a}$ or $g^{a}|s^{\epsilon}$ classes (apart from Zàngbèog⁵ "Hausa" and Nàsāara⁺ "European") and their language to the l^{ϵ} subclass of $r^{\epsilon}|a^{+}$. The place they inhabit has the suffix $-g^{5}$.

Ethnic gp sg Kūsáa ⁼ Ňwāmpūrıg ^{a/} Bārıg ^{a/} Mùa ⁺ Dàgbān ^{nɛ/} Bìn ^{nɛ} Sìmīig ^a Yàaŋ ^a Gōríŋ ^a Yārıg ^{a/} Zàngbɛ̀og ⁵ Bùlıg ^a Tàlıŋ ^a Nàbıd ^a Bùsáŋ ^a	Ethnic gp pl Kōsáàs ^ɛ Ňwāmpūrıs ^{ɛ/} Bārıs ^{ɛ/} Mòɔs ^ɛ Dàgbām ^{ma/} Bìm ^{ma} Sìmīis ^ɛ Yàaňs ^ɛ Gōrís ^ɛ Yārıs ^{ɛ/} Zàngbɛ̀ɛd ^ɛ Bùlıs ^ɛ Tàlıs ^ɛ Nàbıdıb ^a Bòsáàňs ^ɛ	Language Kōsáàl ^ɛ Ňwāmpūrıl ^{ɛ/} Bāt ^{ɛ/} Mòɔl ^ɛ Dàgbān ^{nɛ/} Bìn ^{nɛ} Sìmīil ^ɛ Yàan ^{nɛ} Gōrín ^{nɛ} Yāt ^{ɛ/} Zàngbɛ̀ɛl ^ɛ Bùl ^{lɛ} Tàlın ^{nɛ} Nàbır ^ɛ Bùsáàňl ^ɛ	Place Kōsáòg ⁵ Ňwāmpūrvg ^{5/} Bārvg ^{5/} Mò5g ⁵ Dàgbāµŋ ^{5/} Bìµŋ ⁵ Sìmīug ⁵	Kusaasi Mamprussi Bisa Mossi Dagomba Moba Fulɓe Yansi Farefare Yarsi Hausa Bulsa Tallensi Nabdema Bisa
-				
Nàsāara+	Nàsàa-nàm ^a	Nàsāal ^ɛ		European
Kàmbùŋ ^a	Kàmbùmıs ^ɛ	Kàmbùnır ^ɛ		Ashanti

 $B\bar{a}r\iota s^{\epsilon/}$ is "Bisa" generally, not just the Bareka; $B\iota m^{ma}$ similarly is "Moba" in general, and not only the Bemba (WK.)

Note

Τὺθη ^{ηε}	"Toende area"
Τὺθηηιr ^ε	"Toende dialect of Kusaal"
Àgɔ̀l ^{lε}	"Agolle area"
Àgɔ̀l ^{lε}	"Agolle dialect of Kusaal"
Ò pi̯àň'ad Àgɔ̀l. заn speak:IPFv Agolle.	"She speaks Agolle Kusaal."

29.4

Singular	Plural	Place	
Kὺtān ^{nɛ/}	Kùtām ^{ma/}	Kùtāỵŋ ^{ɔ/}	WK's clan
Zùa ⁺	Zùθs ^ε		
	Zu̯à-sābιlís ^ε		subclans
	Zuà-wìib ^a		
or	Zuà-wìis ^ɛ		
Wìid ^a	Wìid-nam ^a	Wìidvg ^o	
Nàbıd ^a	Nàbıdıb ^a	Nàbıdvg ⁵	
Gòɔg ^a	Gòɔsɛ	Gòɔgɔ	
Sà'dàbùa+	Sà'dàbùes ^ɛ -bùeb ^a	Sà'dàbòɔg ^ɔ	
	Nà'dàm ^{ma}	Nà'daỵŋ ^{>}	
	Gùm-dìm ^a	Gὺm ^{mε}	

Kusaasi clan names include, among many others:

Nàbid^a as a clan name is different from the ethnic group "Nabdema" (WK.)

29.5 Trees and fruits

Tree names are almost all $g^a|s^{\varepsilon}$ class, like $t i \iota g^a$ "tree"; their fruits belong to classes $r^{\varepsilon}|a^+$ or $g^{2}|d^{\varepsilon}$.

Tree sg	Tree pl	Fruit sg	Fruit pl	
āaňdıg ^a	āaňdιs ^ε	āaňdır ^ɛ	āaňda+	Vitex doniana
dùaň+	dòɔňsɛ	dòɔňgɔ	dòɔňd ^ɛ	dawadawa
gāaň ^{=/}	gāaňs ^{ɛ/}	gāňr ^{ε/}	gāňyá ⁺	Nigerian ebony
gùŋ ^a	gὺmιs ^ε	gὺm ^{mε}	gòma+	kapok
kìkàŋ ^a	kìkàmıs ^ɛ	kìkàm ^{mε}	kìkàma+	fig tree
kpùkpàrıg ^a	kpùkpàrιs ^ε	kpùkpàr ^ɛ	kpùkpàra ⁺	palm
lí'əŋ ^a	lī əmísε	lí'əm ^{mε}	lī'əmá+	Ximenia americana
pūsıg ^{a/}	pūsıs ^{ɛ/}	pūsır ^{ɛ/}	pūsá+	tamarind
sīsíbìg ^a	sīsíbìs ^ɛ	sīsíbìr ^ɛ	sīsíbà+	neem
tá'aŋ ^a	tā'amís ^ε	tá'am ^{mε}	tā'amá+	shea butter
tὲ'εg ^a	tὲ'εs ^ε	tè'og ^o	tὲ'εd ^ε	baobab
vúøŋ ^a	νūθmís ^ε	νúθr ^ε	vūáa ⁼	red kapok

The stems for "red kapok" and its fruit are slightly different: tree *vuegm- fruit *vueg-

29.6 Colours

Kusaal, like many local languages, has a basic three-colour system:

zὲň'og ^ɔ	"red"	all reddish shades
sābılíg ^a	"black"	all darker shades of colour
pìəlıg ^a	"white"	all lighter shades of colour

 $Wiug^{\circ}$ "red" seems to be synonymous with $z \check{\epsilon} \check{n}' o g^{\circ}$. Kusaal has many more or less standardised expressions for colour (e.g. $w \check{v} v t \acute{a} m p \check{v} v n \check{\epsilon}$ "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.

29.7 Time

Answers to *bò-wìn*^{nε} "what time of day?"

bε̄ogυ-n ^{ε/}	"morning"	àsùbá+	"dawn" (← Arabic)
bèkèkèoňg ^o	"very early morning"	zàam ^m	"evening"
wìn-līir ^ε	"sunset"	yú'טp ^כ	"night"
wìn-kɔ̀ɔňrɛ	"sunset"	nīntāŋ ^{a/}	"heat of the day, early
			afternoon"

 $Win^{n\epsilon}$ "time of day" (cf winnig^a "sun") always has a predependent. There are no traditional expressions for clock time; NT/KB adapts from Hausa:

kérıfà àtáň'	"three o'clock"	Hausa:	ƙarfèe ukù

The deictic particle $\breve{n}w\dot{a}$ "this" is commonly attached to time words:

zàam ňwá	"this evening"	[za:ma]
yú'טŋ ňwá	"tonight"	[yʊ̯ːŋːa]

The day begins at sunrise. Answers to *būn-dáàr*^ε "which day?":

zīná+	"today"	sù'øs ^a	"yesterday"
bēog ^o	"tomorrow"	dāar ^ɛ	"day after tomorrow/
			day before yesterday"

Selected lexical fields

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 ^ε	"Monday"
Àtàláatà dáàr ^ɛ	"Tuesday"	Àlárıbà dáàr ^ɛ	"Wednesday"
Àlàmíisì dáàr ^ɛ	"Thursday"	À(r)zúmà dáàr ^ε	"Friday"
Àsíbıtì dáàr ^ɛ	"Saturday"		

 $D\bar{a}ar^{\epsilon}$ "day" is "twenty-four hour period" (*nīntāŋ* "day as opposed to night") and is used with predependents to specify a particular day; the word $d\bar{a}b\iota sur^{\epsilon}$ is also used for "day" in counting periods of time, occurring usually in the plural:

Dābá àyópòẹ dáàr kà fù ná lĒb nā.	"You'll come back in a week."
Dābá àyɔ́pɔ̀ẹ̯ kà fù ná lɛ̄b nā.	"You'll come back for a week."
Àláasìd dáàr kà fù ná lĒb nā.	"You'll come back on Sunday."
Tì kpślìm ànínā dábısà bī əlá.	"We stayed there a few days."

Longer periods of time:

dābá àyźpże	"week"	also <i>bákpàeू</i> ← Hausa <i>bakwài</i> "seven"
ňwādıg ^{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:

sēoňg ^o	"rainy season"	<i>úun^{nε}</i>	"dry season"

The Harmattan part of $\dot{u}un$ is called $s\bar{a}p\dot{a}l^{|\epsilon}$ and the very hot humid part before the rains is $d\dot{a}w\dot{a}l\iota g^{a}$.

yὺυm ^{mε}	"year"	dūnná+	"this year"
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"Time" in general is the irregular noun $s\bar{a}\eta\dot{a}^+$ pl $s\bar{a}ns\dot{a}^+$ cb $s\bar{a}n$ -; "time of day" is $win^{n\epsilon}$; "time" as in "several times" is $n\bar{c}r$ <u>15.4.2.4</u>. Examples with $s\bar{a}\eta\dot{a}^+$:

sān-kán <i>è</i> ?	"when?"	sān-kán lā	"at that time"
sāŋá kám	"all the time"	sāŋá bèdugū	"a long time"
sānsá bèdugū	"many times"	sāŋá bī əlá	"for/in a short time"

30 Texts

30.1 Balaam's Donkey

From the 2016 Kusaal Bible, Numbers 22:21-35.

 Balaam da duoe bɛogun lɔɔ o buŋu dɔl Moab na'ayikpɛm la keŋ.

 Balaam dá dùe bɛ̄ogu-n_ Ø lɔ́ɔ_ò bùŋu_ Ø dɔ̃l Moab

 Balaam TNS rise morning-LOC CAT tie 3AN donkey:SG CAT accompany Moab

 ná'-yī-kpɛ́m lā_Ø kɛ́ŋ.

 chief-house-elder:PL ART CAT go.

 "Balaam got up in the morning, saddled his donkey and went with the courtiers of the king of Moab."

Amaa Wina'am svnf da duoe nɛ on keŋ la, ka Zugsɔb maliak kidigi zi'en suor la zug ye o geŋ o. Àmáa Wínà'am súňf dà dùe nɛ̄ ɔ́n kɛ̄ŋ lā, kà Zūg-sɔ́b máli̯āk

But God heart:sg TNS rise with 3AN:NZ go ART, and Head-EMPTY.AN angel:sg $k\bar{l}d\iota g\iota \sigma z' \dot{\sigma} n s\bar{u}\sigma r l\bar{a} z' dg y' \dot{\sigma} \sigma g\bar{l}g \cdot \dot{\sigma} \sigma$.

meet CAT stand road:sg ART upon that 3AN obstruct 3AN.OB.

"But God was angry that he went, and an angel of the Lord met him and stood in the road to obstruct him."

Balaam da ban'adnε o buŋ, ka o yammis ayi' dɔl o. Balaam dá bàň'ad nέ ò bùŋ, kà ò yàmmıs àyí' dɔll·ó ø. Balaam τNS ride:IPFV FOC 3AN donkey:SG, and 3AN slave:PL NUM:two accompany 3AN.OB. "Balaam was riding his donkey, and his two slaves accompanied him."

Bυŋ la da nyε Zugsɔb maliak la ka o zi'e suor la zug ka fuoe sυ'υgυ zanl o nu'ugin, ka o buŋi kpɛn' mɔɔɡi gaad.

Bùŋlā dá ňy
k Zūg-sóbmálįāk lá kà ò zí'esū
orlā zúgDonkey:sg ART TNS see Head-EMPTY.AN angel:sg ART and 3AN be.standing road:sg ART upon
kà fúesù'vgv_ø záňlò nú'ugī-n, kà ò búŋì
ø kp
kň'and draw knife:sg CAT have.in.hand 3AN hand:sg-loc, and 3AN cut.across CAT enter
mōɔgı_ø gáàd.gáàd.

grass:SG CAT pass.

"The donkey saw the angel of the Lord standing in the road with a drawn sword in his hand and cut across into the grass and went on."

Ka Balaam pin'ili bv'vd bvŋ la ye o lɛb suor pvvg.
Kà Balaam pīň'ili ø bū'vd búŋ lā yɛ́ ò lɛ́b sūer púòg.
And Balaam begin cat beat:IPFV donkey:SG ART that 3AN return road:SG inside.
"Balaam started beating the donkey to make it return to the road."

Zugsɔb maliak la da tɔlisi zi'en lɔmbɔn'ɔd ayi' banɛ ka ba mɛ' zaŋguoma ayi' bɛŋ, ka suobaanlig bɛɛ li teŋsʋk la.

Zūg-sóbmálįāklā dá tòlusu ø zí'àn lòmbò'od àyí'bánì kà bà méHead-EMPTY.AN angel:SG ART TNS do.next CAT stand orchard:PL NUM:two REL.PL and 3PL buildzàngùema àyí' ø bēŋ, kà suā-báaňlìg béɛ lì tèŋ-sōk lā.wall:PLNUM:two CAT demarcate, and road-narrow:SG EXIST 3INAN middle:SG ART."The angel of the Lord then stood where dividing walls had been built between twoorchards and there was a narrow path between them."

Buŋ la n da nyɛ Zugsɔb maliak la, o da miee labin zaŋguom la urig Balaam nɔbir.Buŋlá n dà ňyɛ Zūg-sɔ́bmáli̯āklā, òdà mie____ølàbınDonkey:sg art nz tns see Head-EMPTY.AN angel:sg art, JAN tns squeeze cat hide.behindzàngùemlā ___øūrugBalaam nɔ́bir.

wall:sg Art cat scrape Balaam leg:sg.

"When the donkey saw the angel of the Lord, it squeezed against the wall and scraped Balaam's leg."

Ka o lɛm bʋ' o ya'as.
Kà ò lɛ́m bʋ́'·o_ø yá'às.
And ȝĂN again beat ȝĂN.OB again.
"And he beat it again."

Zugsəb maliak la da len vurigi təlis zi'en tuon zin'ikane ka sə' ku nyani fendig datiun bee dagəbuga.

Zūg-sóbmáljāk lā dá lèm vūruguøtölusøzíň'-kànuHead-EMPTY.AN angel:sg ART TNS again shift.along CAT do.next CAT stand in.front place-REL.sgkàsɔ̄'kúňyāŋuøfēňdug dátùun bēɛ dágòbugā +ø.

and INDF.AN NEG.IRR prevail CAT turn right or left NEG.

"Then the angel of the Lord moved along to stand in front of a place where nobody could turn to the right or the left."

Bυŋ la da lɛn nyɛ Zugsɔb maliak la, o da digin nɛ Balaam wʊsa teŋin, ka Balaam sʊnf duoe hali ka o vɔb bʊŋ la nɛ o dansaar.

Bùŋ lá ơ dà lèm ňyē Zūg-sób máliāk lā, ò dà dìgin nē Balaam Donkey:sg ART NZ TNS again see Head-EMPTY.AN angel:sg ART, 3AN TNS lie.down with Balaam wūsa tēŋi-n, kà Balaam súňf dūe hālí kà ò vōb búŋ lā né all ground:sg-LOC, and Balaam heart:sg rise so.far and 3AN strike donkey:sg ART with ò dànsàar.

заn staff:sg.

"When the donkey again saw the angel of the Lord, it lay down along with Balaam on the ground, and Balaam was so angry he beat the donkey with his staff."

Ka Zugsɔb kɛ ka buŋ la ya'ae o nɔɔri pian' Balaam ye, "Bɔ kimm ka m maalif ka li kɛ ka fu bu'um nɔɔr atan' sa?"

Kà $Z\bar{u}g$ -sób ké kà bùŋ lā yá'e ò nōɔrı \emptyset pịāň' Balaam y $\bar{\epsilon}$, And Head-EMPTY.AN let and donkey:sG ART open 3AN mouth:sG CAT speak Balaam that Bō kímm kà m máalì f kà lì ké kà fù bú'u m what IDEO and 1sG make 2sG and 3INAN let and 2sG beat 1sG nōɔr átáň' sá ⁺ \emptyset ? time:sG NUM:three hence co?

"Then the Lord caused the mouth of the donkey to open to speak to Balaam: 'Just what have I done to you to make you beat me these three times?'"

Balaam da lɛbis o ye, "Fʋ mɔrim nɛ maan galim! M ya'a mɔrin sʋ'ʋgʋ m nu'ugin m naan kʋʋnif nannanna."

Balaam dá lèbis· \bar{o} g $y\bar{\epsilon}$, $F\dot{v}$ $m\dot{r}\bar{i}$ m $n\bar{\epsilon}$ g $m\dot{a}\dot{a}n$ g $g\dot{a}lim!$ \dot{M} $y\dot{a}'$ Balaam TNS reply 3AN.OB that, 2SG have 1SG FOC CAT make:IPFV CAT joke:IPFV! 1SG if $m\bar{r}r_{i}-n$ $s\dot{v}'\dot{v}gv$ m $n\dot{u}'ug\bar{i}-n$, m $n\bar{a}an$ $k\bar{v}v-ni$ f $n\bar{a}nn\dot{a}-n\bar{a}$. have-DP knife:SG 1SG hand:SG-LOC, 1SG then kill-DP 2SG now.

"Balaam replied: 'You are holding me in contempt! If I'd had a sword in my hand, I would have killed you now.'"

Bυŋ la da lɛbis Balaam ye, "Man ka'anɛ fu mɛŋ buŋ onɛ ka fu ban'ad saŋa wusa ti paae zinaa? Fu nam mi' nyɛ ka m maal anwa tisi fɔɔ?"

Bùŋ lā dá lÈbis Balaam yē, Mān kā' nế fù mēŋ búŋ ónì kà fù Donkey:sg ART TNS reply Balaam that, ISG.CNTR NEG.BE FOC 2SG self donkey:sg RELAN and 2SG bāň'ad sāŋá wūsa ø tí pāe zīnáa +ø +ø? Fù nám mī ø ňyế kà m ride:IPFV time all cAT after reach today NEG PQ? 2SG already know CAT see and ISG máàl àňwá ø tísì fò +ø?

make thus CAT give 2SG CQ?

"The donkey replied to Balaam: 'Am I not your own donkey that you have always been riding up until today? Have you ever known me to behave like this?'"

Ka o lɛbis ye, "Ayei!" Kà ò lɛ́bìs yɛ̄, Áyìı! And ȝམས reply that No. "He replied, 'No.'"

Ka Zugsɔb yɔ'ɔg Balaam nini ka o nyɛ maliak la zi'e suor la teŋsvk ka fuoe sv'vgv zanl. Kà Zūg-sɔ́b yɔ́'ɔ̀g Balaam nínì kà ò ňyɛ̃ máli̯āk lā ø zí'e sūər And Head-EMPTY.AN open Balaam eye:PL and 3AN see angel:sg ART CAT be.standing road:sg lā tɛ́ŋ-sūk, kà fúe sv̀'vgv ø zāňl.

ART centre:sg and draw knife:sg cat have.in.hand.

"Then the Lord opened Balaam's eyes so he could see the angel standing in the middle of the road with a drawn sword in his hand."

Ka o igin ka vanbin teŋin.
Kà ò ígìn kà vábìn tēŋı-n.
And 3AN kneel and lie.prone ground:SG-LOC.
"And he knelt down and lay face down."

Zugsɔb maliak la da bu'os o ye, "Bɔ ka fʋ bʋ' bʋŋ la nɔɔr atan' sa? M kena ye m giŋif bɔzugɔ ken la ka' sʋ'ʋm m nini nii. Nɔɔr atan' ka bʋŋ la nyɛɛm ka yuk. Bʋŋ la ya'a pʋ yukinɛ, anwaa m kʋʋnif ka basin bʋŋ la."

máliāk lā dá bù'əs ō ø kà fù bū' bún Zūg-sób νē, Βź lā Head-EMPTY.AN angel:SG ART TNS ask 3AN.OB that, What and 2SG beat donkey:SG ART กวิวท átáň' sá +ø? M kέ nā yé m gīní f bī zúgī kēn lā time:sg NUM:three hence cq? 1sg come hither that 1sg obstruct 2sg because go:ger Art m nīní nīi +ø. N52r kā' súm átáň' kà bùŋ lā ňyés m kà NEG.BE good:ABSTR 1SG eye:PL LOC NEG. Time:SG NUM:three and donkey:SG ART see 1SG and yūk. Bùn lā yá' pū yūki-ní àňwáa m kūv-ní f kà básī-n deviate. Donkey:sg ART if NEG.IND deviate-DP thus 1sg kill-DP 2sg and release-DP búŋ lā.

donkey:sg art.

"The angel of the Lord asked him: 'Why have you beaten the donkey these three times? I came here to obstruct you because your journey is not good in my eyes. Three times the donkey saw me and turned aside. If the donkey had not turned aside, I would have killed you and spared the donkey."

Texts

Balaam da lebisi yel Zugsob maliak la ye, "M tum taal, m pa'a pu ban ye fu zi'ene suorin la ye fu geni ma. Nannanna li ya'a pu malisi fo m na lɛbi kul." Balaam dá lèbisi ø yél Zūg-sób máliāk lā vē, À túm táàl, m pá' Balaam TNS reply CAT say Head-EMPTY.AN angel:SG ART that, 1SG work fault:SG, 1SG TNS рū vέ fù zí'e nē sūer(-n lā yć fù gīní bán mā +ø. NEG.IND realise that 2SG be.standing FOC road:SG-LOC ART that 2SG obstruct 1SG NEG. fɔ̄ +ø, m̀ ná lɛ̄bı ʃ ø kūl. Nānná-nā, lì yá' pū mālisi Now. 3INAN if NEG.IND be.pleasing 2SG NEG, 1SG IRR return CAT go.home. "Balaam replied to the angel of the Lord: 'I have transgressed. I did not realise that you were standiing in the road to obstruct me. Now, if it is not pleasing to you, I will return home.'"

Ka maliak la lɛbisi yɛl Balaam ye, "Dɔl nidib la keŋ, amaa yɛlim nɛ man ye fυ yɛl si'el ma'aa."

but say:IMP FOC 1SG:NZ that 2SG say INDF.INAN only.

"But the angel replied to Balaam: 'Go with the people, but say only what I tell you to say.'"

Ka Balaam dɔl Balak na'ayikpɛm la keŋ.Kà Balaam dɔ̄lBalak ná'-yī-kpɛ́mlā _ ø kɛ́ŋ.And Balaam accompany Balak chief-house-elder:PL ART CAT go."So Balaam went with Balak's courtiers."

30.2 The Three Murderers

This story is from *Kusaal Solima ne Siilima* p16. It is clearly related to Chaucer's *Pardoner's Tale*; the fable is in fact familiar throughout Europe, Asia and Africa, and is probably ultimately derived from a Buddhist *Jātaka* story. (Hamel, Mary, and Charles Merrill. "The Analogues of the 'Pardoner's Tale' and a New African Version." *The Chaucer Review*, vol. 26, no. 2, 1991, pp. 175–183.)

The style is much less formal than in the passage from KB above.

NING KUUDIBA ATAN'."The three murderers."Nīn-kúvdìbáàtáň'.Person-kill:AGT:PL NUM:three.

Dapa atan' n da be. Ba da ane dap kanda su'unga. Dāpá_àtáň' n dá bè. Bà dà à nē dáp-kāňda súŋā. Man:PL NUM:three CAT TNS EXIST. 3PL TNS COP FOC man-tough:PL well. "There were once three men. They were really tough men."

Ka daar yinni ka ba la'asi zin'ini gban'e ye ba duom ia budaalim la'ad n ginni kuum nidib ma'aa ka da lem tum si'ela.

Kà dāar yīnní kà bà lá'asì \emptyset zíň'inì \emptyset gbāň'e yé bà dúèm \emptyset And day:sg one and 3PL gather CAT sit CAT grab that 3PL rise:IMP CAT $j\bar{a}$ búdàalım lá'àd n gīnnı \emptyset kū nīdıb má'àa seek manliness goods:PL CAT wander:IPFV CAT kill person:PL only kà dā lém tòm sī'əla ⁺ \emptyset .

and NEG.IMP again work INDF.INAN NEG.

"One day they sat down to meet and decided to go and find some weaponry and go round looking to kill people so as never to have to work again."

Ba sid due ia su'us ne zan'ana ne tiraad ne piima ne lu'ad, ne kpana ne mali su'unga n pin'ili ginni ied nidib ye ba ya'a nye so' ban ku.

Bà sìd dùe ø iā sú'ùs nē záň'anà nē tí-dāad nē pīmá nē 3PL truly rise CAT seek knife:PL with bludgeon:PL with bow:PL with arrow:PL with lú'àd. málì súŋā n pīň'ili 🧔 gīnni nē kpāna nē ø īəd nīdıb quiver:PL with spear:PL with gun:PL well CAT begin CAT wander:IPFV CAT seek:IPFV person:PL yé bà yá' ňyē sɔī' bān kū.

that 3PL if find INDF.AN 3PL.CNTR kill.

"So indeed they went and found lots of swords and bludgeons and bows and arrows and quivers and spears and guns and started out looking for people so if they found someone they would kill him."

Ba giligi ala ne nwadisa atan' ne dabisa atan' ba po nye nidii na kuu. Ka kpelim mor ken ne ken ne ken.

Bà gìligí àlá nē ňwādısá àtáň' nē dábisà àtáň'. Bà pũ ňνē 3PL go.round thus with month:PL NUM:three with day:PL NUM: three. 3PL NEG.IND find ø ná kūv ⁺ø. Kà kpélìm mōr kēn nē kēn nīdı nē kēn. person:sg cat IRR kill NEG. And remain have go:geR with go:geR with go:geR "They went round like this for three months and three days and didn't find a person to kill. They carried on walking and walking and walking."

Daba anu daar ba nye ne lallisa ka si'el zie sabili wuu nidne, ka ba kpeem la ye ba kem kuu o, ye o sob ya'a pun ton'e ka morne lauksia'a wusa ba na nyangi kuu o. Dābá ànū dáàr bà ňyē nē lāllí sà kà sī'əl zí'è sābíllì ø Dav:PL NUM: five day:SG 3PL find with far hence and INDE.INAN stand black:SG CAT wūv nīd nē, kà bà kpēcňm lā yé bà kém ø kú o ø, vέ ò sīb like person:sg like, and 3PL elder:sg ART that 3PL go:IMP CAT kill **JAN.OB**, that JAN EMPTY.AN vá' pùn túň'e kà mɔr nɛ láuk-sī a wūsa, bà nà ňyāŋı 🧔 kú·o 🦪 ø. if already be.able and have FOC item-INDF.INAN all, 3PL IRR prevail CAT kill 3AN.OB. "On the fifth day they saw something standing in the distance, black like a human being, and the eldest of them said that they should go and kill him; when he himself was ready and had every piece of equipment, they would be able to kill him."

Ka onga gingid kpe, ka onga gingid kpe, ba ti keng paae nye ka li ka'a nida, ka ane boto ka ligidi pe'el ma'aa ma'aa ma.

Kà $\partial n\bar{a}$ $g\bar{n}_{l}d$ $kp\bar{\epsilon}$, kà $\partial n\bar{a}$ $g\bar{n}_{l}d$ $kp\bar{\epsilon}$, bà tì $k\bar{\epsilon}n_ø$ And DEMST.AN intercept:IPFV there, and DEMST.AN intercept:IPFV there, 3PL after go CAT $p\bar{a}e_ø$ $ny\epsilon$ kà lì $k\bar{a}$ ' $n\bar{l}da$ $^+ø$, kà a $n\bar{\epsilon}$ $b\bar{c}tv$ kà $l\bar{g}_{l}dl$ $p\epsilon'\epsilon l$ reach CAT see and 3INAN NEG.BE person:SG NEG, and COP FOC sack:SG and money fill mà'aa ma'àa ma'.

only only IDEO.

"And this one blocked this way, and that one blocked that way, but after they got there they saw that it wasn't a person but a bag chock full of money."

Ka ba ye, Ato, ka nannanna nwa, ti ye ti ning ligidi nwa walla? Kà bà yē, Àtò, kà nānná-nā ňwá, tì yé tì níŋ līgıdı ňwá wālá ⁺ø? And 3PL say, So.then, and now this, 1PL that after do money this how cq? "They said: 'Well, now! What are we going to do with this money?'"

Ka ba ye, ba na pudigne. Amaa ba ye li nar ka ba yis ligidi la n keng da'a daam na nu yiiga ka nyaan pudig ligidi la.

Kà bà yē, bà nà pūdıg nē. Àmáa bà yé lì nár kà bà yīs līgıdı lā n And 3pL say, 3pL IRR share FOC. But 3pL that 3INAN must and 3pL extract money ART CAT kēŋ_ø dá' dāam_ø ná nū yīigá kà ňyāan pūdıg līgıdı lā.

go CAT buy beer CAT IRR drink firstly and next share money ART.

"And they said they'd share it. But first they said they should take some money out to buy beer to drink, and then share out the money." Ka yis ligidi la bi'ela ye biig la kem da' yoor na ka ba nu.

Kà yīs līgıdı lā bī əlá yā bīig lā kém ø dá' yōvr ná kà bà nū. And extract money ART little that child:sg ART go:IMP CAT buy jug:sg hither and 3PL drink. "And they took out a little of the money so the youngest could go and buy a jug so they could drink."

Biig la ken la o ten'esidne on na nnig [sic] si'em ku bane kpelim anniga [sic] la ka vaae ligidi la wusa wusa n su'e, o yeli o meng ye, o na da' ne daam ka bo tikuudim n los daamin la n paae tii ba ka ba nuu kpi ka o su'e ligidi la wusa. nà nīŋ sī əm ø kū bánì kpèlim lā, ò tèň'ɛsıd nē ón Bīig lá ø kēn Child:sg art NZ go:IPFV ART, 3AN think:IPFV FOC 3AN:NZ IRR do INDF.ADV CAT kill REL.PL remain àní nā lā, kà váe līgīdi lā wūsa wūsa n sū'e, ò yèlí ò mēŋ yē, there ART, and gather money ART all CAT OWN, 3AN Sav 3AN self that. all ò nà dā' nē dāam, kà bó tì-kūvdím n lós dāam(-n lā 3AN IRR buy FOC beer, and seek medicine-killing CAT immerse beer-LOC ART n pāe jø tíi bá kà bà nūu 🧔 🖉 kpí kà ò sū'e līgidi lā wūsa. CAT reach CAT give 3PL.OB and 3PL drink CAT die and 3AN own money ART all. "As the youngest was travelling, he was thinking how he might kill those who stayed in that place and take absolutely all of the money as his own; he said to himself that he would buy the beer, and look for a poison to put into the beer and go and give it to them to drink and die so he'd possess all of the money."

Ka sid da' daam la ka bo tikuudim n los.

Kà síd dà' dāam lā, kà bó tì-kūvdím n lós.And truly buy beer ART, and seek medicine-killing CAT immerse."And indeed he bought the beer and sought poison to put in it."

Ziisige, ka baba yi'i la kpellim la, me gban'e ne ye ba ku biig la keng daam la da'ab la ka me su'e ligidi la.

 $Z\overline{r}$ isí $g\overline{\epsilon} + \emptyset$, kà bà bàyí' lá \emptyset kpèlım lā mé gbāň'e nē yé bà kū NEG.KNOW NEG, and 3PL NUM:two ART NZ remain ART also grab FOC that 3PL kill bīig lá \emptyset kēŋ dāam lā dá'àb lā, kà mé sū'e līgıdı lā. child:sg ART NZ go beer ART buy:ger ART, and also own money ART.

"Unbeknownst, the two who had stayed behind had also decided to kill the youth who

had gone to buy the beer and themselves keep the money."

Texts

Biig la n mor daam la paa na la, ka onga kiak [sic] kpe, ka on kiak [sic] kpe, n kia o ku ka yu'un zang daam la nu wan wan, li pu yuuge, ka ba wusa wusa me kpelim kpi zin'i kan la noo ka ba so'o so' pu nyangi paam la'af la baa yinni mori kule ba yaane. lá n mōr dāam lā ø pāa nā Bīia lā, kà ònā kiá kpē. Child:sg ART NZ have beer ART CAT reach hither ART, and DEMST.AN cut here, kà л kiá kpē, n kí o ø ø kū, kà yū'un zán dāam lā ø and SAN.CNTR cut here, CAT cut 3AN.OB CAT kill, and then take beer ART CAT nū wán wán. lì סֿמ yúugē +ø, kà bà wūsa wūsa mé kpélìm kpì drink IDEO IDEO, 3INAN NEG.IND delay NEG and 3PL all all also immediately die kà bà sī' zìň-kàn lā nóo sī' סֿמ ňyāni ø páàm lā'af lā place-dem.sg art exactly and 3PL INDF.AN INDF.AN NEG.IND prevail CAT receive cowry:sg art báa yīnní ø mōri ø kūlí bà yáanē +ø.

not.one CAT have CAT go.home 3PL house:PL.LOC NEG.

"When the youth arrived back with the beer, this one cut him here and that one cut him there, cutting him to death, and they then picked up the beer and drank it in gulps; before long both of them died immediately in the exact same place, and none of them was able to take even a single coin home."

Din ka Kusaas ye fu ya'a ten'es bee tumbe'ed ye fu tisi fu tiraan, fu maane fu meng ya'as la.

Dìn kà Kūsáàs yế fừ yá' tẽň'ɛs bēɛ tóm bē'ɛd yế fừ tísì JINAN.CNTR and Kusaasi:PL that 2sG if think or act bad that 2sG give fừ tĩráàn, fừ máànní fừ mēŋ yá'às lā.

2SG neighbour:SG, 2SG make:IPFV 2SG self again ART.

"That's why the Kusaasi say: if you think or do evil toward your neighbour, you're doing it to yourself in return."

30.3 Proverbs

These are a selection from *Kusaal Solima ne Siilima* pp38ff; others are cited above in the body of the grammar itself. I have added English proverbs with similar implications where possible; the art of deploying proverbs appropriately is hard, however, and I will be happy to accept corrections.

Benga nobid ka o sob la'adne.Bēŋá nòbid kà ò sōb lá'àd nē.Bean:PL grow:IPFV and 3AN EMPTY.AN laugh:IPFV FOC."Beans grow and their owner is laughing." (Make hay while the sun shines.)

Ku'om kaadi lebisne m geegun.
Kù'om káadì ø lébìs né m gēogu-n.
Water bail:IPFV CAT return FOC 1SG between.legs:SG-LOC.
"Water is bailed and returns between my legs." (Charity begins at home.)

Ku'om zotne bian'ar zug.
Kù'om zót nē biāň'ar zúg.
Water run: IPFV FOC riverbed: sg upon.
"Water runs on mud." (What's in it for me?)

Kuga la'asidne zuorin.
Kūgá là'asıd nē zūerı-n.
Stone:PL gather:IPFV FOC hill:SG-LOC.
"Stones build up on a hill." (The rich get richer and the poor get poorer.)

Awiak seung zi' senne. À-wįāk sēoňg zī' sínnē +ø. PERS-hatch rainy.season NEG.KNOW hawk:PL NEG. "The one hatched in the rainy season doesn't know about hawks." (It's a fool's paradise.)

Po nye saa kuubo, ka nye saa niib. Pō ňyɛ̃ sāa kúʊbɔ̃ ⁺ø, kà ňyɛ̃ sāa níìb. NEG.IND see rain threaten:GER NEG, and see rain rain:GER. "Didn't see the rain coming, but did see the rain." (Easy to be wise after the event.)

Ba pu nokid na'ambinni lobigid naafo. Bà pū nɔkíd nā'-bínnì ø lɔ̃bıgíd náafɔ̄ +ø. 3PL NEG.IND take:IPFV cow-dung:SG CAT throw.at:IPFV cow:SG NEG. "They don't take cow dung and throw it at the cow." (Don't carry coals to Newcastle.)

Zu'om ya'a ye o na lobug, bangim ka o none kugir.
Zū'om yá' yé ò nà lɔ̄bıg, bàŋım kà ò nò nɛ̄ kūgır.
Blind.person:sG if that 3AN IRR throw.at, realise:IMP and 3AN stand.on FOC stone:SG.
"If a blind man says he'll stone you, know that he's got a stone under his foot."
(Be prepared!)

Nong daan fuug tigidne gum ka li po tigid ki'ibo. Nɔ̄ŋ-dáàn fúùg tìgıd nē góm, kà lì pō tígìd kī'ıbɔ́ +ø. Poverty-owner:sG shirt:sG sate:IPFV FOC cotton, and 3INAN NEG.IND sate:IPFV soap NEG. "The poor man's shirt has a lot of material but not a lot of soap." (i.e. wastefulness leads to poverty.)

Balerigu zi' ye o a balerigu, ka tadim mi' ye o tadim.

Bālārugu ø zī'yé ò à bālārugó +ø, kà tādım mī' yé ò [à] tādım.Ugly:sgCAT NEG.KNOW that 3AN COP ugly:sgNEG, and poor:sg know that 3AN COP poor:sg."The ugly man doesn't know he's ugly, but the poor man knows he's poor."(Self-delusion about poverty is not possible.)

Fu ya'a bood tampiing siind, fu po lem zot lieng daug nyoogo.
Fò yá' bɔ̄ɔd támpìiňg sîiňd, fò pō lém zòt líəŋ dáòg ňyɔ̄ɔgɔ +ø.
2SG if want rock:SG honey, 2SG NEG.IND again run:IPFV axe:SG wood:SG sympathy NEG.
"If you're trying to get honey out of a stone, you shouldn't feel sorry for the shaft of the axe." (You can't make an omelette without breaking eggs.)

Moodi pilig ka yu'ada be.

Mɔ̄ɔdı Ø pílìg kà yū'ada bɛ́.
Grass:PL CAT strip.off and rafter:PL EXIST.
"The thatch has come off but the rafters are still there."
(Where there's life there's hope.)

Buribig kunni o ba' yirne nobkoog daar.

Bò-dìbigkúnníòbā'yírnēnōb-kóògdáàr.Goat-young.male:sggo.home:IPFV 3AN father:sghouse:sgwith leg-break:geRday:sg."The kid goes back to his father's house on the day he breaks his leg."

Adi'e buud po zin'i na'ayiree.
À-dī'e būvd pū zíň'i ná'-yīrź +ø.
PERS-receive innocence NEG.IND be.sitting chief-house:SG NEG.
"He who has been declared innocent doesn't hang around the courthouse." (Quit while you're ahead.)

Ba ye balerug ka fu ye zumauk. Bà yē bālērug, kà fù yē zūg-máuk. 3PL that ugly:sg, and 2sg that head-crumpled:sg. "They say 'ugly' and you say 'funnyface.'" (Six of one, half a dozen of the other.) Texts

Bungdaug po kaasidi o tiraan tengine.Bùŋ-dāvgpūkāasídíòtīráàntéŋī-né+ø.Donkey-male:sg NEG.IND cry.out:IPFV 3AN neighbour:sg land:sg-LOC NEG."The jackass doesn't bray in his neighbour's territory."

Kpeem ane te'eg, o tigidne balaya.Kpēɛňm á nē té'èg, ò tìgid nē bálàya.Elder:sg cop Foc baobab:sg, 3AN sate:IPFV Foc stick:PL."An elder is like a baobab - no shortage of sticks."(Uneasy lies the head that wears the crown.)

A proverb related to me by KT:

Sāan-súŋá nē yī-dáànáňsìb.Stranger-good:sg COP FOC house-owner:sg mother's.brother:sg."A good guest is a householder's uncle."

KT explained: Entertaining a guest gives the householder a reason to bring out all his best food and drink and enjoy himself. (The mother's brother is traditionally a generous benefactor to his sister's child.)

31 Vocabulary

Words are ordered by Short Forms. Vowel glottalisation and the distinctions n/\check{n} , $\partial/e/\check{e}/\epsilon$, $i/\iota/\check{i}$, $\partial/o/c$ and $u/v/\check{u}$ are ignored in the ordering; η follows n.

The abbreviations *n adj adv ideo q sv dv* stand respectively for noun, adjective, adverb, ideophone, quantifier, single-aspect verb and dual-aspect verb.

Nouns are listed under the sg. Adjectives are listed under the $g^a|s^{\epsilon}$ class form if extant; if not, $g^{\flat}|d^{\epsilon}$ or $r^{\epsilon}|a^+$. Dual-aspect verbs are listed under the perfective; other forms are listed only if irregular. Regular deverbal nominals are not listed. 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.

Personal and place names are not listed: see <u>29.2</u> <u>29.3</u> for examples.

Binomial names of plants are mostly taken from Haaf (see References); he checked the identifications carefully with botanical experts.

Arabic words have probably all been transmitted via other languages.

A

à- personifier particle (default allomorph) 15.5 āaňdıg^a pl āaňdıs^ɛ cb àaňd- n. black plum tree, Vitex doniana **āaňdır^ɛ** pl āaňda⁺ n. black plum fruit àaňs^ε dv. tear **àbòlá**⁺ *q*. *adv*. how many-fold? àbùyí'+ àbùtáň'+ àbùnāasí+ q. adv. twice, three times etc **à-dàalúŋ⁹** pl à-dàalís^{ε} à-dàalímìs^{ε} cb à-dàalúŋ- n. stork <u>15.5</u> àeň^a ger àaňlím^m sv. be something/somehow <u>19.11.2</u> 7.5 **àeň**⁺ dv. get torn; resultative adj àaňlún³ torn à-gáùňg² plà-gáàňd^ɛ cb à-gāň- n. pied crow <u>15.5</u> àqźl^{lɛ} àqɔ̃lá⁺ adv. upwards $\dot{A}g\dot{z}l^{\epsilon}n$. Agolle district of Kusaasi territory; n. Agolle Kusaal dialect à-kōra-díàm^{ma} pl à-kōra-díàm-nàm^a n. praying mantis 15.5 àlá⁺ adv. thus àlá⁺ q. so many; how many? àláafù⁺ n. health; in greetings <u>28;</u> cf láafiya⁺ ← Arabic العافية ?al-sa:fiya \dot{A} *láas* \dot{a} *dáàr*^{ε} *n*. Sunday \leftarrow Arabic Àlàmíisì dáàr[€] n. Thursday ← Arabic \dot{A} lárıbà dáàr^ɛ n. Wednesday \leftarrow Arabic àlá zùg³ therefore <u>20.2.1</u> **àlópìr^ɛ** pl àlópìya⁺ n. aeroplane \leftarrow English àmáa⁼ but <u>20.2.1</u> ← Hausa ← Arabic àmēŋá⁺ adv. really, truly

Vocabulary

31

àmí amen ← Arabic آمين ?a:mi:n; in replies to greetings 28 à-mús^ɛ pl à-mús-nàm^a n. cat <u>15</u>.5; cf Hausa mussàa id ànāasí⁺ q. four àní⁺ adv. there **àníi**⁼ q. eight àní nā^{+/} adv. there ànínà⁺ adv. promptly ànź'àn^ɛ who? 15.3.4 **àňruŋ^o** pl àňrıma⁺ cb àňruŋ- n. boat (written aaruŋ in the 1976/1996 NT) āňs^ε dv. pluck (leaves) áňsìb^a pl āňs-nám^a cb āňs- n. mother's brother $\bar{a}\bar{n}sig^{\epsilon}/dv$. break at an angle āňsín^a pl āňsís^ɛ cb āňsın- n. (man's) sister's child **àntù'a**⁼ pl àntù' θ s^{ϵ} cb àntu'à- n. lawsuit ànū⁺ q. five àňwá⁺ adv. like this **ānzúrıfà**⁺ n. silver ← Hausa azùrfaa àràkóň'⁺ q. one àrazàk^a pl àrazà'as^ɛ cb àrazà'- Generally used in pl: n. wealth, riches ← Arabic الرزق ?ar-rizg àrazánà⁺ n. heaven ← Arabic الجنة ?al-¡anna Àrzúmà dáàr^ε n. Friday ← Arabic àsée except, unless <u>18 20.2.1</u> ← Hausa sai Àsíbitì dáàr^ε n. Saturday ← Arabic àsīda⁺ adv. truly àsùbá⁺ n. dawn ← Arabic الصباح ?as^r-s^raba:ħ àtáň'⁺ q. three **Àtàláatà dáàr^ε n.** Tuesday ← Arabic $\dot{a}tán\bar{a}^{+/}q$. three exactly Àtínì dáàr^ε n. Monday ← Arabic àtìuk² n. sea ← Hausa tèeku $awana^{+/} adv$. like this àwāe⁺ q. nine **à** $y i'^+ q$. two **áyìι** no <u>21.4.4</u> $ayina^{+/}q$. two exactly àyźpże⁺ q. seven àyúəbù⁺ q. six

В **bà** they, their (right-bound); **ba**⁺ them (left-bound) <u>15.3.1</u> $b\bar{a}'^{+/}$ pl $b\bar{a}'$ -nám^a cb $b\bar{a}'$ - n. father 8.4 **bāa**⁼ pl bāas^{ε} cb bà- n. dog báa (← Hausa bâa "not exist") in constituent negation <u>26</u> $b\bar{a}'a^{=}$ pl $b\bar{a}'ab^{a}$ cb $b\dot{a}'a$ - n. traditional diviner; $b\dot{a}'a$ - $k\dot{2}lug^{2}$ pl $b\dot{a}'a$ - $k\dot{2}n^{n\epsilon}$ cb $b\dot{a}'a$ - $k\dot{2}l$ n. diviner's bag $b\bar{a}'a^{=}$ pl $b\bar{a}'as^{\epsilon}$ cb $b\dot{a}'$ - n. peg to hang things on **bà**'an^{nɛ} pl bà'ana⁺ cb bà'an- n. stocks (punishment) **bàaňlıg**^a pl bàaňlıs^ɛ adj. narrow, slender **bāaňlíg^a** adj. quiet **bāaňlím^m** adv. quietly **bà'ar^{\epsilon}** pl bàda⁺ bà'a⁺ cb bà'- n. idol **bābá**⁺ beside postposition <u>16.6</u>; cf <u>bāb</u>(r^{ϵ}) sphere of activity **bàbigā**^{+/} *q*. many **bákpàe**⁺ n. week ← Hausa bakwài "seven" **bàlàar**^ɛ pl bàlàya⁺ cb bàlà- n. stick, staff, club **bàlànır^ɛ** pl bàlàna⁺ cb bàlàn- n. hat **bāl** $\bar{\epsilon}$ ru $q^{2/}$ pl bāl $\bar{\epsilon}$ ri $d^{\epsilon/}$ bāl $\bar{\epsilon}$ ri $s^{\epsilon/}$ cb bāl ϵ r- n. ugly person; cf $|\bar{\epsilon}r^{\epsilon}$ get ugly **bàmmā**^{+/} these, those demonstrative 15.3.2**b** an^{ϵ} these, those *demonstrative* 15.3.2 **bán** they (subject of *n*-clause); **bān^ɛ** they, them (contrastive) 15.3.1 **bāň'**⁺ dv. ride **bānāa**⁼ pl bānāas^{ϵ} cb bànà- (tone sic in my materials) n. traditional "fugu" smock **bàň'ad**^a pl bàň'ad-nàm^a n. ill person **bāň**'al^{ϵ}/ dv. make to ride (horse, bicycle) **bāň'as^ɛ** cb bàň'- n. pl as sg disease **bàn-dāug⁹** pl bàn-dāad^ɛ cb bàn-dà- n. crocodile bān-kúsél^l^ε pl bān-kúsēlá⁺ cb bān-kúsēl- n. lizard **bāŋ^a** pl bāaňs^{ε} cb bàŋ- n. ring, chain, fetter **bàn^a** n. agama lizard **bàn^ɛ** dv. come to know **báp** wallop! **B**ārı $q^{a/}$ pl Bār $\iota s^{\epsilon/}$ cb Bār- n. Bisa person (not only the Bareka, WK) bárıkà⁺ n. blessing; in greetings <u>28</u> ← Arabic يركة baraka **Bārug^{5/}** n. Bisa country; North <u>29.3</u> **b** $\dot{a}s^{\epsilon}$ dv. go away; abandon; throw out **Bāt^{ε/}** *n*. Bisa language **bàtáň'**⁺ *q*. three (after a personal pronoun) **bàun** v^+ n. found only as in Ò kpěň' báunv. He was circumcised. \leftarrow Songhay "pool" **bày** $\bar{\epsilon}$ **og**^{**5**/ betrayer of secrets (*cf* $y\bar{\epsilon}\epsilon s^{\epsilon/}$)}

bàyí' + *q*. two (after a personal pronoun) **bàyópòe**⁺ q. seven (after a personal pronoun) $b\dot{\epsilon}^+$ ger $b\dot{\epsilon}l(m^m (sic) sv. exist; be in a place 19.11.1)$ **b** $\bar{\epsilon}$ dı q^{ϵ} / dv. go rotten bèdug[>] bèdır^ɛ pl bèda⁺ cb bèd- adj. great **b** \dot{c} **d**v**g** \dot{v} ^{+/} *g*. much, a lot **b***ɛɛ* or 20.2.1 21.2 bèkèkèoňq² or bèkèoňq² n. very early morning **b***èlm*^m *dv*. beg **b** $\hat{\epsilon}$ *l*(s^{ϵ} *dv*. comfort **b***ε***n**ⁿ*ε pl bεna*⁺ *cb bεn- n*. end **b** $\check{e}\check{n}$ '⁺ *ger* $b\bar{e}\check{n}$ ' $\varepsilon s^{\varepsilon} dv$. fall ill **b***èň***si***g*^{*ε*} *dv*. serve soup **b** $\epsilon \eta^{\epsilon}$ dv. mark out a boundary **b** $\bar{\epsilon}$ **n**(d^{ϵ} cb b $\bar{\epsilon}$ **n**- n. pl bean leaves, Vigna unguiculata (Haaf); $b\bar{\epsilon}$ **n**(d n $\bar{\epsilon}$ k $\bar{\imath}^{+/}$ n. beanleafand-millet, a traditional snack **b**ɛ̄nír^ɛ pl bɛ̄ná⁺ cb bɛ̄n- n. brown bean bēog[>] n. tomorrow <u>20.2.1</u> <u>29.7</u>; Kà bēog níe kà ... The next day ... **bēogu-n^{ε/}** n. morning 29.7 $b\bar{\epsilon}'og^{\circ}b\bar{i}'a^{+}pl b\bar{\epsilon}'\epsilon d^{\epsilon}b\bar{i}'\partial s^{\epsilon}cb b\dot{\epsilon}'-b\dot{i}\dot{a}'-adj.$ bad **b** $\dot{\epsilon}$ *r*(η^{a} *pl* $\dot{\epsilon}$ *sic n*. a plant used for fibre (KED), Hibiscus cannabinus (Haaf) **b***ɛr***ig**⁺ *cb bɛr***i***g*⁻ *pl* leaves of *bɛr***i***n* used for soup (KED) **b** $\bar{\epsilon}$ **sug**^{**°**} *pl b* $\bar{\epsilon}$ *sid*^{ϵ} *cb b* $\dot{\epsilon}$ *s- n.* a kind of wide-mouthed pot **biāň'ar**^{ϵ}/ pl biāň'adá⁺ biáň'a⁺ cb biāň'- n. wet mud, black mud; riverbed **biāuňk²** pl biāň'ad^ɛ cb biàň'- n. shoulder **bī***ə́***l**^ε *pl bīəlá*⁺ *adj*. naked bìəl^ɛ dv. accompany **bī**'**ə**lá⁺ q. a little; **bī**'**ə**l **bī**'**ə**l q. and adv. a very little; little by little **bī'əm^m** pl bì'əm-nàm^a bī'əmma LF cb bì'əm- n. enemy **bīən^{nε}** pl bīəna⁺ cb bìən- n. shin **b** \bar{i} **ə** r^{ϵ} / pl bi \bar{e} y \dot{a}^+ cb bi \bar{a} - n. elder sibling of the same sex bì'əs^ɛ dv. doubt **b**iqus^{ϵ} dv. show, teach **bīig**^a pl bīis^ɛ cb bì- bī- n. child; **bī-d(bìŋ**^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; **bī-púŋ^a** n. girl **b**i'ig^{ϵ} dv. ripen, become pregnant **biil**(f^{P} pl biil(f^{+} cb biil- n. seed **bìilím^m** *n*. childhood **bīım^m** cb bī- n. soup, stew **b**i'**i**s(m^m n. milk (human or animal) **b***i***i**str^{*ɛ*} *pl bi*'*i*sa⁺ *cb bi*'*i*s- *n*. woman's breast

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bīla pl bībis^{ϵ} cb bìl- or bì- adj. little, small **bìlıg^ε** dv. roll (transitive) **bìlım^m** dv. roll (intransitive) **bimbim^{mɛ}** pl bimbima⁺ cb bimbim- n. altar NT (KED: mound or pillar of earth) **Bin^{nε}** pl Bim^{ma} cb Bin- n. Moba, Bimoba person (not only Bemba, WK) **B***i***n**^{nε} *n*. Moba language **bīn^{nε}** *n*. excrement **Biun²** n. Moba country **bj**⁺ dv. seek; **bjd**^a *ipfv* used for: want, like, love (sexual, romantic); *ipfv ger* **bòɔdım^m** will 12.2.1.4 $b\bar{j}$ + cb b)- what? why? <u>15.3.4</u>; b)- $b\bar{u}ud\iota$ + what sort of ..?; b)- $z\dot{u}g\bar{j}$ because <u>20.2.1</u>, why? <u>16.7</u>; **bɔ̀-wìn^{nε}** what time of day?; **bɔ̃ kímm** "exactly what?" **bbbi** q^{ϵ} dv. wrap round, tie round **bòdıg**^{ϵ} dv. lose, become lost **b** $\dot{}$ **d** $\dot{}$ **b** $\dot{}$ **d** $\dot{}$ **b** $\dot{}$ **d** $\dot{}$ **h** $\dot{}$ n. bread (? ultimately \leftarrow English) **b** $\dot{}$ **k**^{\mathbf{p}} pl b $\dot{}$ 'ad^{ϵ} cb bu' $\dot{}$ a- n. pit **b5**str^ε pl b**5**sa⁺ cb b**5**s- n. a kind of small, very poisonous snake **bjtv**⁺ *n*. sack $b\bar{v}'^+ dv$. beat **buàk^ε** dv. split **b** \dot{v} '**a** r^{ϵ} pl by' $\dot{a}a^{+}$ cb by' \dot{a} - n. hole $b\bar{v}'ar^{\epsilon}/pl bu'áa^+ cb bu'\bar{a}- n$. skin bottle **b** \dot{v} *d*^{ε} *ger b* \bar{v} *dig*^a *b* \bar{v} *dvg*^b *dv*. plant seeds **bùdàalım^m** n. manhood, courage **bùdım^m** dv. get confused **bùdιmís**^ε *n*. confusion **b** \dot{u} ' e^+ dv. pour out **b***νq*^ε dv. get drunk; cf Hausa b*νqu* id **b** \bar{v} gud^a n. client of a $b\bar{a}'a^{=}$ traditional diviner **bùqulim^m** dv. cast lots **būgur**^{ϵ} pl būga⁺ cb bùg- n. dwelling-place of a $win^{n\epsilon}$ localised spirit; also a $win^{n\epsilon/}$ as a $s\bar{i}g_{i}r^{\epsilon}/29.2$ inherited from one's mother's family **bùqúm^m** cb bùqūm- bùqúm- n. fire; **Bùqúm-tōɔňr^ɛ** n. Fire Festival **būgus**^a/ sv. be soft **būgus(g^a būgus(r^ɛ** pl būgusá⁺ cb būgus- adj. soft, weak **būgus(gā**^{+/} adv. softly **būgusím^m** n. softness, weakness **bυk**^ε/ dv. weaken $b\dot{v}k^{\epsilon} dv$. cast lots **bùl^ɛ** dv. germinate, ooze **b** \bar{u} *l*^{ϵ} *pl b* \bar{u} *l* a^+ *n*. shoot, sprout

b*v*^{*ε*} *dv*. astonish **Bùl^{lε} n.** Buli language **Bùlıq^a** pl Bùlıs^{ϵ} cb Bùl- n. Bulsa person **bùltg^a** pl bùlts^{ϵ} cb bùl- n. well, pond bùmbàrıg^a pl bùmbàrıs^ɛ cb bùmbàr- n. ant **bùn^ε** dv. reap, harvest **b**ūn^{nε}/ pl būná⁺ būn-nám^a cb būn- n. thing (concrete or abstract); **būn-búudìf**^o n. plant; **būn-gíŋ^a** n. short chap (informal, joking); **būn-kɔ́ňbùg^o** pl būn-kɔ́ňbìd^ɛ *cb kòňb-* (*sic*) *n*. animal; **būn-kúdùg[>]** *n*. old man būn-dáàr^ε which day? 16.7 **bùŋ**^a pl $bùmis^{\varepsilon}$ cb bùŋ- n. donkey **bν**^ε dv. take a short cut **bùel**^{ϵ} dv. call, summon; \dot{O} y \bar{v} 'vr búèn X. She is called X. 19.8.2 **bùər**^ɛ pl buèya⁺ cb buà- n. grain store, silo **bū'es^ɛ** dv. ask; ger **bū'esúg²** n. guestion; bu'oskana this guestion (In 18:34) **b\dot{v}-pijig***, adv.* ten times **b** \bar{v} rá $a^{=}$ n. man, male adult (in ILK, but characteristically *Toende* Kusaal; see $d\bar{a}u^{+}$) **bū**rıyá⁺ n. Christmas ← Twi/Fante bronya **b** \dot{v} **r**k \dot{n} ^a *pl b* \dot{v} *r*k \dot{n} *-n* \dot{a} *m*^a *cb b* \dot{v} *r*k \dot{n} *-n*. free person; honourable person \leftarrow Songhay Bòsáàňl^ɛ n. Bisa language **B**ùsán^a pl Bùsáàňs^ɛ cb Bùsān- n. Bisa person **būtıŋ**^a pl būtus^ɛ 5.4; cb bùtıŋ- n. cup (in general; originally "seed-planting [cup]") **b** \bar{v} od^{ε} n. pl as sg innocence **būud**⁺ *cb bùud*- *n*. kind, sort, ethnic group būug^a pl būus^ɛ cb bù- n. goat; bù-dìbıg^a n. male kid

D

dà before two days ago, tense particle <u>19.3.1</u>
dā not with imperative mood <u>19.5</u>
dàa day after tomorrow, tense particle <u>19.3.1</u>
dāa before yesterday, tense particle <u>19.3.1</u>
dà'⁺ dv. buy
dà'^a pl dà'as^ɛ cb dà'- n. market
dà'abur^ɛ n. slave
dàalum^m n. masculinity
dàalúm^m pl dàalímìs^ɛ n. male organs
dāam^m/ cb dā- n. millet beer, "pito"; dā-núùr^ɛ n. beer-drinking; dā-bín^{nɛ} cb dā-bínn. residue of beer; NT yeast (cf bīn^{nɛ})
dàam^m dv. disturb, trouble (cf Hausa dàamaa id)
dāan^a pl dàan-nàm^a cb dàan- n. owner of ... <u>15.6.2</u>
dāar^ɛ pl dābá⁺cb dà- n. day, 24-hour period 29.7; dà-pīiga⁺ n. ten days Vocabulary

dāa-sí'erē perhaps 20.2.1 **dàbīəm^m** tone sic n. fear **dàbioq²** pl dàbiəd^{ε} cb dàbià- n. coward **dabisir**^{ϵ} pl dabisa⁺ cb dabis- n. day (as one of several) *dādúk***⁹** *n*. a kind of large pot $d\bar{a}'e^{+}/dv$. push; blow (of wind) **Dàgáàd**^a pl Dàgáadìb^a Dàgáàd-nàm^a cb Dàgáàd- n. Dagaaba person (L prefix sic) **Dàgbān^{nɛ/}** pl Dàgbām^{ma/} cb Dàgbān- n. Dagomba person **Dàgbān^{nε/}** *n*. Dagbani language **Dàgbāuŋ^{5/}** n. Dagomba country, Dagbon dàgòbig^a n. left-hand; (yà) dàgòbig^a South KB 29.3 **dāká**⁺ pl dāká-nàm^a cb dāká- n. box ← Hausa àdakàa **dàkīig**^a pl dàkīis^ɛ cb dàkì- n. wife's sibling; **dàkì-dāu**⁺ n. wife's brother; **dàkìpuāk**^a n. wife's sister; **dàkì-tùa**⁺ n. wife's sister's husband **dà-kòɔňr^ɛ** pl dà-kòňya⁺ cb dà-kòň- n. unmarried son 29.1 **dàm^m** ipfv dàmmıd^a dv. shake dàmà'a⁼ n. liar cf mà'⁺ **dàmà**'**am**^m n. lie, untruth, lying dàmà'ar^ɛ n. lie, untruth **dāmpūsāar**^ε n. stick dànkòŋ² n. measles dànsàar^ɛ n. staff. club **dà-pāal**^a/ n. young man, son **dà-sāŋ^a** pl dà-sāaňs^ɛ dà-sām^{ma} cb dà-saŋ- n. young man $d\dot{a}$ - $t\bar{a}a^{=}$ pl d \dot{a} - $t\bar{a}as^{\epsilon}$ cb d \dot{a} - $t\dot{a}$ - n. enemy **dàtìuŋ²** n. right-hand; (yà) dàtìuŋ² North KB <u>29.3</u> $d\bar{a}u^+$ pl $d\bar{a}p^a$ cb $d\dot{a}u$ - $d\dot{a}p$ - <u>8.2</u> n. man (as opposed to woman) dàug^o pl dàad^ɛ cb dà- n. piece of wood, log; pl also: wood (material); dà-kīəd^a n. wood-cutter; dà-kpī'əda n. carpenter; dà-pūvdír^ɛ n. cross-piece, pl dàpūvdá⁺ n. used as sg cross NT $d\bar{a}\nu q^{2}$ pl $d\bar{a}ad^{\epsilon}$ cb $d\dot{a}$ - adj. male **dàwàlıg**^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; dàyāam-dáu⁺ n. husband's father; dàyāam-puák^a n. husband's mother **dàyūug^{>/}** pl dàyūud^{ϵ /} cb dàyū- n. rat **d** $\hat{\epsilon}$ *b* ι *r* $^{\epsilon}$ *pl d* $\hat{\epsilon}$ *b* a^{+} *n*. mat, pallet, bed $d\hat{\epsilon}\epsilon g^{a}$ pl $d\hat{\epsilon}\epsilon s^{\epsilon}$ n. warthog $d\bar{\epsilon}\epsilon\eta^{a}$ pl $d\bar{\epsilon}\epsilon\bar{n}s^{\epsilon}$ $d\bar{\epsilon}\epsilon m s^{\epsilon}$ $d\bar{\epsilon}\epsilon na^{+}$ cb $d\epsilon\bar{\epsilon}\eta$ - q. first $d\bar{\epsilon}l^{|a|}$ ger $d\bar{\epsilon}ll \dot{\epsilon} g^{\circ} d\bar{\epsilon}ll (m^{m} sv. lean on something (of a person))$ **d***ɛlu***m**^m *dv*. begin to lean on something (of a person)

 $d\bar{\epsilon}n^{a}$ pl $d\bar{\epsilon}mis^{\epsilon}$ cb $d\epsilon n$ - n. accidental bruise dεn^ε dv. go, do first dènım beforehand, preverb <u>19.7.2</u> **dì** it, its (right-bound) 15.3.1 = lì $d\hat{\iota}^+$ ipfv $d\hat{\iota}t^a$ imp $d\hat{\iota}m^a d\nu$. eat, receive; ger $d\bar{\iota}b^a$ n. food; $\hat{O} d\hat{\iota} p u' \bar{a}$. He's married a wife. Ò dì ňyán. She's ashamed. diā'^a dv. get dirty diā'ad^{ɛ/} n. dirt $d\bar{i}'e^{+/}dv$. receive, get **dìəm^{ma}** pl dìəm-nàm^acb dìəm- n. wife's parent; also in polite address to an unrelated person of opposite sex and similar or greater age than onself; **dìəm-dāu**⁺ n. wife's father; **dìəm-puāk**^a n. wife's mother **d**i'**ə**m^m dv. play. not be serious dì'əma⁺ n. festival $d\bar{i} = \delta s^{\epsilon} / dv$. receive (many things) $d\bar{i}qi^{ya}$ ger $d\bar{i}k^{a}$ KT $d\bar{i}qir^{\epsilon}$ WK sv. be lying down **dīgisá**⁺ n. pl lairs $digul^{\epsilon}/dv$. lay down **dìgın^ε** dv. lie down **dìgır^ɛ** pl dìga⁺ cb dìg- n. dwarf dis^ɛ dv. feed; agt dis^a n. glutton **dìisún³** pl dìisímà⁺ dìisís^{ε} cb dìisún- n. spoon dìm^a dummy head pronoun, animate pl; dìn^{nɛ} inanimate sg <u>15.3.7</u> *dín* it (subject of *n*-clause) <u>15.3.1</u> $d\bar{i}n^{\epsilon}$ it (contrastive) $\underline{15.3.1} = l\bar{i}n^{\epsilon}$ **dìnd** $\bar{\epsilon}$ og^{\circ /} pl dìnd $\bar{\epsilon}$ ϵ d^{ϵ /} cb dìnd $\bar{\epsilon}$ - n. chameleon dìndìis^a n. glutton dìn zúg³ therefore 16.7 **dìtúŋ²** n. right-hand (see dàtìuŋ²) **dì-zɔ̃ruq^{ɔ/}** pl dì-zɔ̃rá⁺ cb dì-zɔ̃r- n. crumb dɔ̃l^{la}/ ger dɔ̃ll(m^m sv. accompany in a subordinate rôle; Ànɔ́'ɔnì dɔ̃ll(fɔ̂? Who has come with you? (to an elderly patient.) $B\dot{a} d\dot{b} / n\bar{\epsilon} t\bar{a}aba$. They went together. $d\bar{\partial} l(q^{\epsilon}/dv)$ make accompany, send along with $d\bar{\partial} ls^{\epsilon}/dv$. investigate, trace $d\bar{\sigma}\bar{n}llq^{\epsilon}/dv$. stretch oneself *dòň'ɔs^ε dv*. water plants **dòɔq**^{**p**} pl dòɔd^{ϵ} dòt^{ϵ} cb dò- n. house, hut; clan; dòɔq bílq^a n. (house) cat **dòɔňg[>]** *pl dòɔňd^ɛ cb dòň- n.* dawadawa fruit $d\bar{v}^+$ ipfv $d\bar{v}t^{a/}$ imp $d\dot{v}m^a dv$. go up $du'\dot{a}^{a} dv$. bear, give birth, beget; agt $d\bar{v}'ad^{a} n$. elder relation

 $d\dot{v}$ ' al^{ϵ} dv. make interest (of a loan)

dv'**am**^m n. birth

dùaň⁺ pl dòoňs^ɛ cb dòň- n. dawadawa Parkia clappertoniana [biglobosa] (Haaf) $du' \dot{a}t\dot{a}^+ n$. doctor ← English $d\bar{u}e^{+/} dv$. raise. rise dūg^ε dv. cook $d\bar{\nu}k^{2}$ pl $d\bar{\nu}q\nu d^{\epsilon}$ d $\dot{\nu}t^{\epsilon}$ cb $d\bar{\nu}q$ - n. cooking pot; $d\bar{\nu}q$ - $p\epsilon'\epsilon la^+$ n. full pots **dùm^m** dv. bite dūm^{mε} dūm^{nε} pl dūma⁺ cb dùm- n. knee **dùndùug⁹** pl dùndùud^ɛ cb dùndù- n. cobra $d\bar{u}niya^+$ cb $d\bar{u}niya^-$ 8.6 n. world ← Arabic دنيا dunya: **dūnná**⁺ adv. this year <u>29.7</u> $d\bar{u}n^{a}$ pl $d\bar{u}m(s^{\epsilon} cb d\dot{u}n - n. mosquito)$ **dūθr^ε**/ pl duēyá⁺ cb duā- n. stick $d\bar{u}$ ' $\Theta s^{\epsilon}/dv$. lift up, honour **dùr^a** sv. be many $d\bar{u}'un^{\epsilon}/dv$. pass water (ger recorded as $d\bar{u}'un\dot{v}g^{2}$) **dū'uním^m** cb dū'un- n. urine dvusá⁺ n. pl. steps

Ε

ēɛň yes <u>21.4.4</u>
ēɛň or ēɛň tí see ňyēɛ, ňyēɛ tí habitually auxiliary tense marker <u>19.3.2</u>
ēɛňb^{ɛ/} dv. lay a foundation
ēɛňbír^ɛ n. foundation <u>11.1.2</u>
èňbis^ɛ dv. scratch
èňd^ɛ dv. block up, plug up
èňdig^ɛ dv. unblock, unplug
ēňrig^ɛ/ dv. shift along (e.g. a bench)

F

f² you sg (left-bound) <u>15.3.1</u> fāaň⁼ q. every fāeň^{+/} dv. save; agt fāaňd^{a/} fāaňgíd^a n. saviour <u>14.1</u> fāň⁺ dv. grab, rob fáss ideo. for piəlıg^a white fēɛg^{ɛ/} dv. (of food) get old, cold fēňdıg^{ɛ/} dv. turn round (tone uncertain) fēň'og^{ɔ/} pl fēň'ɛd^{ɛ/} cb fēň'- n. ulcer fiəb^ɛ dv. beat fi'ig^ɛ dv. cut off fīiň⁼ q. a little (liquid)

Vocabulary

fitlá⁺ n. lamp \leftarrow Hausa fitilàa; in KB adapted to the $r^{\varepsilon}|a^+$ class: sg fitir pl fita f525^{\varepsilon l} dv. blow, puff (wind); ger f525\varepsilon g^2 n. hypocrisy NT f\vec{v} you, your sg (right-bound) <u>15.3.1</u> f\vec{u}e^+ dv. draw out f\vec{v} f\vec{v} m^{\vec{w}} pl f\vec{v} f\vec{v} m^{-n} envy; stye (believed to result from envy) f\vec{v} n you sg (as subject of \vec{n}-clause); f\vec{v} n SF f\vec{v} n\vec{\vec{v}} LF you sg (contrastive) <u>15.3.1</u> f\vec{u} ug^{2/} pl f\vec{u} ud^{\varepsilon/} f\vec{u} t^{\varepsilon} cb f\vec{u} - n. shirt, clothing; pl also: cloth

G

gàad^ɛ dv. pass, surpass 22.2.2 gáafàra sorry formula <u>28</u> (Hausa gaafaràa, ultimately ← Arabic) $\mathbf{q}\mathbf{\dot{a}}^{\mathsf{L}}\mathbf{a}^{\mathsf{E}}$ dv. button up **gà'am^m** dv. grind teeth $g\bar{a}a\check{n}^{=/}$ pl $g\bar{a}a\check{n}s^{\epsilon/}$ cb $g\bar{a}\check{n}$ - n. Nigerian ebony Diospyros mespilliformis (Haaf) **gàas^ε** dv. pass by $g\bar{a}dv^+ g\bar{a}dvg^{2}$ pl $g\bar{a}dv$ -nám^a $g\bar{a}t^{\epsilon}$ cb $g\bar{a}d$ - $g\bar{a}dv$ - n. bed \leftarrow Hausa gadoogàlım^m dv. joke **gàlis^{\epsilon}** dv. exceed, get to be too much $g\bar{a}\check{n}r^{\epsilon}$ pl $g\bar{a}\check{n}\check{y}\acute{a}^+$ cb $g\bar{a}\check{n}r$ - n. fruit of Nigerian ebony **gàn^ε** dv. step over **gāŋ^{ε/}** dv. choose **gbāň'e**^{+/} dv. catch gbáňyà'a⁼ n. lazy person <u>14</u> gbáňyà'am^m n. laziness; 1976 NT gonya'am gbàuŋ² pl gbàna⁺ cb gbàn- gbàuŋ- n. book WK **gbāuŋ^{ɔ/}** *pl gbāná*⁺ *cb gbān- gbāuŋ- n.* animal skin WK; animal skin, book DK gbéèňm^m cb gbēň- n. sleep *qb* $\dot{\epsilon}$ '*oq***^{2**} *pl qb* $\dot{\epsilon}$ '*ɛd*^{ϵ} *qb* $\dot{\epsilon}$ *da*⁺ *cb qb* $\dot{\epsilon}$ '- *n*. forehead; shore of a lake **gb** $\bar{\epsilon}r^{\epsilon}$ pl gb $\bar{\epsilon}y\dot{a}^+$ cb gb $\bar{\epsilon}r$ - n. thigh **gbīgιm^{nε}** pl gbīgιma⁺ cb gbìgιm- n. lion **gbin^{ne}** pl gbina⁺ cb gbin- n. buttock; base (e.g. of a mountain); postposition 16.6 gbìn-vòoňr^ɛ n. anus **gbīs^ε** dv. sleep $q\bar{\epsilon}\epsilon^{\prime} dv$. place between one's legs (Pattern H) *ḡεεňm^{m/} dv*. go mad, madden gēɛňmís^ɛ n. pl as sg madness **géeňn**^a pl gēeňmís^e n. madman gél^{le} pl gēlá⁺ cb gēl- n. egg $g\bar{\epsilon}n^+ dv$. get tired; resultative adj $g\bar{\epsilon}\epsilon\bar{n}l\dot{\nu}\eta^2$ adj. tired $q\bar{\epsilon}\bar{n}^{+} dv$. get angry *gε̃og³ n.* place between one's legs (Pattern O *sic*)

qīiňlím^m n. shortness gik^a pl gigis^{ε} cb gig- n. dumb person **qìqılım^m** dv. become dumb *qīlıq***^{\epsilon}** *ipfv qīn*^{na/} dv. go around 10.1 gim^{ma/} sv. be short **qīn**^a pl qīma⁺ cb qìn- adj. short **gìŋ^ε** dv. scrimp $q\bar{i}n^{\epsilon}/dv$. surround, intercept, obstruct **gina**⁺ adv. shortly *qīņılím***^m** *n.* shortness $g\bar{j}d_{\ell}g^{\epsilon}/g\dot{j}'jn^{\epsilon}dv$. look up **g**5**l**^{la}/**g**5**r**^a/**g**5'e^{ya}/sv. be looking up $q \partial n^+ dv$. hunt; *ipfv* $q \partial \partial n^- da$ wander, *ger* $q \partial \partial n^- dum^- da$ wandering 12.2.1.4 **Gòog**^a pl Gòos^{ε} n. clan name **Gòog^o** *n*. place of the Gòos^{ϵ} Goosi clan **g)**'**)***n*^ε *dν*. look up **gjr**^{**a**/ *sv*. be looking up} $g\bar{j}s^{\epsilon}$ ipfv $g\bar{j}s_{l}d^{a/}$ $d\bar{j}t^{a/}$ imp $g\bar{j}s_{l}m^{a}$ $g\bar{j}m^{a}$ ger $g\bar{j}s_{l}d^{a}$ dv. look; $agt g\bar{j}t^{a/}$ n. seer, prophet $g\bar{u}'^+ dv$. guard, protect **g***νl*^ε *ipfv gνn*^{na} *dv*. suspend **q** \dot{v} **l**^{la} *ger* $q\bar{v}$ *l* ι b^o *sv*. be suspended gòllimm SF gòllimnē LF only; emphatic 27.6 **gòm^{mε}** pl gòma⁺ n. kapok fruit; also thread WK **Gòm^{mε}** *n*. place of the clan Gòm-dìm^a **gūmpūzēr**^ε/ pl gūmpūzēyá⁺ cb gūmpūzér- n. duck $gùn'a^+$ pl gòn' cs^{ε} cb gòn'- n. thorn; Acacia; gòn'- $s\bar{a}bulíg^a$ Acacia hockii (Haaf) *qν***n***qν***n***mε n*. kapok material $g\dot{v}\eta^{a}$ pl $g\dot{v}m\iota s^{\epsilon}$ cb $g\dot{v}\eta$ - n. kapok tree Ceiba pentandra (Haaf) $g\bar{u}r^{a/}$ ger $g\bar{u}r(m^{m} sv)$ be on guard, watch for <u>25.1</u> **G***v***ín**ⁿ*ε n*. Farefare language **G***v***í***n*^{**a**} *pl Gv***í***s*^ε *n*. Farefare person $g\bar{u}'ul^{\epsilon}/dv$. put on guard **qv**'**v***l*(**m**^m dv. become half-ripe **gòur^{\epsilon}** pl gòya⁺ cb gò- n. upland; bank of river $g\bar{v}vr^{\varepsilon}$ pl $g\bar{v}va^{+}$ cb $g\dot{v}$ - n. ridge of back $q\bar{u}'us^{\epsilon}/dv$. take care, watch out **gυ**'υs^ε n. pl half-ripe fruit

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hālí⁺ until, up to and as far as, even <u>18 20.2.1 22.1 27.6</u>; ? ← Arabic حتى ħatta: hālí báa even

I

 $i\bar{a}^{\dagger} dv.$ seek $i\bar{a}\bar{n}^{\dagger}as^{\epsilon} dv.$ leap $i\bar{a}\bar{n}k^{\epsilon} ger i\bar{a}\bar{n}^{\dagger}ad^{a} agt i\bar{a}\bar{n}^{\dagger}ad^{a} dv.$ leap, fly <u>10.1</u> $igiv^{a}$ ger ik^{a} KT $igir^{\epsilon}$ WK sv. be kneeling $igil^{\epsilon} dv.$ make to kneel $igin^{\epsilon} dv.$ kneel down $(il^{i\epsilon} pl \bar{i}la^{+} cb \bar{i}l - n.$ horn $isir^{\epsilon} pl \bar{i}sa^{+}cb$ is- n. scar $isig^{\epsilon} dv.$ get up early

Κ

kà and, that 20.2 **kā**⁺ *dv*. bail (water) $k\bar{a}ab^{\epsilon}/dv$. offer. invite **kāal**^ε/dv. count $k\bar{a}as^{\epsilon}/dv$. cry out, weep; (cock) crow kà'asıgē LF only; sv. not exist 19.5.1 $k\bar{a}b\iota g^{\epsilon}/dv$. ladle out (liquid) **kāb** r^{ϵ} dv. call out asking for admission <u>28</u>; ger **kāb** r^{ϵ} n. calling out for admission kàd^ɛ dv. drive away; kàd sàríyà dv. judge <u>19.8.1</u>; agt sàríyà-kāt^a n. judge NT $k\bar{a}'e^+$ ger $k\bar{a}'al(m^m sv. not exist, not be, not have <u>19.5.1</u> <u>7.5</u>$ $k\bar{a}l^{|\epsilon|}$ pl k $\bar{a}l\dot{a}^+$ cb k $\bar{a}l$ - n. number **kàlıgā**^{+/} *q*. few **kàm^a** q. every **Kàmbùnιr^ε** *n*. Twi language Kàmbùn^a pl Kàmbùmıs^ɛ cb Kàmbùn- n. Ashanti person kàn^ε this, that *demonstrative* 15.3.2 **kàňb^ε** ger kāňbιr^ε dv. scorch kāňdug³ adj. fat, tough (person) **kànā**^{+/} this, that *demonstrative* 15.3.2 kàr^a sv. be few kàrım^m dv. read kàsēt^a/ n. witness; testimony (Mooré kàsétò "proof, testimony"; probably ultimately ← French *cachet*; *pl kàsɛ̃t(b*^a witnesses) $k\bar{\epsilon}^+$ ipfv $k\bar{\epsilon}t^{a/}$ imp $k\dot{\epsilon}l^a dv$. let, cause to ... 10.1 22.3 kčekė⁺ pl kčekė-nàm^a cb kčekė- n. bicycle ← Hausa kèekė

kεεs^ε dv. say farewell to
kèlıg^ɛ or kèlıs^ɛ dv. listen
kēň ⁺ ipfv kēn ^{a/} imp kèm ^a ger kēn ^{nɛ/} dv. come <u>10.1</u> ; always with nā <u>19.10</u> ; kēn kēn welcome! <u>28</u>
kēŋ^{ε/} ipfv kēn^{na/} imp kèm^a (disambiguated with sà <u>19.10</u>) dv. go; walk <u>10.1</u>; agt
kēn ^{na/} n. traveller
kźrıfà or kárıfà ← Hausa ƙarfèe; in telling time <u>29.7</u>
$k\bar{i}^{+/}$ cb $k\bar{i}$ - $k\bar{a}$ - n . cereal, millet; $k\bar{i}$ - $d\bar{a}$ ' ar^{ϵ} pl $k\bar{i}$ - $d\bar{a}$ ' ada^{+} n . purchased millet; $k\bar{a}$ -
wēnnır^ɛ pl kā-wēnna ⁺ cb kā-wén- n. corn
$kia^+ dv$. cut
$k\bar{l}dlg^{\epsilon}/dv$. cross over, meet; À - $K\bar{l}dlgl B\bar{u}$ 'es <i>n</i> . the constellation Orion
$k\bar{i}'lb^{2}/n$. soap; WK has instead the Mampruli loan $k\bar{i}lb\delta^{+}cb k\bar{i}lb$ -
kíiňP pl $k\overline{i}n(t^+ n. millet seed$
$k i s^{\epsilon} dv$. listen
$k\bar{\iota}'\iota s^{\epsilon}/d\nu$. deny
kìkàm^{mɛ} pl kìkàma ⁺ n . fig
kìkàŋ^a kìnkàŋ^a pl kìkàmıs^ɛ cb kìkàŋ- n. fig tree Ficus capensis (Haaf)
kìkīrıg ^a / pl kìkīrıs ^{ϵ} / cb kìkīr- n. "fairy" in local English; protective spiritual beings
associated with a person (three for a man, four for a woman because of the
dangers of childbirth.) Wild $k i k \bar{i} r \iota s^{\epsilon}$ hostile to man live in the bush: "Their feet
are attached backwards to confuse trackers." WK; kìkīr-bś'èd ^ɛ n. NT evil
spirit, demon (KB just uses kìkīrıg ^{a/})
<i>kīlum^{m/} dv.</i> become, change into
kìm ^m dv. tend flock, herd; agt kòňb-kīm ^{na} n. herdsman, shepherd
$k\bar{l}r^{\epsilon}$ ger kıkíròg ^o kīrıb ^o dv. hurry, tremble
kīs^{a/} ger kís ùg ⁵ agt kīs ^{a/} kīsıd ^{a/} sv. hate
kísòg^{>} adj. hateful, taboo
kɔ̀+ dv. get broken, break (intransitive); resultative adj kɔ̀ɔlúŋ³ adj. broken
kɔ̀bıgā̄= q. one hundred; kɔ̀bısí́+ two hundred
kɔ̃bır^ε pl kɔ̃ba ⁺ cb kɔ̀b- n. bone
kɔ̃dıg ^{ϵ/} $d\nu$. slaughter (one animal) by cutting its throat
kɔ̃dύ⁺ n. banana ← Twi <i>kwadu</i>
kòl ^{ϵ} dv. put something around the neck
kòlıbır^ɛ pl kòlıba n. bottle
kɔ̃lıgª pl kɔ̃lıs ^ɛ cb kòl- n. river; kɔ̃lugu-n nɔ́-dáùg^{>} n. crayfish
kòlug^{>} pl kòn ^{nε} cb kòlug- <u>8.2</u> n. sack, bag
<i>kōm^{m/} cb kōm- n.</i> hunger
$k \bar{j} n b u g^{2}$ pl $k \bar{j} n b u d^{\epsilon}$ cb $k \bar{j} n \bar{b} - (also used as cb of b \bar{v} n - k \bar{j} n \bar{b} u d^{\epsilon}$ animal) n. animal hair
or human body hair; cf zūəbúg ^ɔ ; kɔ̀ňb-kīm^{na} pl kɔ̀ňb-kīmmıb^a n. shepherd ,
herdsman

 $k\bar{j}\bar{n}'\bar{j}k\bar{j}^+ adv$. alone, by oneself

kòňs^ε dv. cough kòňsım^m dv. cough $k\dot{a}'ag^{\epsilon} dv$. break (transitive or intransitive) $k\dot{z}'zs^{\epsilon} dv$. break several times $k \bar{j} t^{\epsilon} / dv$. slaughter (several animals) by cutting their throats **kòtàa^{nε}** at all; *emphatic* 27.6 $k\acute{j}t\acute{v}^+$ n. lawcourt \leftarrow English, probably via Hausa **kpà'a**⁼ *pl kpà'a-nàm*^a *n*. rich person **kpāad**^a/ pl kpāadíb^a cb kpāad- n. farmer, cultivator **kpà'am^m** n. riches **kpāaňm^{m/}** cb kpāň- n. grease, ointment; **kpāň-sóň'ɔdìm^m** n. anointing oil **kpàkūr^ε**/ pl kpàkūyá⁺ cb kpàkūr- n. tortoise **kpān^{nε}** pl kpāna⁺ cb kpàn- n. spear **kpàňdır^ɛ** pl kpàňda⁺ cb kpàňd- n. baboon **kpàr^ε** dv. lock kpār-kéòňg^o pl kpār-kéčňd^ɛ cb kpār-kéň- n. rag **kpā'ún**² pl kpī'in(⁺ cb kpā'- n. guinea fowl $k p \bar{\epsilon}^+ a d v$. here **kpēɛňm^m** pl kpèɛňm-nàm^a cb kpèɛňm- n. elder **kp***ɛɛňm*^{ma/} *sv*. be older than **kpɛlá**⁺ adv. here **kp***č***l**(*m*) still; immediately after, preverb 19.7.2 **kp***č***l**(*m*^m *dv*. remain kpèn reduced form of the preverb kpèlim kpèň'+ dv. enter **kpēňdır^{ε/}** pl kpēňdá⁺ cb kpēňd- n. cheek $kp \tilde{\epsilon} n' \epsilon s^{\epsilon} dv$. make enter $kp\dot{\epsilon}'n^{\epsilon} dv$. strengthen **kpēoňn**^{**2**} *n*. seniority **kpì**⁺ dv. die; resultative adj **kpìilúŋ**² adj. dead **kpì'a**⁺ pl kpì' ∂s^{ϵ} cb kpià'- n. neighbour **kpià**'⁺ dv. shape wood with axe etc **kpì**'**e**⁺ *dv*. approach **kpī**'**əm**^{ma/} sv. be strong, hard **kpìib** g^{a} *pl kpìib* s^{ϵ} *cb kpìib*- *n*. orphan **kpìig^ε** dv. go out (fire) **kpī**'*ılím*^m dv. finish, come to an end **kpī**'**im^m**/ pl kpī'imís^ε cb kpī'im- n. dead person, corpse *kpìis^ε dv*. quench (fire) **kpīkpīn^{na/}** pl kpīkpīnníb^a cb kpīkpín- n. merchant **kpī**'**oŋ**^{**°**} *pl kpī*'*əma*⁺ *cb kpi*'*oŋ*- *adj*. strong, hard

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Vocabulary

kpisinkpil^l ϵ pl kpisinkpila⁺ cb kpisinkpil- n. fist **kpìsukpìl^{lɛ}** n. fist **kpùkpàr**^{ϵ} pl kpùkpàra⁺ n. palm tree fruit **kpùkpàrıg**^a pl kpùkpàrıs^{ε} cb kpùkpàr- n. palm tree (Borassus akeassii/aethiopum) **kpòkpàuŋ^o** pl kpòkpàma⁺ cb kpòkpàuŋ- n. arm, wing **kv** not; *negates irrealis mood* 19.5 $k\bar{\upsilon}^+ dv$. kill (= Mooré $k\dot{\upsilon}$) $k\bar{v}^+ dv$. gather, threaten (of rain): Sāa kú yā. It looks like rain (= Mooré kúi) $ku\bar{a}^+ dv$. hoe, farm $k\bar{v}$ 'alí η^{a} pl $k\bar{v}$ 'alím's $k\bar{v}$ 'alís cb $k\bar{v}$ 'alí η - n. sleeveless traditional smock **kùd^ε** dv. work iron **kòdıg^{\epsilon}** dv. shrivel up, dry out, age **kūdım^m** *n*. the olden days; also for kūlım qv $k\bar{\nu}d\nu g^{2} k\bar{\nu}d\iota r^{\epsilon}$ pl $k\bar{\nu}da^{+} k\bar{\nu}t^{\epsilon} cb k\dot{\nu}d$ - adj. old $k\bar{u}dva^{2}$ pl $k\bar{u}t^{\epsilon}$ (used as sg 15.2.1) cb k $\dot{u}t$ - n. iron, nail; sg only in names 29.2 **kūgor**^{ϵ}/ pl kūgá⁺ cb kūg- n. stone kūka pl kūgus^ε cb kùg- n. chair kùk^a n. ghost kūk^{a/} n. mahogany tree, Khaya senegalensis (Haaf); cf Hausa kuukàa kùkòm^{mε} pl kùkòma⁺ cb kùkòm- n. leper **kùkɔ̃r^{ε/}** pl kùkɔ̃yá⁺ cb kùkɔ̃r- n. voice kùkpàrıg^a see kpùkpàrıg^a id *kūl^ε ger kūlıg^{a/} dv. return home; transitive marry (woman subject, man object)* **k***olm* always, post-subject particle 20.2.3 **k**ùlıŋ^a pl kùlımıs^ɛ kùlıs^ɛ cb kùlıŋ- n. door kòm^m dv. cry, weep *kūm^m cb kùm- n.* death; *kùm-vū'υgír^ε n.* resurrection NT **kùndù'ar^ε** pl kùndù'ada⁺ cb kùndu'à- n. barren woman **kùndùŋ**^a pl kùndùmıs^ɛ kùndùna⁺ n. jackal, hyena $k\dot{u}$ ' em^{m} cb $k\underline{v}$ ' \dot{a} - n. water; $k\underline{v}$ ' \dot{a} - $n\overline{u}ud^{\epsilon}$ /n. thirst; $k\underline{v}$ ' \dot{a} - $n\overline{v}\overline{i}g^{a}$ /pl $k\underline{v}$ ' \dot{a} - $n\overline{v}\overline{i}s^{\epsilon}$ /n. current in a river **kùθs^ε** dv. sell **kòrkūr^{ε/}** pl kòrkūyá⁺ cb kòrkūr- n. pig Kūsáa⁼ pl Kūsáàs^ɛ cb Kūsá- n. Kusaasi person Kūsáàl^ɛ n. Kusaal language Kūsáùq^o n. Kusaasi country **Κὺtān^{nε/}** pl Kỳtām^{ma/} cb Kỳtān- n. member of WK's clan Kùtāuŋ^{ɔ/} n. country of clan Kùtām^{ma/} Kutamba **k**ūv or 20.2 21.2 ← Hausa $k\bar{u}ug^{a/}k\bar{u}ug^{2/}$ pl $k\bar{u}us^{\epsilon/}cb$ $k\bar{u}$ - n. mouse **kνι** dv. get drunk

 $l\bar{a}^{+/}$ definite article <u>15.7.5</u> $|\dot{a}|^+ dv$. laugh lā'af? n. cowrie; pl līgıdı⁺ n. cowries, money; cb lìg- là'-; là'-bīəlíf? n. small coin láafiya⁺ n. health ← Arabic العافية ?al-sa:fiya; replaced throughout by laafe láafi in 1996 NT and KB **là**'am together, preverb 19.7.2 **là**' $am^m dv$. associate with; together with <u>22.2</u> *là*'*as*^ε dν. gather together (transitive); Bà là'as tāaba They gathered together. làbāar^ɛ cb làbà- n. news ← Arabic الأخبار ?al-?axba:r làbi^{ya} sv. be crouching, hiding behind something (cf Hausa labèe "crouch behind something to eavesdrop" 14.1) $|\dot{a}b_{l}|^{\epsilon} dv$, make crouch behind something **làb** n^{ε} dv. crouch behind something *làbιs^ε dv*. walk stealthily lābıs^{a/} sv. be wide lābisíg^a lābisír^ε pl lābisá⁺ cb lābis- adj. wide lābisím^m n. width $l\bar{a}k^{\epsilon}/dv$. open (eye, book) lāl^{la/} sv. be distant $l\bar{a}l(q^{\epsilon}) dv$. get to be far, make far lāll(+ adv. far off **lāllíŋ**^a pl lāllís^ɛ cb lāllíŋ- adj. distant lāllúg⁵ pl lāllá⁺ cb lāl- adj. distant $l\bar{a}m^{m\epsilon}/pl \ l\bar{a}m\dot{a}^+ \ cb \ l\bar{a}m$ - n. gum (of tooth); $l\bar{a}m$ -fóòg^o pl $l\bar{a}m$ -fóòd^{ϵ} adj. toothless *làmp5-dí*'*às*^a *n*. tax collector $\underline{14}$ ← French *l'impôt* lān^{nε} pl lāna⁺ cb làn- n. testicle **làngáun^o** pl làngáam^{mɛ} làngāamá⁺ cb làngāun- n. crab (cf màngáun^o id) lànnıg^a pl lànnıs^ɛ cb lànnıg- <u>8.2</u> n. squirrel $l\bar{a}'\eta^{\epsilon}/dv$. set alight *lāním^m dv.* wander around searching **lāuk**^o pl lā'ad^{ϵ} cb là'- n. item of goods pl goods là'un² pl là'ama⁺ n. fishing net lɛ̀bɛ ger lɛ̃bıg^a dv. return (intrans) $l \hat{\epsilon} b \iota g^{\epsilon} dv$. turn over; return *l* $\hat{\boldsymbol{\varepsilon}}\boldsymbol{b}\boldsymbol{\iota}\boldsymbol{s}^{\boldsymbol{\varepsilon}}$ *dv*. answer; send back; divorce (wife) lèe but, VP particle 19.7.1 lèm again, preverb <u>19.7.2</u> lèm^m ipfv lèmmıd^a dv. sip, taste $l\bar{\epsilon}r^{\epsilon}dv$. get ugly \mathbf{l} it, its (right-bound); \mathbf{l} it (left-bound) <u>15.3.1</u>

L

lì⁺ ipfv lìt^a imp lìm^a ger līig^a dv. fall $l\bar{\iota}^+ dv$. block up *lia* where is ...? 21.4.2 *lìdιa^ε dv*. turn a shirt WK $lidig^{\epsilon}dv$. astonish, be amazed $liab^{\epsilon} dv$, become $li' = l^{\varepsilon} dv$. approach, come near *lí*' $\partial m^{m\epsilon}$ *pl li*' $\partial m \dot{a}^+ n$. fruit of yellow plum tree líəŋ^a pl līəmís^ɛ cb līəŋ- n. axe $li' = \eta^a pl li' = m(s^{\epsilon} n. \text{ yellow plum tree}, Ximenia americana$ lìg^ε dv. patch lìqu^ɛ dv. cover ligin^{ϵ} dv. cover oneself *līıbır^ε pl līıba*⁺ *cb lìıb*- *n*. twin *līk^a pl līgιs^ε n.* darkness **lìlāalíŋ^a** pl lìlāalís^ɛ lìlāalímìs^ɛ cb lìlāalíŋ- n. swallow *l(n* it (subject of \hat{n} -clause); *lin^{\epsilon}* it (contrastive) 15.3.1 lìn^ε that *demonstrative* 15.3.2 lìná⁺ that *demonstrative* 15.3.2 *l***5**⁺ *dv*. tie $l\bar{b}b^{\epsilon}$ or $l\bar{b}b_{\epsilon}g^{\epsilon}/d\nu$. throw stones at **I5** $b_{i}d(g^{a} pl | 5b_{i}d(s^{\epsilon} n. water drawing vessel)$ *lɔ̃dıg^{a/} pl lɔ̃dıs^{ε/} cb lɔ̃d- n.* corner; *lɔ̃dıgín kúg-súŋ*^o cornerstone NT $l\bar{j}d_{l}q^{\epsilon}/d\nu$. untie $l\dot{b}k^{2}$ pl $l\dot{v}'ad^{\epsilon}$ cb $l\underline{u}'\dot{a}$ - n. quiver (for arrows) **lòmbò'ɔg^o** pl lòmbò'ɔd^ɛ cb lòmbò'- n. garden ← Hausa làmbuu $l\bar{j}\eta^{a}$ pl $l\bar{j}mls^{\epsilon}$ cb $l\dot{j}\eta$ - n. a kind of frog $l\bar{j}' n^{\epsilon} dv$. go across river, road etc **I**5*r*^ε *pl* I5*y*à⁺ I5*m*^{ma} *cb* I5*r*- *n*. car, lorry ← English $l \hat{b} s^{\epsilon} dv$. dip, immerse in liquid **lù**⁺ *ipfv lùt*^a *imp lùm*^a *dv*. fall $l\bar{u}b^{\epsilon}$ ger $l\bar{u}bur^{\epsilon}/dv$. buck, kick, struggle, throw off rider $l\bar{u}q^{\epsilon} dv$. swim *lūgur^ε n.* organ, member

Μ

m` I, my (right-bound); m` me (left-bound) <u>15.3.1</u>
 m`a`+ cb m`a- n. mother; pl m`a n´am`a (tone sic) mother's sisters/co-wives; m`a-bīig`a n. sibling with same mother; m`a-bīl^a n. mother's younger sister or junior co-wife; m`a-kpēɛňm^m n. mother's elder sister or senior co-wife; m`a-pīt`a' n. mother's younger sister

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mà'+ dv. lie, deceive mà'aa SF mà'anē LF only; emphatic 27.6 $maal^{\epsilon} dv$. prepare, sacrifice; $agt maal-maan^{na} n$. sacrificer; priest NT; traditionally just a worker who conducts the actual slaying for the *tɛ̀ŋ-dāan*^a earth-priest $m\bar{a}^{\dagger}al^{\epsilon}/d\nu$. make cool, wet *māan^{nε} pl māana⁺ cb màan- n.* sacrifice 11.1.2 *má*'an^{nε} pl mā'aná⁺ cb mā'an- n. okra *mā*'*as*^a/*sv*. be cool, wet $m\bar{a}$ 'asíg^a $m\bar{a}$ 'asír^{ϵ} pl mā'asá⁺ cb mā'as- adj. cool, wet *mā*'*as(gā*^{+/} *adv*. coolly *mā*'*as(m*^m *n*. coolness, wetness $m\bar{a}d_{l}q^{\epsilon}/d\nu$. overflow, abound $m\bar{a}'e^{+/}dv$. cool down màk^ɛ dv. crumple up $m\bar{a}k^{\epsilon}/dv$. measure, judge **màliāk**^{a/} pl màlįā'as^{ɛ/} màlįāk-nám^a cb màlįā'- n. angel \leftarrow Arabic \checkmark mal?ak; written malek in NT versions before 2016 **màl** $(f^{\circ} pl màl)^{+} n$. gun, rifle (ultimately \leftarrow Arabic) màligim again; preverb 19.7.2 *mālıs*^a/ *sv*. be sweet, pleasant **mālisíg^a mālisír^ɛ** pl mālisá⁺ cb mālis- adj. sweet, pleasant *mālısím^m n.* sweetness **mālisín**^a pl mālisís^{ε} cb mālisín- adj. sweet, pleasant **māluŋ[>]** pl mālıma⁺ cb màluŋ- n. sacrifice **mām** I, me 15.3.1 mán I (as subject of *h*-clause); mān SF mánē LF I, me (contrastive) <u>15.3.1</u> **màngáuŋ⁵** pl màngáam^{mε} màngāamá⁺ cb màngāuŋ- n. crab (cf làngáuŋ⁵ id) **màuk^o** pl mà'ad^ɛ adj. crumpled up $m\dot{\epsilon}^+ dv$. build *m*ε *m*έn^ε too, also; *emphatic* <u>27.6</u>; *m*έ-kàma -soever <u>15.3.3</u> *mɛ̄d^ε dv*. mash up **mèɛŋ**^a pl mèɛmıs^ɛ cb mèɛŋ- n. turtle **mèliqim^m** n. dew *m*ε̄η^{a/} self 15.3.6 *m***ɛ̄ŋír^ɛ** adj. genuine *m***ɛ̃t^ɛ**/ cb *m*ɛ̃t- n. pl as sg pus *mī*^{'+} *ger mī*[']*il*(*m*^m *sv*. know; *aqt* **gbàn-mī**[']*id*^{a/} *n*. scribe ("book-knower") NT *mie*⁺ *dv*. squeeze(?) <u>30.1</u>; *uncertain meaning and tones míif*^{**P**} $pl m \bar{l} n (h^{+} n)$ okra seed *mì*'*iq*^ε dv. become sour mì'is^a sv. be sour

mì'isuq⁹ pl mì'isa⁺ cb mì'is- adj. sour $m\bar{l}lg^{\epsilon}/d\nu$. get dirty **mìmīilím^m mìmīilúq⁵** n. sweetness mit see that it doesn't happen that... 19.5.1: always mid in KB $m\bar{2}^+ dv$. strive, struggle **mj**d^ε dv. swell $m\bar{j}d_{l}q^{\epsilon}/dv$. be patient, endure **mòlt**P pl mòlt⁺ cb mòl- n. gazelle $m\bar{j}n^{\epsilon} dv$. grind millet to make $s\bar{a}'ab^{2}$ porridge $m\bar{\sigma}n^{\epsilon}/dv$, refuse to lend **mɔ̃ɔɡ**^{**°**} *pl* mɔ̃ɔd^ɛ *cb* mò- *n*. grass, "bush"; **mò-pīl**^{lɛ} *n*. grass thatch Mòog^o n. Mossi realm; Mòog Ná'àb^a n. the Moro Naba, King of the Mossi *mɔ̄ɔlɛ/* dv. proclaim; agt *mɔ̄ɔl-mɔ́ɔ̀n^{na} n.* proclaimer Mòɔl^ɛ n. Mooré language **Mɔ***r*^ε/ pl M*jr*- n. Muslim *mɔ̃r^a/ ger mɔ̃rím^m sv*. have, possess; *mɔ̃r nā* bring <u>19.10</u> **Mùa**⁺ $pl M \dot{2} s^{\epsilon} cb M \dot{2} - n$. Mossi person mu'à^a dv. suck (of a baby) **muàk**^a pl mù'as^ɛ cb mu'à- n. maggot **mὐ**'ar^ε pl mụ'àa⁺ m**ὐ**'ada⁺ cb mụ'à- n. dam; reservoir *m***υ**'*as*^ε *dv*. give (to baby) to suck $m\dot{u}'e^+ dv$. redden; catch fire/ignite; become intense, severe **mùi**⁺ cb mùi- n. pl as sg rice *mùl^ε dv*. itch **mùm^m** dv. bury Ν *n* clause nominaliser particle <u>24</u> *n* clause catenator particle <u>22.1</u> **n**- personifier particle (allomorph used before an adjective) <u>15.5</u> **n**^ε discontinuous-past marker 23.1.1 $n^{\epsilon} n\bar{i}^{+/}$ locative particle <u>16.3</u> **nà** positive irrealis mood marker 19.4 **nā**^{+/} hither; VP-final particle <u>19.10</u> $n\bar{a}^+ dv$. join **náa** reply to greetings invoking blessings <u>28</u>

nà'ab^a pl nà'-nàm^a cb nà'- n. chief, king; nà'-bīig^a n. prince/princess; nà'-yīr^{ε/} n. palace; nà'-yī-kpém^{ma} n. pl king/chief's retainers

náaf⁹ pl nīig(⁺ cb nā'- n. cow; nā'-lór^ɛ n. place in compound for tying up cows;
 nā'-dáòg⁹ pl nā'-dáàd^ɛ cb nā'-dá- n. ox; nā'-dá-kūed(r^ɛ n. ox for ploughing nàam^m dv. happen

nā'am^m cb nà'am- n. chieftaincy, kingdom

nāan next, afterwards = *ňyāan*

nāan or nāanı then, in that case, being thus/there 23.1.2

nà'anā+/ adv. easily

nà'as^ε dv. honour; ger **nà'asι**⁺ n. honour

Nàbid^a pl Nàbidib^a cb Nàbid- n. Nabdema person

Nàbidug^o n. Nabdema country

Nàbιr^ε n. Nabit language

Nà'dàm^{ma} n. clan name

Nà'dàuŋ' *n.* place of clan Nadamba

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nà'-dàwān<sup>nɛ/</sup> n. pigeon KED (= dàwān<sup>nɛ/</sup>)
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nāe+/ dv. finish

nàm still, yet; *auxiliary tense particle* <u>19.3.1</u>

nàm^a pluraliser <u>8.4</u>

 $n\bar{a}m(s^{\epsilon}/dv)$, persecute, suffer

nān^ε dv. love, respect, appreciate

nà'-nɛ̄sınnɛ̃ogɔ́/ n. centipede WK

nānná⁺ adv. now

nānná-nā^{+/} *adv*. now

nānzū'*us*^{ε/} *n*. pepper tones uncertain

nāŋ^a pl nāmιs^ε cb nàŋ- n. scorpion

nār^a/ ger nārím^m sv. be obliged to; impersonal: to be necessary; with following purpose clause <u>25.1</u>; negated: be obliged not to

nàruŋ³ pl nàrıma⁺ cb nàruŋ- adj. necessary

Nàsāal^ɛ n. English/French language

Nàsāara⁺ pl Nàsàa-nàm^a Nàsàar-nàm^a cb Nàsàa- Nàsàar- n. European person ← Arabic نصارى Nas^ca:ra: "Christians"; Nàsàa-bīig^a n. European child

nàyīig^a pl nàyìig-nàm^a nàyìis^ɛ n. thief

nàyīigım^m n. thievery

nà'-zòm^{mε} n. locust

 $n\bar{\epsilon}$ preposition: with <u>18</u>; linking NPs and AdvPs: and <u>15.1</u>

n*ē* uncommon variant of y*ē* that <u>25.2</u> (cf Mampruli *ni id*)

 $n\bar{\epsilon}^{+/}$ focus particle <u>27.1.2</u>; aspectual marker <u>19.2.1</u>

 $n\bar{\epsilon}^{+/}$ meaningless particle after objects of $w\bar{\upsilon}\upsilon$ and $w\bar{\epsilon}n^{na/}$ <u>18</u>

 $n\bar{\epsilon}$ '+/ this (pronoun) <u>15.3.2</u>

nèɛl^ɛ dv. reveal

nèem^m adv. for free

 $n\bar{\epsilon}\epsilon m^{m}/dv$. grind with a millstone

nεειn. millstone

nεεs^ε dv. reveal

nèesım^m n. light

*n***\bar{r}***m***-***n* $\bar{\epsilon}$ *pl n* \bar{r} *m***-***n* $\bar{\epsilon}$ *y* \bar{a}^+ *n*. someone who grinds **n***ē***n**^{**na**/} *ger nēnním*^m *sv*. envy $n\bar{\epsilon}'\eta\dot{a}^+$ this (pronoun) <u>15.3.2</u> **nèog²** $n \hat{\epsilon} e^{\epsilon} p l n \hat{\epsilon} e^{\epsilon} n \hat{\epsilon} y a^{+} c b n \hat{\epsilon} - a d j$. empty *n***\bar{\epsilon}sınn\bar{\epsilon}og^{5/} pl n\bar{\epsilon}sınn\bar{\epsilon}ed^{\epsilon/} cb n\bar{\epsilon}sınn\bar{\epsilon}- n. envious person WK; others: centipede** *hfá!* Well done! 21.4.4 $n\bar{i}^{+/}$ locative particle 16.3 see n^{ϵ} $ni^+ dv$. rain nīd^a/ pl nīdıb^a/ cb nīn- n. person; **nīn-sáàl**^a pl nīn-sáalìb^a cb nīn-sáàl- n. human being; nīnpūnān^{na/} pl nīnpūnānníb^a cb nīnpūnán- n. disrespectful person; nīnsábilis^ε n. Africans *nie*⁺ dv. appear, reveal nīf⁹/ pl nīn(+ cb nīn- nīf- n. eye; nīf-gbáuŋ⁹ n. eyelid; nīf-sób^a n. miser; nīf-ňyáuk⁹ adj. one-eyed <u>15.7.1.3;</u> **nīn-dáa**⁼ pl nīn-dáàs^ɛ cb nīn-dá- n. face; **nīn- gótìŋ**^a n. mirror pl $n\bar{n}-q\dot{\sigma}t\dot{s}^{\epsilon}$ n. spectacles, glasses; $n\bar{n}-k\dot{\sigma}gud\dot{g}^{a}$ pl $n\bar{n}-k\dot{\sigma}gud\dot{s}^{\epsilon}$ n. eyebrow; *nīn-tá'àm^m n.* tear(s); *nīn-múa⁺ n.* concentration ("eye-redness"); *m* nīní mù'e nē ... I'm concentrating on ... (KB "zealous for ...") **níi** η^{a} pl nīimís^{ε} níis^{ε} cb nīi η - n. bird **nīm^{nε/} nī[·]m^{nε/}** pl nīmá⁺ cb nīm- n. meat **nīn-báalig**^a n. pity; **nīn-báàl-zɔ̃ɔr**^{ε} n. pity; Ò zòt $\cdot \bar{o}$ nīn-báalig. He has pity on him. **nīŋ**^a pl nīis^ɛ cb nìŋ- nìn- n. body (uncommon); **nìn-tūllím^m** n. fever; **nìn-tāa**⁼ pl nìntāas^ɛ cb nìn-tà- n. co-wife; husband's sister's wife (Ghanaian English: "rival"); **nìn-gbīŋ^r** pl nìn-gbīná⁺ cb nìn-gbīŋ- n. body (plural often used as singular); nìn-gòor^ɛ n. neck *nīn-púùd*^ε *n*. *pl* as sg pus **nīntāŋ**^a/ pl nīntāaňs^{ϵ}/ cb nīntáŋ- n. heat of the day, early afternoon **nìŋ^ε** dv. do **n lā** that is ... 21.4.1 **nāas** q. four, in counting *nníi* q. eight, in counting **nnū** q. five, in counting **n ňwà** this is ...; **n ňwà nā** this here is ... <u>21.4.1</u> $n\bar{2}$ dv. tread **n5b**^ε dν. get fat $n5big^{\epsilon}/dv$. grow (e.g. child, plant) nóbìr^ɛ pl nōbá⁺ cb nōb- n. leg, foot; nōb-bíl^a n. toe; nōb-yíuŋ^o adj. one-legged 15.7.1.3; *nɔ̃b-íň*'a⁺ *n*. toenail; *nɔ̃b-pómpàuŋ*^o *n*. foot *nɔ̃k^{ε/} dv*. pick up, take up $n \partial \eta^{\epsilon}$ agt $n \partial \eta d^{a}$ (irregularly Pattern L) sv. love (family, spiritual); irregularly has the m^a-imperative form nonima 10.2 nɔ̃ŋɔ/ cb nɔ̃ŋ- n. poverty; nɔ̃ŋ-dáànª n. poor person

nòŋılím^m n. love

nɔ̄ɔ⁼ exactly, just; *emphatic* <u>27.6</u>

- nɔ̄ɔr^ɛ/ pl nɔ̄yá⁺ cb nɔ̄- n. mouth; command, message, opinion; nɔ̄-dí'às^a n. "linguist", a councillor who speaks on a chief's behalf on all official occasions (not only in the region of the old Mossi-Dagomba states <u>1.1</u>: "linguist" in Ghana typically refers to an Akan chief's herald and spokesman, the okyeame); Wínà'am nɔ´-dí'às^a ("God's linguist") prophet NT/KB; nɔ̄-lɔ́ɔ̀r^ɛ n. fasting ("mouth-tying", as throughout West Africa); nɔ̄-náàr^ɛ n. covenant; nɔ̄-pɔ́ɔ̀r^ɛ n. oath; nɔ̄-gbáuŋ^o pl nɔ̄-gbánà⁺ n. lip
- *nɔ̄ɔr^{ε/} nɔ̄ɔrím^m* times <u>15.4.2.4</u>

np>e q. seven, in counting

htáň' q. three, in counting

 $n\bar{u}^+ dv$. drink

- nūa^{+/} pl nɔ̄ɔs^{ε/} cb nɔ̄- n. hen; nɔ̄-dáùg^o n. cock; nɔ̄-ňyá'àŋ^a n. (specifically female) hen; Nɔ̄-ňyá'àŋ-nέ-ò-Bīis the Pleiades
- $n\bar{u}llg^{\epsilon}/dv$. make drink

 $n\bar{u}l(s^{\epsilon}) dv$. make drink

 $n\dot{u}$ \dot{u} \dot{u}

 $cb n\bar{u}'-\epsilon n' - n.$ fingernail; $n\bar{u}'-w\epsilon n'\epsilon d^a n.$ mediator

ňwà+ this <u>15.7.5</u>

 $\check{\mathbf{n}}w\bar{\mathbf{a}}'^+ dv$. smash, break up

ňwāaŋ^a pl ňwāamıs^ɛ cb ňwàaŋ- n. monkey

 $\breve{n}w\bar{a}d\iota g^{a/}$ pl $\breve{n}w\bar{a}d\iota s^{\epsilon/}$ cb $\breve{n}w\bar{a}d$ - n. moon, month; $\breve{n}w\bar{a}d$ -bí l^{a} pl $\breve{n}w\bar{a}d$ -bí $b\iota s^{\epsilon}$ n. star;

Ňwād-dár^ɛ n. Venus

ňwà'e+ dv. cut wood

ňwā'e^{+/} dv. strike, break

ǹwāe̯ q. nine, in counting

ňwām^{mε} ňwān^{nε} pl ňwāma⁺ ňwāna⁺ cb ňwàm- ňwàn- n. calabash

Ňwāmpūrıg^a/ pl Ňwāmpūrıs^ε/ cb Ňwāmpúr- n. Mamprussi person

Ňwāmpūrul^{ɛ/} n. Mampruli language

Ňwāmpūrvg⁾ *n*. Mamprussi country

 $\mathbf{\check{n}w}\mathbf{\check{e}'}^+ dv$. beat; $\mathbf{\check{n}w}\mathbf{\check{e}'} \ge nu'$ and $\mathbf{\check{n}u'}\mathbf{\check{n}g}$ make an agreement with X; $\mathbf{\check{n}w}\mathbf{\check{e}'} = \mathbf{\check{n}y}\mathbf{\check{2}'2g}$ boast

ňwīig^{a/} pl ňwīis^{ɛ/} cb ňwī- n. rope; ňwī-ték^a pl ňwī-tékìdıb^a cb ňwī-ték- n. rope-puller;

ňwī-tékìr^ɛ *pl ňwī-tékà*⁺ *n.* rope for pulling

 $\check{\mathbf{n}}w\bar{\mathbf{i}}\mathbf{i}\mathbf{g}^{\mathbf{\epsilon}}/dv.$ make a rope

 $\check{n}y\bar{a}'al^{\epsilon}/dv$. leave behind

ňyāan next, afterwards; post-subject particle 20.2.3

 $\ddot{n}y\dot{a}'a\eta^a$ pl $\ddot{n}y\dot{a}'as^{\epsilon}$ $\ddot{n}y\bar{a}'am(s^{\epsilon} cb \ \ddot{n}y\bar{a}'a\eta - adj$. female (animal)

ňyá'aŋ^a behind, postposition <u>16.6;</u> East <u>29.3;</u> **ňyà'an-dòl^{la} ňyà'an-dòl^{lɛ} pl ňyà'an**dòlla⁺ ňyà'an-dòllıb^a cb ňyà'an-dòl- n. disciple NT; tones unexpected, Pattern L

ňyā'ar^ɛ pl ňyā'a⁺ cb ňyà'- n. root $\breve{n} v \bar{a} e^{n \epsilon} dv$. in the light, brightly, clearly **ňyālúŋ[°]** pl ňyālımá⁺ cb ňyāluŋ- adj. wonderful **ňvàn^{nε}** n. shame: Ò dì ňván, He's ashamed. $n \bar{\gamma} \bar{\sigma} \eta^{\epsilon} / d\nu$. overcome <u>22.2</u> \check{n} yàuk³ pl \check{n} yà'ad^ɛ adj. only (eve) 15.7.1.3 **ňyē**⁺ ipfv ňyēt^{a/} imp ňyèm^a dv. see, find; ňyē láafiya get well ňyēɛ, ňyēɛ tí habitually, auxiliary tense marker 19.3.2 $ny\bar{\epsilon}'\epsilon r^{\epsilon}/pl ny\bar{\epsilon} da' cb ny\bar{\epsilon}' - n.$ next-younger sibling ňyžes^a sv. be self-confident ňyžesim^m n. self-confidence **ňy\dot{\epsilon} s s (\eta^{a} p | ny \dot{\epsilon} s s (s^{\epsilon} c b ny \dot{\epsilon} s s (\eta - a d j))** self-confident $ny \epsilon \epsilon s (n \bar{a}^{+/} a d v)$. self-confidently **nyí** q. two, in counting **ňyīn^{nε/}** pl ňyīná⁺ cb ňyīn- n. tooth *ňyīríf pl ňyīrí*⁺ *n*. a kind of edible seed, egusi: *Colocynthis citrullus* (Haaf) *ň*ȳɔd^ε *n*. intestines ňyō'ɔg^{ɔ/} n. chest n sympathy: \dot{O} $z\dot{z}\dot{t}\cdot\bar{O}$ n sympathises with him. **ňyɔ̄ɔr^ε** pl ňyɔ̄ya⁺ cb ňyɔ̀- n. nose; breath; **ňyɔ̀-vūr^{ε/}** pl ňyɔ̀-vūyá⁺ cb ňyɔ̀-vūr- n. life; ňyò-vūr-páàl^{lε} n. new life NT ňyɔ̄'ɔs^{ε/} n. smoke *n***yú***èb q*. six, in counting **ňyūur^{ε/}** pl ňyūyá⁺ cb ňyū- n. vam

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ò [v] he, she, his, her (right-bound); ^o LF [v] him, her (left-bound) <u>15.3.1</u>
ón he, she (subject of *n*-clause); **5n**^ε he, she (contrastive) <u>15.3.1</u>
òn^ε this, that (animate sg demonstrative) <u>15.3.2</u>
òňb^ε ger 5ňbir^ε dv. chew
òŋā^{+/} this, that (animate sg demonstrative) <u>15.3.2</u> **53s**^{ε/} dv. warm oneself; Ò *basid nē búgóm lā*. She's warming herself at the fire.

Ρ

pà' earlier today, tense particle <u>19.3.1</u>
pà'al^ɛ dv. teach, inform; agt pā'an^{na} pl pā'annıb^a cb pà'an- n. teacher
pà'al^ɛ dv. put on top of something
pāalíg^a páal^{lɛ} pl pāalís^ɛ pāalá⁺ cb pāal- adj. new
pāalím^m adv. recently
pāalú⁺ adv. openly
pàaňlúŋ² pl pàaňlímìs^ɛ n. spider's web

pàam^m dv. receive a gift **pàas^{\epsilon}** dv. add up to, amount to **pāe**^{+/} dv. reach pàk^ε dv. surprise $p \dot{a} k^{\epsilon} dv$. take off from the top **pāmm** SF **pāmné** LF *q*. much, a lot 5.1.3 pàň'alım^m dv. dedicate pàňsig^ε dv. lack **pàŋ^a** pl pàaňs^ɛ cb pàŋ- n. power pà' tì perhaps; post-subject particle 20.2.3 pèbis^ɛ dv. blow (of wind) pèbisim^m pèbisug^o n. wind **pè**'*ɛl*^ɛ *dv*. fill; resultative adj **pè**'*ɛl***úŋ**² full pɛɛlug[>] in zū-pɛ́ɛlug[>] bald <u>15.7.1.3;</u> cf pie "go bald" (Leviticus 13:40), Mooré péoogè $p\dot{\epsilon}'\epsilon s^{\epsilon} dv$ add up to, amount to $p \epsilon l q \epsilon d v$. whiten, go white pèlis^ɛ dv. sharpen **pèn^{nɛ}** *n*. vagina $p\bar{\epsilon}' n^{\epsilon} dv$. borrow; knock over WK **p** $\dot{\epsilon}$ og² pl p $\dot{\epsilon}$ ϵ d^{ϵ} cb p $\dot{\epsilon}$ - n. basket $p\bar{\epsilon}'og^{\prime}$ pl $p\bar{\epsilon}'\epsilon s^{\epsilon}$ cb $p\bar{\epsilon}'$ - n. sheep; $p\bar{\epsilon}'-s\dot{a}'a^{-}$ n. ewe lamb $p\bar{\epsilon}sig^{\epsilon}/dv$. sacrifice $p_i\bar{a}^+ dv$. dig up piāň'a dv. speak, praise; ger piàuňk^o n. word pl piàň'ad^ɛ language cb piàň'-; piàň'-zùna⁺ n. foreign language pibig^ε dv. uncover **p**ible dv. cover up **pībin^{nɛ}** pl pībina⁺ cb pìbin- n. covering 11.1.2 **p** id^{ε} dv. put on (hat, shoes, rings); clothing item as object; with indirect object put (hat, shoes, rings) on someone else $p\bar{l}d^{\varepsilon} dv$. get bloated **pid** q^{ϵ} dv. take off (hat, shoes, rings) $p\bar{i}e^{+/}dv$. wash (part of one's own body) pìəb^ɛ dv. blow (e.g. flute) **piəluga piəl^{\epsilon}** pl **piəla⁺** piəlus^{ϵ} cb **piəl-** adj. white **pìəlim^m** n. whiteness **pi∂**s^ε dv. fool someone **pīəs^{ε/}** dv. wash **pīiga**⁺ q. ten **pīim^{m/}** pl pīmá⁺ cb pīm- n. arrow **píiňf**² pl pīiní⁺ cb pīin- n. genet

piint + cb piin- pl as sq (?) n. gift pìl^ε dv. cover pìlıg^ɛ dv. uncover **pīň'il^{ε/}** dv. begin $p\bar{i}p\bar{i}rig^{a/}$ pl $p\bar{i}p\bar{i}ris^{\epsilon/}cb$ $p\bar{i}p\bar{i}r$ - n. desert **pīsí**⁺ q. twenty $p\bar{l}t\dot{v}^+$ pl $p\bar{l}t\dot{v}^a$ cb $p\bar{l}t$ - n. younger sibling of the same sex **p5**⁺ *dv*. swear **ρ**ờňd^ε dv. crouch down **põň'ol**^ε/ dv. cause to rot **pòň'ɔlım^m** dv. cripple, get crippled **pòň'ɔr^ε** pl pòňda⁺ cb pòň'- n. cripple **pòňr**^a ger pōňrub^o sv. be near pòod^a sv. be few, small **pòɔdıq^a pòɔdır^ε** pl pòɔda⁺ cb pòɔd- adj. few, small **pòodum^m** n. fewness $p\bar{j}_{2}q^{2}$, $pl p\bar{j}_{2}d^{\epsilon}$, $p\bar{j}t^{\epsilon}$, $cb p\bar{j}_{2}$, n. field, farm $p\dot{z}' \partial g^{\epsilon} dv$. diminish, belittle $p\bar{j} \sigma r^{\epsilon}/n$. "slogan" of a clan, part of its traditional genealogy WK; $\leftarrow p\bar{j}^+$ swear (cf Farefare pote, pore "nom de famille, nom par lequel on jure", also "oath") **pv** not: negates indicative mood 19.5 $p\bar{v}^+ dv$. divide pu'ā^a pl pv̄'ab^a cb pu'à- n. woman, wife; Ò dì pu'ā. He's married a wife; pu'à-dītr^ɛ $p\mu'\dot{a}-\breve{n}y\dot{a}'a\eta^{a}$ pl $p\mu'\dot{a}-\breve{n}y\dot{a}'as^{\epsilon}$ n. old woman; $p\mu'\dot{a}-p\bar{a}al^{a/}$ n. bride; $p\mu'\dot{a}-s\bar{a}d\iota r^{\epsilon/}$ n. young woman; **pu'à-sāň'am^{na} n.** adulterer; **pu'à-yùa**⁺ n. daughter **puāk**^a pl $p\bar{v}$ 'as^{ϵ} adj. female (human only) pù'alım^m dv. cook pò'alım^m dv. harm, damage; resultative adj pò'alúŋ^o damaged pù'alım^m n. femininity $p\dot{v}$ 'alím^m pl p \dot{v} 'alím \dot{s}^{ε} cb p \dot{v} 'alím- n. female sex organs pùd^ɛ dv. name $p\bar{\nu}d\iota q^{\epsilon}/d\nu$. divide, share out pùgudıb^a pl pùgud-nàm^a cb pùgud- n. father's sister pùkòɔňr^ɛ pl pùkòňya⁺ cb pùkòň- n. widow **pūkpāad**^a/ pl p**ūkpāad**(b^a cb irreg p**ūkpá-** n. farmer **pùluma**⁺ n. a species of grass, *Imperata cylindrica* (Haaf) pòmpɔ̄ɔg[>] n. housefly pòn previously, already; preverb <u>19.7.2</u> pūň'e^{+/} dv. rot **pūsig**^a/ pl pūsis^{ϵ}/ cb pūs- n. tamarind

 $p\bar{v}$ -sú k^{a} pl $p\bar{v}$ -súg vs^{ε} n. half <u>15.4.2.1</u>

 $p\bar{o}t^{\epsilon}/n$. pl as sg contents of stomach WK

pūum^m/ cb pūum- n. flowers

pūvg^a cb pò- n. inside, belly; Pu̯'ā lā mór pūvg The woman is pregnant; pūvgv-n^{εl} inside <u>16.6</u>; pò-pìəlım^m n. holiness; pò-tèň'ɛr^ɛ pl pò-tèňda⁺ cb pò-tèň'- n. mind

ρῦυr^{ε/} n. stomach

pò'vs^ɛ dv. greet, worship, thank; ger pò'vsım^m n. worship; ger pò'vsvg^o n. thanks; pò'vsvg dóòg^o NT temple

S

sà yesterday, tense particle 19.3.1 sà hence, ago, VP-final particle 19.10 $s\bar{a}'^+ dv$, be in distress sàa tomorrow, tense particle 19.3.1 **sāa**⁼ pl sāas^ɛ cb sà- n. rain; sky; as subject of jāňk^{ɛ/} "leap": lightning; **sāa** díndēog^{5/} rainbow ("rain chameleon"); sāa zúg⁵ n. sky <u>16.6</u> sā'ab^o cb sà'- n. millet porridge, "TZ", the staple food of the Kusaasi sāafi⁺ (?tones) n. lock, key ← Twi safẽ sàal^a pl sàalıb^a cb sàal- n. human (perhaps ← "hairless" cf būn-kóňbùg^o); sàal-bīig^a pl sàal-bīis^{ϵ} n. human being **sàalíŋā**^{+/} *adv*. smoothly sàam^{ma} pl sàam-nàm^a cb sàam- n. father; sàam-kpɛ̃ɛňm^m n. father's elder brother; **sàam-pīt^a**/ pl sàam-pītíb^a cb sàam-pīt- n. father's younger brother sāam^m/ dv. mash, crumble $s\bar{a}'an^{\epsilon}$ in the presence of, in the opinion of; postposition <u>16.6</u> **sāan^a**/ *pl sáam^{ma} cb sāan- n.* guest, stranger sáannìm^m n. strangerhood **sàb** $\bar{\epsilon}$ og^o pl sàb $\bar{\epsilon}$ ϵ d^{ϵ} cb sàb $\dot{\epsilon}$ - n. wind, storm **sābilíg^a sābíl^{iɛ}** pl sābilís^ɛ sābilá⁺ cb sābil- adj. black **sàbùa**⁺ pl sàbù θ s^{ϵ} cb sàbuà- n. lover, girlfriend **Sà'dàbòɔq^o** n. place of the clan Sarabose Sà'dàbùa⁺ pl Sà'dàbùes^ɛ Sà'dàbùeb^a n. clan name sādıgím since, because 24.2 **sāeň**⁺ or **sāeň**^a pl sāaňb^a cb sàň- n. blacksmith **sākárùg²** pl sākárìd^ɛ cb sākár- n. fox sàlıbιr^ε n. bridle sālıma⁺ cb sàlım- n. pl as sg gold; sàlım-kùes^a n. gold merchant sām^{nε}/ pl sāmá⁺ cb sām- n. debt; sām-kpá'às^a n. household servant

sāmán^{nɛ} pl sāmánà⁺ cb sāmán- n. open space in front of a $zàk^a$ compound; **Sāmán-píər^ɛ** *n*. traditional New Year ceremony sàň'am^m dv. spoil, get spoiled, get broken; destroy **sāngúnnìr^ɛ** pl sāngúnnà⁺ cb sāngún- n. millipede $s\bar{a}n\dot{a}^{+}$ pl sāns \dot{a}^{+} cb sān- n. time 29.7 8.3.2; $s\bar{a}n$ -kán^{ϵ} adv. then; when? sān-sí'ān lā adv. at one time, once ... 20.2.1 sàn-gbàun³ n. sky, heaven; cf sāa⁼ $s\bar{a}p\dot{a}l^{l\epsilon}n$. Harmattan part of the dry season $\dot{u}un^{n\epsilon}$ **sāpı**⁺ ideo. straight sārıgá⁺ n. prison ← Hausa sarkàa "chain" sàríyà⁺ or sèríyà⁺ n. law ← Arabic شريعة [ari:٢a; sàríyà-kāt^a n. judge NT] **sāvq**² pl sāad^{ϵ /} cb sā- n. broom, brush **sàuk²** pl sà' ad^{ε} n. mote of dust **sáuŋ[°]** *n*. hospitality $s\dot{\epsilon}^+$ ipfv $s\dot{\epsilon}\epsilon d^a dv$. transplant **sēoňq[°]** n. rainy season $si^+ dv$. skin, flav *sī*'*a*⁺ some, any (*sg*) <u>15.3.3</u> sīa⁺ pl sīəs^ε cb sià- n. waist; sià-lɔ̄ɔdíŋ^a n. belt ("waist-tying-thing"); sià-nīf^{o/} n. kidnev $si\bar{a}'al^{\epsilon}/d\nu$. get to be enough sià'ar^ε pl sià'a⁺ cb sià'- n. forest (WK), wilderness siàk^ɛ dv. agree (cf Mooré sàke, Buli siagi id) **siāk**^ε/ dv. suffice (cf Mooré sékè, Buli chagi id) **sīb** (q^{a}) pl sīb(+ cb sīb - n. a kind of termitesid truly, post-subject particle 20.2.3 **sìda**⁺ pl sìd- n. pl as sg truth sīd^a pl sīdıb^a cb sìd- n. husband; sìd-bīl^a n. husband's younger brother; sìd-kpēɛňm^m n. husband's elder brother; sìd-puāk^a n. husband's sister $sie^{+/} dv$. descend, be humbled sīəba⁺ some(ones), any (ones) 15.3.3 *sī*'*əl*^a something, anything <u>15.3.3</u> sī'əm^m somehow, anyhow 15.3.3 16.7 **sīg^ε** dv. descend **sigur**^{ϵ}/ n. guardian spirit, typically but not invariably the $win^{n\epsilon}$ of an ancestor <u>29.2</u> *sīgιs*^{ε/} dν. lower **sīgisír^ɛ** pl sīgisá⁺ n. stopping-place **sīιg^a** pl sīιs^ε cb sì- n. shade, personal spirit (KED); used in NT for "spirit"; in traditional belief rather Lebenskraft (Haaf) "vital energy", closely associated with a person's tutelary $k i k \bar{i} r (gv)$; **Si-sòn**² n. Holy Spirit NT; cf Buli chíik

sīιg^a pl sīιs^ε n. African birch, Anogeissus leiocarpa; cf Buli sīik

Vocabulary

sìilum^m dv. cite proverbs **sìilín^a sìilón³** pl sìilís^{ϵ} sìilímìs^{ϵ} sìilímà⁺ cb sìilín- n. proverb *sīiňd*^{ε/} *n*. honev **sīiňf^o** sīiňg^a pl sīiňs^{ϵ} cb sīň- n. bee *sī*'*ιs*^{ε/} dν. touch **sīlınsíùq²** pl sīlınsîls^ε n. ghost **sīlınsíùňq⁹** pl sīlınsíìňd^ɛ n. spider **silug**² $pl sin^{n\epsilon} sills^{\epsilon} cb sil- n$. hawk **sìm^m** dv. sink in a liquid **Sìmīig^a** pl Sìmīis^ɛ cb Sìmì- n. Fulße person, Fulani **Sìmīil^ɛ** *n*. Fulfulde language **Sìmīuq⁹** n. place of the Fulbe **sīn^{na/}** aer sīnním^m sv. be silent **sīnsáaň**⁼ n. a kind of tiny ant sin^{a} pl sin^{ϵ} cb sin- n. a kind of very big pot sī'η^{ε/} dv. begin **sīsíbìg**^a pl sīsíbìs^{ϵ} cb sīsíb- n. neem tree Azadirachta indica (Haaf) **sīsíbìr^{\epsilon}** pl sīsíbà⁺ n. fruit of neem tree **sìsì'əm^m** *n*. wind, storm sìsùugū-n^{ε/} between, postposition <u>16.6</u> KB suugun $s\bar{i}' u \eta^{2}$ pl $s\bar{i}' i m (s^{\epsilon} cb s\bar{i}' u \eta - n. a kind of large dish$ **sj**'⁺ some(one), any(one), animate sq 15.3.3 *sɔ̃b*^a dummy head pronoun, animate sg <u>15.3.7</u> $s\bar{b}^{\epsilon} dv$. go/make dark; usually write; $s\bar{b}\mu^{\epsilon} n$. piece of writing $s\bar{b}\iota g^{\epsilon}/d\nu$. blacken sɔ̃eň⁺ or sɔ̃eň^a pl sɔ̃oňb^a cb sòň- n. witch sógià^a n. soldier ← English **sɔ̃luŋ^{ɔ/}** pl sɔ̃lımá⁺ n. story **sōň**⁺ dv. rub sɔ̃ň'e^{ya/} sv. be better than; agt sɔ̃ň'ɔd^{a/} pl sɔ̃ň'ɔb^{a/} cb sɔ̃ň'ɔd**sɔ̃nnır**^ɛ pl sɔ̃nna⁺ cb sɔ̀n- n. courtyard dividing wall **sɔ̃ňs^ε** ger sɔ́ňsìg^a dv. converse, talk with **sɔ̃ɔňq^o** *n*. witchcraft **sɔ̃ɔňr^ε** pl sɔ̃ňya⁺ cb sòň- n. liver sòs^ɛ ger sɔ̄sıg^a dv. ask; agt sòs^a n. beggar $s\dot{v}^+ dv$. take a bath su'ā^a dv. do secretly, hide **suāk**^a/ n. hiding place sūeň^{+/} dv. anoint sō'e^{ya/} sv. own; ger sō'olím^m n. property, country, realm **sūqur^{\epsilon}**/ dv. show forbearance, be patient with; **sūgur**o⁺ n. forbearance

sòm^m *n*. goodness; well **sòm^{ma}** sv. be good **sùmbūqusím^m** n. peace **sūmmιr^ε** pl sūmma⁺ cb sùm- n. groundnuts; **sūm-dúgυdà**⁺ n. cooked groundnuts **sùn^{nɛ}** ger sùnnır^ɛ or sùnnug^o dv. bow one's head; agt **sūn^{na}** n. ("someone who goes about with bowed head") deep thinker, close observer WK $s\bar{u}\check{n}'e^{+}/dv$, become better than sūňf^{•/} sūuňr^{ε/} pl sūňyá⁺ cb sūň- n. heart; sūň-kpí òŋ[•] n. boldness <u>15.6.1;</u> **sūň-má**'asìm^m n. joy (\dot{M} sūňf má'e yā. "My heart has cooled"= I'm joyful); sūň-málisim^m cb sūň-mális- n. joy; sūň-pέὲn^{nε} n. anger (À sūňf pélig nē. "My heart is whitened"= I'm angry); **sūň-sáň'ùŋ²** n. sorrow (*M* sūňf sáň'àm nē. "My heart is spoilt" = I'm sad) sòn^ε dv. help **sùŋ² sùm^{mε}** pl sùma⁺ cb sùŋ- adj. good sònā^{+/} adv. well, much **sú'eŋ^a** pl sū'emís^ɛ cb sū'eŋ- n. rabbit **sūer**^{ϵ}/ pl suēyá⁺ cb suā- n. road; permission in sūer bé, mor suer <u>25.1</u> sù'es^a n. yesterday 29.7 sù'θs^ε dv. trick sùr^a sv. have one's head bowed sùsòm^{mε} n. grasshopper Sotáanà⁺ n. Satan $s\bar{v}vg^{\epsilon}/dv$. wither (leaves) WK

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sò'ug<sup>a</sup> sò'ug<sup>></sup> pl sò'vs<sup>ɛ</sup> cb sò'- n. knife
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Т

 $t\bar{a}a^{=} t\bar{a}as^{\epsilon}$ fellow- as second part of compound <u>12.2.1.4</u> $t\bar{a}aba^{+} t\bar{a}ab$ each other <u>15.3.5</u> $t\bar{a}^{-}adir^{\epsilon}$ pl $t\bar{a}^{-}ada^{+}$ cb $t\bar{a}^{-}a$. sandal $t\bar{a}al^{i\epsilon}$ pl $t\bar{a}^{-}ada^{+}$ cb $t\bar{a}^{-}a$. fault, sin $t\bar{a}^{-}am^{m\epsilon}$ pl $t\bar{a}^{-}am\bar{a}^{+}$ n. shea tree fruit $t\bar{a}^{-}ag^{a}$ pl $t\bar{a}^{-}am\bar{s}^{\epsilon}$ cb $t\bar{a}^{-}ag^{-}$ n. shea butter tree Butyrospermum parkii (Haaf) $t\bar{a}^{-}as^{\epsilon'}$ dv. help someone to walk; in greetings <u>28</u> $t\bar{a}b^{\epsilon}$ dv. get stuck to $t\bar{a}big^{\epsilon}$ dv. get unstuck from $t\bar{a}big^{\epsilon}$ dv. get unstuck from $t\bar{a}big^{\epsilon}$ dv. stick to (transitive) $t\bar{a}dig^{\epsilon}$ n. become weak $t\bar{a}dim^{m'}$ pl $t\bar{a}dim$ -n $\bar{a}m^{a}$ cb $t\bar{a}dim$ - n. weak person $t\bar{a}dim(s^{\epsilon}$ n. weakness $T\bar{a}lin^{n\epsilon}$ n. Talni language **Tàlıŋ^a** pl Tàlıs^ɛ cb Tàlıŋ- n. Tallensi person tàm^m ipfv tàmmıd^a dv. forget tàmpìiňg^a n. rock tàmpūa⁺ pl tàmp $52s^{\epsilon}$ cb tàmp5-n. housefly 8.3.2 **tàmpūvr^ε** cb tàmpù- n. ashpit, rubbish tip tān^{nε} pl tāna⁺ cb tàn- n. earth; tàn-mɛ̃εd^a n. builder tāňp^o n. war; tàňp-sɔ̃b^a n. warrior **tàňs**^{ϵ} ger tàňsvq^{\circ} dv. shout; Winnıg táňsid n $\bar{\epsilon}$. The sun is shining. tār^{a/} ger tārím^m sv. have; more typical of Toende Kusaal; NT/KB always m5r^{a/} tàsıntàl^{lɛ} n. palm of hand **tàtà** $I^{l\epsilon}$ *n*. palm of hand tāuň^{+/} pl tāňp^{a/} cb tāuň- tāňp- n. sibling of opposite sex **t** $\hat{\boldsymbol{b}}\boldsymbol{b}^{\boldsymbol{\varepsilon}}$ ger $\boldsymbol{t}\boldsymbol{\bar{\varepsilon}}\boldsymbol{b}\boldsymbol{\iota}\boldsymbol{g}^{a}$ dv. carry in both hands $t\bar{\epsilon}b\iota g^{\epsilon}/d\nu$. get heavy tēbis^a/ sv. be heavy tēbisíq^a tēbisír^ɛ pl tēbisá⁺ cb tēbis- adj. heavy tēbisím^m n. heaviness *tɛ́ɛbòl*^ɛ *pl tɛ́ɛbòl-nàm*^a *n.* table ← English *tēεq^{ε/} dv*. drag, draw; *tēεq* X *tòbor* punish X **tè'ɛga** pl tè'ɛs^ɛ cb tè'- n. baobab Adansonia digitata (Haaf) tēk^ε/ dv. pull tèňb^ɛ ger tèňbug^ɔ dv. tremble, struggle tèň'εs^ε dv. remind $t\bar{\epsilon}n'\epsilon s^{\epsilon}/dv$, think; ger $t\bar{\epsilon}n'\epsilon s\dot{a}^+ n$, thought tèňr^a ger tēňrıb⁵ sv. remember tēn^a pl tēcňs^ɛ cb tèn- n. land; tèn-bīig^a n. native; tèn-dāan^a n. traditional earthpriest; **tèŋ-dū'adıg^a** n. native land; **tèŋ-gbàuŋ⁵** n. earth, land; **tèŋ-pūug^{5/}** pl $t \dot{\epsilon} \eta$ - $p \bar{\upsilon} \upsilon d^{\epsilon} / c b t \dot{\epsilon} \eta$ - $p \bar{\upsilon}$ - n. village, town; $t \dot{\epsilon} \eta$ - $z \dot{\upsilon} \eta$ ² $p l t \dot{\epsilon} \eta$ - $z \dot{\upsilon} \upsilon n s^{\epsilon} n$. foreign country; tèn-sūka n. centre tēni-n^ɛ or tēnír^ɛ downward; as postposition under <u>16.6</u> **tèog**² pl tè ϵd^{ϵ} n. nest **tè'og'** pl tè' $\epsilon d^{\epsilon} n$. baobab fruit *ti* we, our (*right-bound*); *ti*⁺ us (*left-bound*) 15.3.1 tì preverb conveying completion or purpose <u>19.7.2</u> tià'al^ɛ dv. come next tiàk^ε dv. change $ti' = b^{\varepsilon} dv$. prepare, get ready; heal in this sense perhaps influenced by Arabic طب t^ribb "medicinal art"; **tī'əb**^a n. healer *tieň*⁺ *dv*. inform WK (KED remember) **tieň**⁺ dv. stretch out tiən^a pl tiəmis^{ε} cb tiən- n. beard; tiən-gūur^{ε} n. chin

 $tia^{\epsilon} dv$. become sated, have too much/many; ger $tigir^{\epsilon} n$. glut tī'iya/ ger tī ib^{ɔ/} sv. be leaning (object) **tì g**^a pl tì s^{ϵ} cb tì- n. tree; **tì-dā ug**^{\circ} pl tì-dā d^{ϵ} cb tì-dà- n. bow (for arrows) $t\bar{i}'il^{\epsilon}/dv$. lean something tìum^m cb tì-n. medicine; tì-kōvdím^m n. poison (killing-medicine); tì-sābulím^m n. "black medicine" (a particular traditional remedy): **tì-vōnním^m** n. oral medication **tì'in^{\epsilon}** dv. begin to lean tīlás^ε n. necessity ← Hausa tiilàs <u>25.1</u> **tilig**^{ϵ} dv. survive, be saved tīnám^a we, us (contrastive); tīnámi we (subject of *n*-clause) <u>15.3.1</u> **tīntɔ̃ňríg**^a pl tīntɔ̃ňrís^ε 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 tīráànnım^m n. neighbourliness tírigà ideo. for gīn^a short **t**is^{ϵ} ipfv tisid^a tit^a agt tis^a dv. give; also ti before bound pronouns: ti f gave you tītā'al^{lɛ} n. proud person tītā'alım^m n. pride tītā'am^m n. multitude tītā'ug^o tītā'ar^ɛ pl tītāda⁺ cb tītá'- adj. big, great **tò** OK 21.4.4 (= Hausa *tôo*) **t** \dot{d}^{ϵ} dv. give to the poor, share tie^{a/} sv. be bitter, difficult *tóklàe*⁺ *n*. torch ← English "torchlight" tólìb ideo. $t\bar{j}ls^{\epsilon}/dv$. do next, advance, carry on **tólılılı** ideo. for w5k^{5/} tall tòň⁺ dv. shoot tờň'ɔs^ε dv. hunt $t\bar{j}_{2}q^{2}$ pl $t\bar{j}_{2}d^{\epsilon}$ cb $t\bar{j}_{2}$ adj. bitter, difficult tōom^m/ dv. depart, disappear tò'>tō'+/ adv. straight away tuà⁺ dv. grind in a mortar; tuà-bīl^a n. pestle tu'à^a dv. speak, plead in court tò'al^ɛ dv. condemn in court tờ'as^ε dv. talk tùbur^ɛ pl tùba⁺ cb tùb- n. ear; tùb-kpìr^ɛ n. half of jaw; tùb-yīuŋ^{ɔ/} adj. one-eared 15.7.1.3 tolla/ sv. be hot **tùlig^ɛ** dv. invert

tūlıg^{ε/} dv. heat up

tòm^m dv. work; ger tōvm^{mε} n. deed pl tōvma⁺ n. deeds; work cb tòvm-; tòvm-bē'ɛd^ε n. bad deeds; tòvm-bē'ɛd-dím^a n. sinners NT; agt tòm-tōm^{na} n. worker
tòm^m ger tìtōmis^ε dv. send; compare Hausa àikaa "send", aikàtaa "work"
tūødir^ε pl tūøda⁺ cb tùød- n. mortar
tùøn^{nε} in front; as postposition <u>16.6</u>; West (KB yà tùøna) <u>29.3</u>; tùøn-gāt^a n. leader
Tùøn^{nε} n. Toende, western part of Kusaasiland
Tùønnir^ε n. Toende dialect of Kusaal
tūsir^ε/ n. thousand <u>15.4.2.1</u>
tòtūl^{iε} n. upside-down thing, cf tùlig^ε
tövlígā⁺/ adv. hotly
tövlíg⁵ pl tōvlá⁺ cb tōvl- adj. hot
tō'vs^ε/ dv. meet

U

 $\dot{u}dvg^{o} pl \dot{u}t^{\varepsilon} cb \dot{u}d$ - n. (piece of) chaff $\bar{u}gvs^{\varepsilon}/dv$. bring up a child $\dot{v}k^{\varepsilon} dv$. vomit $\bar{u}k^{\varepsilon} dv$. bloat $\dot{v}m^{m} dv$. close eyes $\bar{u}r\iota g^{\varepsilon}/dv$. scrape $\dot{u}un^{n\varepsilon} n$. dry season 29.7

V

 $v\bar{a}bi^{ya}$ ger $v\bar{a}p^{2}$ KT $v\bar{a}bir^{\epsilon}$ WK sv. be lying prone $v\bar{a}b l^{\epsilon} dv$. make lie prone vàbin^ɛ dv. lie prone $vae^+ dv$. gather up vāvňg^{>/} pl vāaňd^{ɛ/} cb vāň- n. leaf $v\bar{\varepsilon}^{+} dv$. lead **ν***ε*'εg^{ε/} dν. drag vèn^{na} or vèňl^{la} sv. be beautiful **v** $\check{\epsilon}$ **n**iliq^a pl v $\check{\epsilon}$ **n**ilis^{ϵ} v $\check{\epsilon}$ **n**ilia⁺ cb v $\check{\epsilon}$ **n**il- adj. beautiful vèňllín^a pl vèňllís^ɛ cb vèňllín- adj. beautiful **v** $\dot{\epsilon}$ **nnıg**^{**a**} **v** $\dot{\epsilon}$ **nnır**^{ϵ} *pl* v $\dot{\epsilon}$ *nnıs*^{ϵ} *v* $\dot{\epsilon}$ *nna*⁺ *cb* v $\dot{\epsilon}$ *n*- *adj*. beautiful **v***è*nnım^m n. beauty $v\bar{i}$ + dv. uproot $v\bar{i}k^{\epsilon}/dv$. uproot **vīuq^{5/}** pl vīid^{$\epsilon/$} cb vī- n. owl **νວ້b^{ε/}** dv. thrash (tones uncertain)

vū+ ger vūug^{>/} dv. make a noise; vūud^{ɛ/} n. noise vūg^{a/} sv. be alive vūl^ɛ dv. swallow vòlɛnvùuňl^{lɛ} n. mason wasp vūm^{m/} cb vūm- n. life; vūm-páàl^{lɛ} n. new life vúŋ^a pl vūomís^ɛ n. red kapok Bombax buonopozense (Haaf) vúor^ɛ pl vūáa⁼ cb vūo- n. fruit of red kapok vūr^{ɛ/} pl vūyá⁺ cb vūr- adj. alive vūrɛg^{ɛ/} dv. shift along, move over (tones uncertain) vū'og^{ɛ/} dv. come, make alive vū'os^{ɛ/} dv. breathe, rest vū'osím^m n. resting

W

wā'⁺ dv. dance $w\bar{a}ad^{\epsilon}/n$, cold weather **wáaf** $pl w \bar{i} q (+ cb w \bar{a} + n. snake)$ $w\bar{a}al^{\epsilon}/dv$. sow, scatter seed wā'alím^m n. length wā'am^a/ sv. be long, tall wàbig^a wàbir^{ϵ} pl wàbis^{ϵ} wàba⁺ cb wàb- n. lame person wàbılım^m dv. make, go lame **wābug^r** pl wābid^{ϵ} cb wāb- n. elephant wādır^{ϵ}/ pl wādá⁺ cb wād- n. law (\leftarrow English "order" via Hausa) plural as sg: law wād-tís^a n. lawgiver NT wà'e^{ya} sv. be travelling **wāltg^a** pl wālts^{ε} wālt⁺ (tone sic) cb wàl- n. a kind of gazelle wànım^m dv. waste away wàsınwàl^{$|\epsilon|$} n. a parasitic gall on trees, called "mistletoe" in local English wàuŋ² pl wàna⁺ cb wàuŋ- adj. wasted, thin w*ɛɛd^a* see wìıd^a $w\bar{\epsilon}\epsilon l^{\epsilon}/dv$. be left unsold (KED) but see $w\bar{\epsilon}og^{\gamma}/dv$ $w\bar{\epsilon}l^{\epsilon}dv$, bear fruit $w\bar{\epsilon}l^{|\epsilon|}$ pl $w\bar{\epsilon}l\dot{a}^+$ cb $w\bar{\epsilon}l$ - n. fruit **wēlá**⁺ or **wālá**⁺ how? <u>16.7</u>; nìŋ wēlá n/kà how can ...? <u>22.2.1</u> *wɛ̃n^{na/} sv.* resemble; in KB wɛ̃n nɛ̃ appears as nwɛnɛ; ger wɛ̃nním^m $w\bar{\epsilon}nnir^{\epsilon}$ adj. resembling (Pattern O, specifically confirmed with WK) w*èog^o n.* deep bush $w\bar{\epsilon}og^{2}$ pl $w\bar{\epsilon}\epsilon d^{\epsilon}$ n. cheap thing sold in abundance WK $wi\bar{a}k^{\epsilon}/dv$. hatch (from an eqg) widig^ɛ dv. scatter

Vocabulary

wiəf² pl widi⁺ cb wid- n. horse; wid-l $\bar{j}r^{\epsilon}$ / n. place for tying up horses in a compound; wid-dāug^o n. stallion; wid-ňyá'aŋ^a n. mare; wid-zūur^ɛ n. horsetail **wild**^a or **w***ɛ***ɛd^a** *pl wilb*^a *cb wild*- *n*. hunter Wiid^a pl Wiid-nàm^a cb Wiid- n. member of the clan Wiid Wiidug² n. place of the clan Wiid wiig^a/ n. whistle witm^m n. sickness, disease ("worse than bāň'as^ε" WK) **wìk^ɛ** *ipfv wìid*^a *dv*. fetch water 10.1 will^ε pl wila⁺ cb wil- n. branch **wīlısúŋ[>]** pl wīlımís^ɛ cb wīlısúŋ- n. a kind of snail 8.3.2 *wím* ideo. for zìň'a⁺ red win^{nε/} pl winá⁺ cb win- n. God; god; spiritual double, genius; destiny; win-tóòg³ n. misfortune *Wínà'am^m n.* God 14.1 winnig^a cb win- n. sun; talent; win-liir^{ϵ} n. sunset; win-kòoňr^{ϵ} n. sunset **wiug²** wir^{ϵ} pl wiya⁺ wiid^{ϵ} cb wi- adj. red $w\bar{c}k^{2}/w\bar{a}'ar^{\epsilon}/pl w\bar{a}'a^{\dagger}/w\bar{a}'ad^{\epsilon}/cb w\bar{c}k-w\bar{a}'-adj$. long, tall wòm^m dv. hear; understand (a language); smell wūsa⁺ q. all wūv⁺ q. all wōo like, resembling 18 $w\bar{\upsilon}'\upsilon q^{\epsilon}/dv$. get wet $w\bar{\upsilon}'\upsilon l^{\epsilon}/dv$, make wet Υ **yà** you, your *pl* (*right-bound*); **ya**⁺ you *pl* (*left-bound*) <u>15.3.1</u> **ya** you pl, left-bound subject after imperative 7.2.1 15.3.1 21.3 **ya**⁺ *independent-perfective particle* 19.6.2.1 **yà'** if, when <u>23</u> yáa adv. whither? **yáab**^a *pl yāa-nám*^a *cb yāa- n.* grandparent, ancestor; **yāa-dáu**⁺ *n.* grandfather; yāa-pu'á^a n. grandmother **và**'**ab**^ε dν. mould clav yā'ad^ε cb yà'- n. clay $y\dot{a}'al^{\varepsilon} dv$. hang up; make perch (bird) yà'an^ε dv. perch (of a bird) **Yàan^{nε}** n. Yansi language (apparently Mooré now)

yáa ní⁺ *adv*. where?

yáaŋ^a pl irr yáas^ε (consistently without nasalisation) cb yāaŋ- n. grandchild, descendant <u>29.1</u>

Yàaŋ^a pl Yàam^{ma} Yàamıs^ɛ Yàas^ɛ cb Yàaŋ- n. Yansi person

Vocabulary

yāar^{ɛ/} dv. scatter

yàarım^m cb yàar- n. salt

yà'as^a yà'as^ε again <u>22.2</u>

 $y\bar{a}'as^{\epsilon}/dv$. open repeatedly

yàddā or yàdā n. faith, trust <u>19.8.1</u> ← Hausa yàrda; probably ← Arabic يرضى yard^sa:; yàddā-níŋìr^ɛ n. belief

 $y\bar{a}d\iota g^{\epsilon}/dv$. scatter; agt $y\bar{a}t^{a}/irreg$. agt: participant in a housebuilding ritual

 $y\bar{a}'e^{+/}dv$. widen, open (mouth)

yàk^ɛ dv. unhang, unhook

yàlım^{ma} sv. be wide

yālım^m/ pl yālım-nám^a n. worthless person

yālısúŋ[>] pl yālımís^ɛ cb yālısúŋ- n. quail <u>8.3.2</u>

yàluŋ[>] pl yàlıma⁺ cb yàluŋ- adj. wide

yām^{mε} pl yàma⁺ cb yàm- n. hay WK

yām^m/ cb yām- n. gall; gall bladder; common sense. WK yā'am^m/; probably originally two distinct words 3.2.4

yàmmıg^a yàmmug^a yàmmug^o pl yàmmıs^ɛ cb yàm- n. slave

yānám^a you pl (contrastive); yānámì you pl (subject of *h*-clause) <u>15.3.1</u>

 $Y\bar{a}r\iota g^{a\prime}$ pl $Y\bar{a}r\iota s^{\epsilon\prime}$ cb $Y\bar{a}r$ - n. Yarsi person; also called Kantonsi; said to have been originally of Manding/Dyula origin

Yāt^{ε/} n. Yarsi language (no longer Dyula/Bambara, but a Western Oti-Volta language)

yàug' pl yàad^{ϵ} n. grave, tomb

yε̃ that <u>25</u>; be about to ... <u>19.3.4</u>

 $y\dot{\epsilon}^+ dv$. dress oneself; *resultative adj* $y\dot{\epsilon}\epsilon\dot{\nu}\eta^{\mathbf{y}}$ worn (e.g. of a shirt)

yἑεg^ε dv. undress oneself

 $y \hat{\epsilon} \epsilon l^{\epsilon} dv.$ dress someone

 $y\bar{\varepsilon}\varepsilon s^{\varepsilon/} dv$. betray a secret

yèl^ɛ ipfv yèt^a ger yèlug^ɔ dv. say, tell

 $y\bar{\epsilon}l^{\epsilon}$ pl $y\bar{\epsilon}l\dot{a}^+$ (as postposition: about <u>16.6</u>) cb $y\bar{\epsilon}l$ - n. matter, affair; $y\bar{\epsilon}l$ -ménìr^{ϵ}

n. truth; **yēl-náròŋ[>]** n. necessity; **yēl-pákìr^ɛ** n. disaster; **yēl-sú'adìr^ɛ**

n. confidential matter; $y\bar{\epsilon}l-s \omega m^{m\epsilon} n$. blessing <u>15.7.1.1</u>

yēŋím^m dν. oscillate (like waves)

yèog^o pl yèɛd^ɛ n. bird's crop; person displaced from family (KED)

yἑόŋ q. one, in counting

 $y\bar{i}^+$ ipfv $y\bar{i}t^{a/}$ imp $y\bar{i}m^a dv$. go, come out

yìdιg^ε dν. go astray

yīdιg^{ε/} dv. untie

yìər^ɛ n. jaw

 $yiiga^+ q$. firstly; former <u>15.1</u>; $yiig-sb^a n$. first person <u>15.3.7</u>

 $y\bar{i}s^{\epsilon}/ger y\bar{i}s(b^{\circ}dv)$ make go/come out, extract

yīmmír^ɛ pl yīmmá⁺ cb yīm- adj. solitary, lone <u>15.4.2.3</u>

yīmmú⁺ q. adv. straight away, at once **yīnní**⁺ q. one vìn^a adv. outside **vi***r*^ε/ *pl yā*^{+/} *cb yi*- *n*. house; **y***i*-dáàn^a *n*. householder; **y***i*-sób^a *pl yi*-sób-nàm^a *n*. householder; yī-dím^a n. members of the household; yī-póňrùg^o pl yī-póňrà⁺ *n*. neighbouring house; $y\bar{i}-sig(d)r^{\epsilon}$ *n*. lodging-house; $yin^{n\epsilon}$ at home *pl* yin^{ϵ} $v\bar{s}^{\varepsilon} dv$. make go/come out, extract $y\bar{i}u\eta^{2}$ pl $y\bar{i}n\dot{a}^+$ adj. single- <u>15.7.1.3</u> y⁺ dv. close; resultative adj y⁻ closed $y\bar{j}^{+n}vv$. pay; *ger* $y\bar{j}d^{\epsilon}/n$. pay $y\bar{j}ls^{\epsilon}/dv$. untie **yɔ̃lısím^m** n. freedom $v \bar{\rho} \log^{-1} p l v \bar{\rho} n^{\epsilon} c b v \bar{\rho} l$ - n. sack, moneybag; (like Hausa jàkaa) £100, ¢200 (200 cedis) **y)')***g*^ε *dv*. open **vòɔr^{\epsilon}** pl vòva⁺ cb vò- n. soldier ant **yuà**⁺ *dv*. bleed; *also* fornicate WK yύ'adır^ε pl yú'ada⁺ n. rafter **yùb** ig^{a} pl yùb is^{ϵ} cb yùb- n. small bottle-like pot **yūgudır^ε** pl yūguda⁺ cb yùgud- n. hedgehog yūgúm^{mɛ} yūgúm^{nɛ} pl yūgumá⁺ cb yūgum- n. camel **yùlıg^ε** dv. swing (transitive) $y\bar{u}\bar{n}'e^{+/}dv$. set alight yū'er^ε pl yuāda⁺ cb yù'er- n. penis **yùug**^{ϵ} dv. get to be a long time, delay; Tì yúùg n $\bar{\epsilon}$ tāaba. It's long since we met. **yùul^ε** dv. swing (intransitive) yū'um^m/ dv. sing; agt yūum-yú'ùm^{na} pl yūum-yú'ùmnıb^a n. singer **yύ**'**υm**^{nε} pl yū'υmá⁺ cb yū'υm- or yūυm- n. song **yòum^{mε}** pl yòma⁺ cb yòum- n. year; **yòum-pāalíg^a** n. new year **yū'un** then, next <u>20.2.3</u> **yύ'υη²** pl yū'υmís^ε cb yū'υη- n. night $y\bar{v}'vr^{\epsilon}/pl y\bar{v}d\dot{a}^+ cb y\bar{v}'-n.$ name

y \bar{v} **v** \bar{v} pl y \bar{v} ya⁺ cb y \dot{v} - n. water pot

Ζ

zā+[/] cb zā- n. millet
zāalíg^a záal^{lɛ} pl zāalís^ɛ zāalá⁺ cb zāal- adj. empty
zāalím^m adv. emptily
zàam^m cb zà- n. evening; zà-sìsɔ̄bur^{ɛ/} n. evening
zàň'an^{nɛ} pl zàň'ana⁺ n. metal hammer, iron-tipped weapon, bludgeon
zàaňsum^m dv. dream

Vocabulary

zāaňsím^m cb zāaňs- n. soup; soup in general, not "fish soup" despite Mampruli *zaasim* "fish"; cf Toende *zãas*ím "meat soup" (Niggli) **zàaňsúŋ³** pl zàaňsímà⁺ cb zàaňsúŋ- n. dream zab^{ε} ger $zabir^{\varepsilon} dv$. fight; hurt (of body part); agt $zab-zab^{a} n$. warrior; agt gbān-záb^a n. leather-beater, leather-worker zàbιl^ε dv. cause to fight zàka pl zà'as^ɛ cb zà'- n. compound; zà'-nɔ̄ɔr^{ɛ/} n. gate; zà'-nɔ̄-gúra n. gatekeeper **zàkım^m** dv. itch **zàlıŋ**^a pl zàlımıs^{ε} cb zàlıŋ- n. electric eel zàm^m ipfv zàmmıd^a dv. cheat; aqt zàm-zām^{na} n. cheat **zàmιs^ε** dv. learn, teach **zāň'a**⁼ q. every **zàň'as^ε** dv. refuse **zàňbıl^ɛ** dv. tattoo, mark skin zāňbın^{nε} pl zāňbına⁺ cb zàňbın- n. tattoo; NT sign <u>11.1.2</u> **Zàngbɛɛl^ɛ** n. Hausa language **Zàngbèog⁵** pl Zàngbèɛd^ɛ n. Hausa person **zàngùem^{mε}** pl zàngùema⁺ cb zàngùem- n. wall zànkù'ar^ɛ pl zànku̯'àa⁺ zànkù'ada⁺ cb zànku̯'à- n. jackal *zāňl^{la/} ger zāňllím^m sv*. be holding, carrying in hands **zàňl^{lε}** *n*. umbilicus zàn^ε dv. pick up, take up **zēm^{ma/}** ger zēmmúg^o sv. be equal $z\bar{\epsilon}ms^{\epsilon}/dv$. make equal **zēmmúg^o** pl zēmmá⁺ cb zēm- adj. equal $z\bar{i}^+$ ger $z\bar{i}d^{\epsilon}/d\nu$. carry on one's head; agt $z\bar{i}-z\hat{i}d^a$ n. carrier on the head $z\bar{i}'^+$ ger $z\bar{i}'\iota l(m^m sv. not know <u>19.5.1</u>; agt <math>z\bar{i}'\iota d^{a/}$ n. ignorant person zì'e^{ya} ger zī'a⁺ KED; DK KT zī'əg^a (exceptional phonology <u>14</u> <u>11.1.1</u>) sv. be standing **zì'ə**^{ϵ} dv. make to stand; **zì'ə**/ $n\bar{2}r^{\epsilon}$ promise, command; with n tìs X: promise to X $zi' = n^{\varepsilon} dv$. stand still; $O zi' = n n\overline{\varepsilon}$. She's pregnant. **zīum^m** cb zī- n. blood zíiŋ^a pl zīmí⁺ cb zīm- n. fish; zīm-gbáň'àd^a n. fisherman **zìlım^{mε}** pl zìlıma⁺ cb zìlım- n. tongue **zīlinzíòg⁹** adj. unknown **zím** ideo. for sābilíg^a black **zīná**⁺ today <u>29.7</u> zìň'a⁺ zèň'ug[>] pl zèň'ɛd^ɛ zèň'ɛs^ɛ zèňda⁺ cb zèň'- adj. red zìň'i^{ya} sv. be sitting; ger zīň'ig^a pl zīň'is^ɛ cb zìň- (also place) **zìň'il^ε** dv. make sit, seat **zìň'in^ε** dv. sit down **zīnzāuŋ^{ɔ/} pl zīnzāná+ cb zīnzáuŋ- n. bat**

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z\bar{i}ri^+ n. lie. untruth
z\dot{z}^+ ipfv z\dot{z}t^a imp z\dot{z}m^a dv. run; fear; experience emotion; ger z\bar{u}a^+ z\bar{z}cg^2 run;
          ipfv ger zòtım<sup>m</sup> fear 12.2.1.4 Ò zòt·ō nīn-báalìg. He has pity on him
zɔ̃l<sup>ε</sup> dv. castrate
zɔ̃lımís<sup>ε</sup> n. foolishness
zɔ̃lug<sup>>/</sup> pl zɔ̃n<sup>nε/</sup> cb zɔ̃l- n. fool
zɔ̃m<sup>m</sup>/ cb zɔ̃m- n. flour
zɔ̃ɔm<sup>mε</sup> zɔ̃ɔm<sup>nε</sup> pl zɔ̃ɔma<sup>+</sup> cb zòɔm- n. refugee, fugitive
zɔ̃rıg<sup>a</sup>/ n. small child WK
zɔ̃ruq<sup>ɔ/</sup> pl zɔ́rá<sup>+</sup> n. piece
z\bar{u}^+ dv. steal
zuà<sup>+</sup> pl zuà-nàm<sup>a</sup> cb zuà- n. friend
Zùa<sup>+</sup> pl Zùes<sup>ɛ</sup> n. member of clan Zoose; subclans pl Zuà-wìis<sup>ɛ</sup>/-wìib<sup>a</sup>, pl Zuà-sābılís<sup>ɛ</sup>
zù'e<sup>+</sup> dv. get higher, more
zùe<sup>+</sup> dv. perch, get on top (? variant of z\dot{u}'e^+)
z\bar{u}g^{\prime} pl z\bar{u}t^{\epsilon} cb z\bar{u}g- z\bar{u}- \underline{8.2} n. head; as postposition <u>16.6</u>; z\bar{u}g\dot{\nu}-n<sup>\epsilon</sup> is also used as a
          postposition; zūg-dáàn<sup>a</sup> n. boss, master (replaces zūg-sźb<sup>a</sup> in KB for meanings
          other than "the Lord"); zūg-kūgur<sup>ε</sup> pl zūg-kūga<sup>+</sup> cb zūg-kúg- n. pillow; zūg-
          máuk<sup>></sup> pl zūg-má'àd<sup>ɛ</sup> adj. crushed-headed <u>15.7.1.3</u>; zūg-sób<sup>a</sup> n. boss; NT
          Lord; z\bar{u}-p\epsilon \epsilon l \dot{v} g^{2} pl z\bar{u}-p\epsilon \epsilon l \dot{a}^{+} a d j. bald <u>15.7.1.3</u>; z\bar{u}-p\ell b \dot{v} g^{a} n. hat
zùlıg<sup>ε</sup> dv. deepen
zùlım<sup>ma</sup> sv. be deep
zùluŋ<sup>></sup> pl zùlıma<sup>+</sup> cb zùluŋ- adj. deep
zùluŋ<sup>2</sup> n. depth
z \dot{v} n z \dot{z} \eta^{a} z \dot{v} n z \dot{z} \eta^{a} p l z \dot{v} n z \dot{z} \dot{v} n s^{\epsilon} c b z \dot{v} n z \dot{z} \eta^{-} n. blind person
zūebúg<sup>3</sup> pl zūebíd<sup>ε</sup> cb zūeb- n. hair (of human head); see kɔ̃ňbug<sup>3</sup>
zùθd<sup>ε</sup> n. friendship
zùθl<sup>ε</sup> dv. make to perch
zū'em<sup>m</sup>/ pl zū'emís<sup>ε</sup> cb zū'em- n. blind person
zū'em<sup>m</sup>/ dv. go blind, make blind
zùen<sup>\epsilon</sup> dv. begin to perch
zūθr<sup>ε</sup> pl zuēya<sup>+</sup> cb zuà- n. hill
z \dot{u} e s^{\epsilon} dv. befriend
zūríf<sup>•</sup> pl zūr(<sup>+</sup> cb zūr- n. dawadawa seed
zú'uňf^{\mathbf{p}} pl z\bar{v}'vni^{+}n. dawadawa seed
zùuňg<sup>o</sup> pl zùuňs<sup>\epsilon</sup> zùuňd<sup>\epsilon</sup> cb zùň- n. vulture
z\bar{v}vr^{\varepsilon} pl z\bar{v}ya^{+} cb z\dot{v}- n. tail; z\dot{v}-w\bar{z}k^{2/} adj. long-tailed 15.7.1.3
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