A Grammar of Kusaal

Agolle Dialect

David Eddyshaw 2019



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Preface

I worked as an eye surgeon in the Bawku Presbyterian Hospital in Ghana for some years in the 1990s. I had previously not so much as heard the name of the major language of the district, Kusaal. Although I had the benefit of some coaching in the language by SB (see Sources), there were no written instructional materials of any kind available to me at the time I first arrived. (I would have been saved a good deal of trouble, though denied some pleasure of discovery, if I had then seen David Spratt's 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 section 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, and a complete grammar of Agolle Kusaal by Agoswin Musah, both speakers themselves.

Particularly useful accounts of other Western Oti-Volta languages have been Knut Olawsky's study of Dagbani and Adams Bodomo's grammar of 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 brief description of the Kusaasi people themselves in my Introduction is merely a short list of points I found especially interesting, and not even the beginning of an adequate account of a deep and intricate culture. It is much to be hoped that Kusaasi culture finds worthy investigators who can portray it as it deserves. Until then I would recommend Ernst Haaf's "Die Kusase" (see References.) 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, April 2019 david.eddyshaw@btinternet.com

Abbreviations

AdvP adverbial phrase

agt agent noun

BNY Bunkonbid ne Niis ne ba yɛla

C consonant

cb combining form

CGEL Cambridge Grammar of the English Language

DK informant

dp discontinuous past

ger gerund

H High toneme

ILK An Introduction to Learning Kusaal

imp imperative ipfv imperfective irreg irregular

KB Kusaal Bible of 2016

KED A Short Kusaal-English DictionaryKKY Kusaas Kuob nε Yir yela Gbauŋ

KSS Kusaal Solima ne Siilima

KT informant
L Low toneme
LF Long Form
M Mid toneme
NP noun phrase

NT Kusaal New Testament, 1976 and 1996

pfv perfective
pl plural
SB informant
SF Short Form
sg singular
V vowel

VP verb phrase WK informant

1sg 2pl ... first person singular, second person plural etc

Abbreviations for 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	8.2
ADV	adverbial	
AN	animate gender	<u>12.3</u>
CAT	clause catenator (underlyingly n)	<u>19</u>
CNTR	contrastive (personal pronouns)	$\frac{1}{24.6}$
COP	copula àeňa	16.12.2
CQ	content question prosodic clitic	<u>4.1</u>
DEM	demonstrative pronoun (discourse)	12.4.2
DEMST	demonstrative pronoun (spatio-temporal)	
DP	discontinuous-past marker n^{ε}	16.3.2
EXIST	existence/location verb $b\dot{arepsilon}$	16.12.1
FOC	focus particle $n\bar{\varepsilon}^l$	24.1.2
GER	gerund	<u>8.1.1</u>
IDEO	ideophone	<u>14</u>
IMP	independent imperative verb form	<u>7.1</u>
IN	inanimate gender	<u>12.3</u>
INDF	indefinite pronoun	12.4.3
IPFV	imperfective verb form	<u>7.1</u>
IRR	positive irrealis mood marker	<u>16.4</u>
LOC	locative postposition $(n\bar{\imath}^{/} \sim n^{\varepsilon})$	<u>13.3</u>
NEG	negative prosodic clitic	<u>4.1</u>
NEG.BE	negative verb to and COP and EXIST	<u>16.5</u>
NEG.HAVE	(another use of the same verb)	
NEG.IMP	negative imperative marker	<u>16.4</u>
NEG.IND	negative indicative marker	
NEG.IRR	negative irrealis marker	
NEG.KNOW	negative verb $z\bar{\imath}$	<u>16.5</u>
NEG.LET	negative verb <i>m</i> į̇́ <i>t</i>	
NULL	semantically empty NP head $s\bar{o}b^a$	<u>12.4.7</u>
NUM	number prefix à- bà- 'n- bὺ-	<u>10.2</u>
NZ	nominaliser (underlyingly \dot{n})	<u>21</u>
PERS	personifier particle (\dot{a} - or \dot{n} -)	<u>12.6</u>
PFV	independent-perfective marker $y\bar{a}$	<u>16.6.2</u>
PL	plural	<u>12.2</u>
PQ	polar question prosodic clitic	<u>4.1</u>
REL	relative pronoun	21.2.2
SG	singular	<u>12.2</u>
TNS	tense marker	<u>16.3.1</u>
VOC	vocative prosodic clitic	<u>4.1</u>

Personal pronouns:

12.4.1

1SG 1PL 1st sg/pl 2SG 2PL 2nd sg/pl

3AN 3IN 3rd sg animate/inanimate

3PL 3rd pl

2PL.SUB postposed 2nd pl Subject

.OB object (pronouns)

The linker particle $k\grave{a}$ is conventionally glossed "and" throughout, though this very often does not reflect the true meaning in context $\underline{17.2}$; similarly $y\grave{a}'$ $\underline{20.1}$ is glossed "if" in all cases. The empty particle $n\bar{\varepsilon}$ which follows objects of comparison which lack the article $\underline{15}$ is glossed "like."

Mass nouns are not specified as SG or PL in the glossing; similarly, single-aspect verbs <u>7.2</u> 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 $\underline{4.1}$ are represented by $=\emptyset$, and liaison $\underline{4.2}$ is marked by $\underline{}$.

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 3.1.

Polysyllabic words ending in a vowel symbol before a hyphen are always followed by liaison, so the symbol is omitted: $p\bar{v}vgv$ -n "inside", not $p\bar{v}vgv$ -n.

Transcription conventions

Phonetic transcriptions are generally broad, ignoring all allophony not immediately under discussion. Starred forms are used *ad hoc* to illustrate morphophonemic rules, and do not represent a uniform underlying level of language.

For Agolle Kusaal orthography see $\underline{2}$. Symbols have approximately their IPA values, but long vowels are written with double symbols, $e \iota$ both represent $[\iota]$, $o \upsilon$ both represent $[\upsilon]$, \check{n} and 'mark nasalisation and glottalisation of adjacent vowels respectively, y stands for $[\check{j}]$, and $kp\ gb$ stand for $[\widehat{kp}]\ [\widehat{gb}]$. The symbol i is written with the dot below when it carries a tone mark, e.g. $b\bar{i}ig$ "child" [bi:g]. This colour is reserved for words and word fragments in the working orthography of the grammar; it is not used for Kusaal in the orthography of written sources.

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.

Mooré words are cited as in Niggli 2016, and Nawdm as in Babakima 2013. For Moba, I follow Kantchoa 2005, except that I write *y* for [j].

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:? $marbu:t^sa$.

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 ι υ for IPA ι υ , as do Urs Niggli's works in English and the working orthography of this grammar.

Internal and external hyperlinks appear like this.

Sources

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

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

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

My materials drawn from conversation were limited as to genre. More informal settings would have rounded out the picture in many respects. For example, features like ideophones 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.

Except for a few examples from David Spratt's *Introduction to Learning Kusaal*, written sources are cited in their original orthography, with a transliteration into the working orthography of this grammar. The tone marking is supplied by me; it was checked against the audio New Testament version in those few cases where a tonal point is at issue, but in other cases 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 Winà'am Gbáuŋ Kusaal Bible
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 <u>Android application</u>

Bunkonbid ne Niis ne ba yɛla Bōn-kɔ́ňbìd nē Niis né bà yēlá "Animals and birds and their affairs" Matthew M. Abokiba

Kusaal Solima ne Siilima Kūsâal Sólimà nē Síilímà "Kusaal Stories and Proverbs" Samuel Akon, Joe Anabah

Kusaas Kuob ne Yir yela Gbauŋ Kōsâas Kûəb nē Yīr yélà Gbàuŋ "A book on Kusaasi farming and housing" William A. Sandow, Joseph A.H.Anaba

Other studies of Kusaal

The pioneers of Kusaal grammatical study were David and Nancy Spratt. David Spratt's forty-two page "Introduction to Learning Kusaal" contains a useful sketch of the 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.

Tony Naden is working on a dictionary of Agolle Kusaal based on written sources, which is much the most extensive lexicographic work so far.

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.

Anthony Agoswin Musah, a native speaker of Agolle Kusaal, has written a full grammar of Agolle Kusaal as his PhD thesis at the Goethe-Universität Frankfurt, which is available as Musah 2018.

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1 Introduction

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 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 $\grave{A}g\grave{o}l$ "Upper", light grey.)

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 the domain of one family head with his wives, sons, daughters-in-law and grandchildren. Cattle-raising is common but is mostly the preserve of Fulbe and Mossi. A single rainy season lasts unpredictably from May to October. The main crop is millet of various kinds, with rice to a lesser extent. Millet is used for the staple porridge $s\bar{a}'ab$, called "TZ" /ti:'zɛd/ in local English (Hausa $tuwon\ zaafii$, "hot porridge"), and the traditional millet beer, $d\bar{a}am$, called "pito" (Hausa fitoo) in English.

The Kusaasi are divided into numerous patrilineal exogamous clans ($d\partial g$, "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 pɔ̃ɔr "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 $t \approx \eta - d\bar{a}an$ "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 $t \approx n-d \approx n-d \approx n$. 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 $b\bar{a}n\bar{a}a$ smock, called a "fugu shirt" in English ($f\bar{u}ug$ "clothing"), popularised in southern Ghana by President Rawlings.

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

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

Dim $n\bar{\varepsilon}$ $W\bar{\iota}n$, $d\bar{a}$ $t\hat{v}'as$ $n\bar{\varepsilon}$ $W\bar{\iota}nn\hat{\varepsilon}=\emptyset$. Eat:IMP with God:SG, NEG.IMP talk with God:SG=NEG. "Eat with God, don't talk with God."

Wīn ňyέ 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 $w\bar{\imath}n$. A $w\bar{\imath}n$ resides in a $b\bar{\imath}gvr$, an object such as a stone or horn, but it is the $w\bar{\imath}n$ 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: $n \hat{n} - gb \bar{n} p$ "body"; $n \hat{y} - v \bar{v} r$ "life" as opposed to death, possessed by all living animals; $w \bar{v} n$ (in this sense) "genius, spirit, a person's own spiritual self"; and $k \hat{v} + k \bar{v} r s$, protective spirits (called "fairies" in local English.) Men have three $k \hat{v} + k \bar{v} r s$, 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 $k \hat{v} + k \bar{v} r s$ in the bush which are hostile and try to lead travellers astray. $S \bar{v} s s s s s s s s$ "life force", used for "spirit" in Christian materials, is in traditional belief identified with a person's tutelary $k \hat{v} + k \bar{v} r s s s$.

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

Sōoňb "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 role 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 3.2: $\ref{A-Win}$ from $\ref{Widi-nyá'a\eta}$ will introduce himself as "Awini" from "Woriyanga." Similarly "Kusaasi" for $\ref{K\bar{\nu}s\hat{a}as}$, "Bawku" for $\ref{B\dot{o}k}$ etc. "Woriyanga" also shows a Mampruli rather than Kusaal form for the initial combining form "horse": Mampruli $\ref{wuri-}$, Kusaal $\ref{wid-}$. 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 $\ref{Gambaya}$) for the Mampruli place name \ref{Gambaa} (Naden.)

However, this transposition convention has been generalised by analogy, and many forms show distinctively Kusaal phonology, morphology or vocabulary. Simple reproduction of Kusaal forms is also sometimes seen, e.g. "Aruk" for the personal name $\grave{A}\text{-}D\bar{\upsilon}k$, and the language name "Kusaal" $K\bar{\upsilon}s\hat{a}al$ 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.

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 itself is a multiethnic trading centre around a Muslim quarter or "zongo" (Hausa *zangòo* "camping ground") where the main common language is Hausa.

The major dialect division is between Agolle and Toende. Numerous isoglosses coincide to produce a sharp discontinuity between Agolle and Toende Kusaal, probably attributable to depopulation near the White Volta because of the river blindness prevalent until recent times.

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 of 84%.

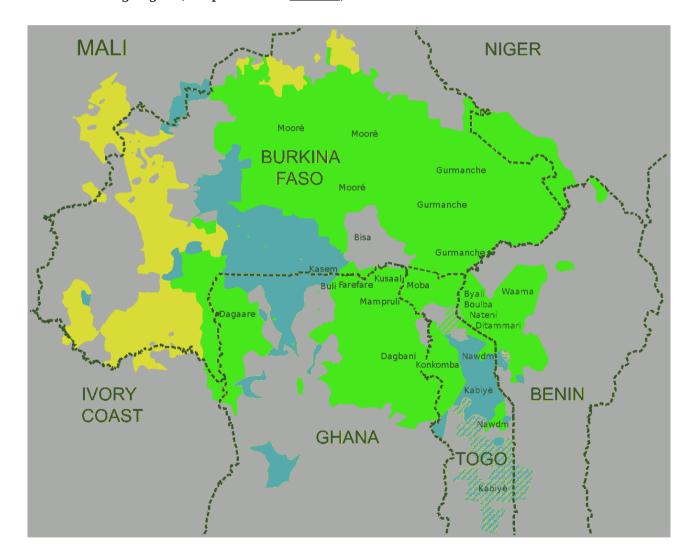
Agolle and Toende Kusaasi agree that they constitute a single ethnic group, and that they speak dialects of a single language. Nevertheless, the differences are great enough to justify separate grammatical treatment for the two major dialects.

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

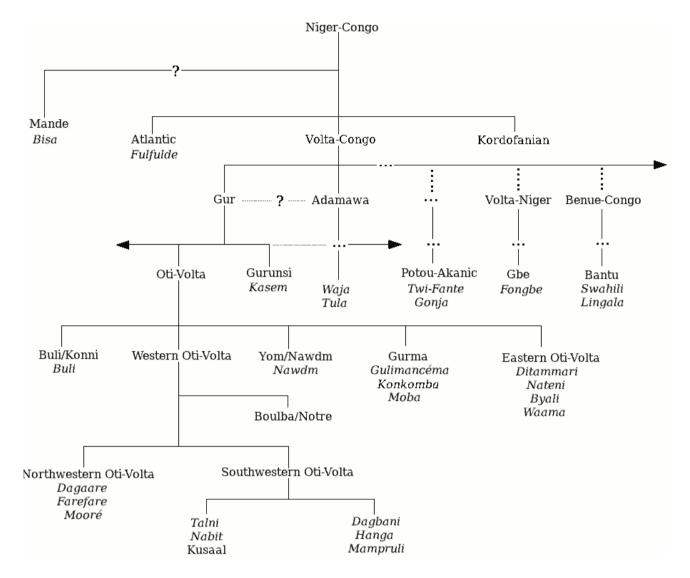
1.2.3 Related languages

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

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



Green: Oti-Volta; blue: Gurunsi; yellow: other Gur.



The chart above 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 may well not belong with Niger-Congo at all. The inclusion of Kordofanian and Atlantic in Niger-Congo is a long-range hypothesis: striking typological similarities with Volta-Congo do not prove genetic unity. For West Africa and beyond as a *Sprachbund* see Güldemann 2007.

However, there is unequivocal evidence for Volta-Congo as a genetic group. Basic lexical items recur frequently: compare Kusaal $b\bar{\imath}ig$ "child", $d\hat{\imath}$ "eat", $n\bar{u}$ "drink", $kp\hat{\imath}$ "die", $t\hat{\imath}ig$ "tree", $ata\check{n}$ "three", $t\hat{\imath}bvr$ "ear" with their Fongbe equivalents vi, $d\hat{\imath}u$, $n\hat{\imath}u$, $k\hat{\imath}u$, $ata\hat{\imath}u$, a

The most salient morphological feature of Niger-Congo is the presence of noun class systems, with frequent matches of form and meaning among Volta-Congo branches. Thus the Kusaal human-plural noun suffix -ba seen in $n\bar{i}dib$ "people", plural of $n\bar{i}d$, matches the Gonja human-plural prefix in ba-sà "people", plural of e-sà, and the e-ba of Lingala e-ba "people", plural of e-sa seen in Kusaal e-ba are cognate recur; for example, the suffixes e-la seen in Kusaal e-ba are cognate to the Bantu prefix pair e-ba (Nurse and Phillippson, p104.) Lingala has the cognate of e-bar in this very class: e-la e-la e-la e-bar in this very class: e-la e-la e-bar in this very class: e-la e-la e-bar in this very class: e-b

Similarities also appear in verbal derivation by suffixes, usually called "verbal extensions", as in Bantu, where such processes are often very 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. 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 Manessy's **Western Oti-Volta** family. Except in Boulba, Proto-Oti-Volta *c *f have become f z; verbal inflection is simple, almost all inflecting verbs using the bare stem for perfective aspect and adding a suffix *f-da for imperfective; some noun classes have been lost, with words referring to trees transferred to the f-ga|f-sc class (Buli f-tild) "tree", Kusaal f-tilg, Mooré f-tilga); and there is much distinctive vocabulary, e.g. Kusaal f-water", Mooré f-koóm, vs Moba f-pum, Buli f-nyíam, Nawdm f-nyíam, Nateni f-sc ma. The Boulba/Notre language of Benin is an outlier: it shares distinctive lexicon (f-koóm "water"), but has devoiced *f-sc have f-c have f-c reflecting areal features shared with Eastern Oti-Volta, and it has not participated in the loss of noun classes, e.g. f-tilebò "tree."

Western Oti-Volta is roughly as diverse as Romance. Claims of mutual intelligibility often reflect underappreciation of the fact that many local people are competent users of more than one distinct language.

Apart from Boulba, the group is subdivided into Northwestern and Southwestern. Northwestern Oti-Volta includes Mooré, Safaliba, the dialect continuum Dagaare-Waale-Birifor, and Farefare-Gurenne-Ninkare. Mooré and Farefare share innovations absent in Dagaare. Southwestern Oti-Volta includes Kusaal, Nabit, Talni, Mampruli, Dagbani, Hanga, Kamara and some smaller languages; a distinctive Southwestern feature is the imperative inflection *-ma.

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

Kusaal probably forms a subgroup with Nabit and Talni, spoken in the adjacent Nabdam and Talensi districts. Tony Naden's Nabit data closely resemble Toende Kusaal; Giffen 2015 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, retain the final vowel at the end of questions and negated clauses (Toende materials from Niggli):

Nabit $La\ bi'im\varepsilon$. "It is ripe."

Toende La bi'i me.

Nabit $La \ na \ bu \ biig \varepsilon$. "It is not yet ripe."

Toende La nan bv bi'ige.

Talni Bunpək dəyam pu bəkəra, buraa dəyam m bəkət.

Toende Bupok dogim bu bokira, buraa dogim bokit.

"A woman's kindred is not divided, a man's kindred is divided."

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

Buli is close 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*j are preserved unchanged.

The Gurma languages are much less close. Gulimancéma and Konkomba typically show nouns with both class prefixes and class suffixes, and all the languages have complex and unpredictable verb aspect flexion, making the imperfective by changing stem tones and/or adding or dropping several different suffixes.

Both Buli and Gurma have three-tone systems. Of the three Western Oti-Volta Tone Patterns 3.8, Pattern H corresponds to Buli *high* tone, but Gurma *low*; Pattern A to Buli mid and Gurma high, and Pattern L to Buli low and Gurma mid:

Kusaal	Buli	Moba	
wáaf	wáab	wààùg	"snake"
mɔ̄ɔg	mūub	móóùg	"grass"
tìng	tìib	tīīà	"tree"

It is Gurma which is conservative: cf Proto-Bantu $-n\dot{u}\dot{a}$ "mouth", Fongbe $\dot{o}n\dot{u}$ = Kusaal $n\bar{o}$ (Pattern H) versus Proto-Bantu $-t\dot{o}$ "ear", Fongbe $t\dot{o}$ = Kusaal $t\dot{v}bvr$.

Nawdm aligns tonally with Western Oti-Volta and Buli: $w\acute{a}\grave{a} \ddot{g} \acute{b}$ "snake", $m\acute{o}\acute{o} g\acute{u}$ "grass", $t\grave{i}\grave{i} \acute{b}$ "tree." Nawdm has shifted $*p \rightarrow f, *s \rightarrow h, *c \rightarrow s$, and $*z \rightarrow \jmath$. It preserves Proto-Oti-Volta *r 3.4, 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 -ra versus 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. He assumes Manessy's Eastern Oti-Volta as a valid subgroup, but this subgrouping is partly based on initial consonant changes which are areal, and shared with Boulba.

The verbal systems of Ditammari and Nateni are similar, broadly resembling Gurma. Both languages also align with Gurma in showing L tones corresponding to Pattern H. Ditammari shows nouns with both class prefixes and class suffixes.

Byali verbs mostly oppose perfective -sə to imperfective -u. Byali 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 have cognates in Western Oti-Volta and Buli, e.g. Waama wōmmā "entendre", Kusaal wòm, Boulba wàmú, Buli wom; Waama cáárō "forgeron", Kusaal sāeň; Waama yété "maison", Kusaal yīr, Boulba yere, 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. Manessy takes Koromfe as a third branch of "Central Gur" alongside Oti-Volta and Gurunsi. He classified some languages as Gur on the basis of very scanty documentation; when adequate descriptions appear, such classifications may need to be revisited. The Senufo group was previously regarded as a branch of Gur, largely on the basis of having noun class suffixes rather than prefixes; it is now usually held to constitute a distinct branch of Volta-Congo.

1.2.4 Grammatical sketch

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. Thus where Mooré has the citation form <code>gigemde</code> "lion", the cognate Kusaal word normally appears in the **Short Form** (SF) <code>gbigum</code>. 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 <code>Long Form</code> (LF):

```
Lì à n\bar{\varepsilon} gb\bar{\iota}gim. "It's a lion."

3IN COP FOC lion:SG.

Lì k\bar{a}' gb\bar{\iota}gimn\varepsilon=\emptyset. "It's not a lion."

3IN NEG.BE lion:SG=NEG.

Lì à n\bar{\varepsilon} gb\dot{\iota}gimn\varepsilon\in\emptyset. "Is it a lion?"

3IN COP FOC lion:SG=PO.
```

As here, after apocope any final consonant cluster drops the second consonant. 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 are used to write the parts of words which are dropped everywhere except before prosodic clitics and liaison: $gb\bar{\imath}g\imath m^{n\epsilon}$ "lion", $b\bar{\imath}ig^a$ "child", $k\bar{\nu}k^a$ "chair", $d\bar{\nu}k^{o/}$ "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 LF $v\bar{\imath}ug\delta$ "owl" has iu for ii because of the rounding effect of the suffix vowel. After apocope, the diphthong iu in $v\bar{\imath}ug$ contrasts with the vowel of $v\bar{\imath}id$ "owls", shortened from $v\bar{\imath}id\epsilon$. Similarly, $\bar{a}a\bar{n}d\imath ga$ "black plum tree" has the default epenthetic vowel \imath , and appears as $\bar{a}a\bar{n}d\imath g$ after apocope, whereas $g\grave{a}ad\upsilon ga$ "passing" has rounding to υ before the flexion -ga, and after apocope this becomes contrastive in the SF $g\grave{a}ad\upsilon g$.

Liaison words cause a preceding word to appear as a LF modified by the loss of all original vowel quality contrasts in final non-root vowels. All non-contrastive personal pronouns fall into this category, for example:

```
\dot{M} p\bar{v} b\acute{o}od\bar{a}=\varnothing. "I don't want to."

LF b\grave{o}od\bar{a} preceding negative clitic.

\dot{M} b\acute{o}od\bar{\iota} b\acute{a}. "I love them."

1SG want 3PL.OB. Modified LF b\grave{o}od\bar{\iota} before liaison.

\dot{M} p\bar{v} z\acute{a}b\bar{\varepsilon}=\varnothing. "I haven't fought."

1SG NEG.IND fight=NEG. LF z\grave{a}b\bar{\varepsilon} preceding negative clitic.
```

```
\dot{M} z\acute{a}b\bar{\imath} b\acute{a}. "I've fought them." 1SG fight 3PL.OB. Modified LF z\grave{a}b\bar{\imath} before liaison.
```

In interlinear glossing, liaison is marked by ___, as above.

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

```
\dot{M} p\bar{v} b\acute{o}od\bar{\iota} f\acute{o}=\varnothing. "I don't love you."

1SG NEG.IND want 2SG.OB=NEG. LF fo of the pronoun "you (sg)"

\dot{M} b\acute{o}od\bar{\iota} f. "I love you."

1SG want 2SG.OB. SF f 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'
                                            "It's not a chair."
             k\bar{\nu}ka=\emptyset.
3IN NEG.BE chair:SG=NEG.
Lì kā'
             k\bar{\nu}ki-n\dot{\varepsilon}=\emptyset.
                                            "It's not in a chair."
3IN NEG.BE chair:SG-LOC=NEG.
                                             "in a chair"
kūkı-n
chair:sg-loc
Lì kā'
              d\bar{v}k\acute{0}=\emptyset.
                                            "It's not a pot."
3IN NEG.BE pot:SG=NEG.
                                            "It's not in a pot."
Lì kā'
             d\bar{v}ki-n\bar{\varepsilon}=\emptyset.
3IN NEG.BE pot:SG-LOC=NEG.
dūkí-n
                                             "in a pot"
pot:SG-LOC
```

The object pronoun o "him/her" has the LF o [v], which is deleted entirely by apocope, producing a SF which is segmentally zero. Its presence is still shown by the replacement of the preceding host-word-final vowel mora by [v], always written o.

Compare the forms with f^0 "you (sg)" with the forms with o "him/her":

```
\dot{M} par{v}
            bɔ́odī fɔ́=\emptyset.
                                     "I don't love you."
1SG NEG.IND want 2SG.OB=NEG.
                                     "I love vou"
M bóodī f.
1sg want
             2SG.OB.
                                     "I don't love him/her."
\dot{M} p\bar{v}
            b \acute{o} j d \acute{o} - o = \emptyset.
                                                                           [:vb:cdvqm]
1SG NEG.IND want-3AN.OB=NEG.
                                      LF o of the pronoun "him/her"
M bɔ́ɔdō ø.
                                     "I love him/her."
                                                                           [mbo:dv]
1SG want
                                      SF ø of the pronoun "him/her"
             3AN.OB.
```

A liaison word form y^a of the 2pl subject pronoun follows imperative verb forms. It similarly loses its entire segmental form in the SF, because y left word-final by apocope is completely deleted unless preceded by a back vowel:

```
Gòsim! "Look!"

Look:IMP!

Gòsimī ø! "Look ye!" by apocope from gòsimī-yá

Look:IMP 2PL.SUB!
```

Liaison words are not all bound to the left. Right-bound non-contrastive personal pronouns cause inhibition of apocope in the preceding word, as do the personifier particle \grave{a} - and all words beginning with certain 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 LF of the preceding word and from tone.

```
\dot{m} z\bar{u}g\dot{v} \varnothing 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 \dot{M} z\bar{u}gv \varnothing z\dot{a}bid. "My head hurts." (catenator-n)
```

Kusaal has contrastive vowel glottalisation.

1SG head:SG CAT fight:IPFV.

Vowel **breaking** has caused earlier $\varepsilon \circ \varepsilon \varepsilon \circ \circ$ (preserved as such in the Toende dialect) to become $\underline{ia} \ \underline{ua} \ \underline{io} \ \underline{uo}$, 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. The tone-bearing unit is now the syllable. Acute, macron and grave mark H, M and L respectively. *CVVC* syllables may also have a circumflex (X) toneme, derived from HL on a single syllable. Macron and grave marks apply not only to the syllable on which they are placed, but to all following syllables within the same word up to another tone mark; the next toneme after an acute or circumflex is marked normally.

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, e.g. $d\bar{\imath}$ 'əsídib "receivers", $b\bar{a}\eta \iota d\iota b$ "wise men", $qb\bar{\imath}q\iota mn\varepsilon$ "lion" LF.

The only consonant clusters possible within stems following the root are kk tt pp $\eta\eta$ nn mm ll mn, of which kk tt pp $\eta\eta$ are written and usually realised as single. Clusters cannot occur word-initially or finally, except for final mm.

Many nominal stems have a **prefix** before the root, taking the forms CV- or CVn-, less often CVlin- or CVsin-, e.g. $p\bar{i}p\bar{j}rig$ "desert." Such stems may thus contain nC clusters between prefix and root: $dind\bar{\epsilon}og$ "chameleon."

Other word-internal clusters are confined to loanwords.

Flexional **suffixes**, like prefixes, have only a three-way vowel contrast $a/\iota/\upsilon$. Suffix vowels are lost by apocope in SFs; when they are retained before prosodic clitics, $\iota \upsilon$ appear lowered to $\varepsilon \upsilon$. Clusters of two consonants occur freely across word division (including within compounds) due to apocope of word-final short vowels.

Most common **particles** are short bound words, like the postposed article $l\bar{a}$ "the", and the preverbal tense marker $d\bar{a}a$ "before yesterday."

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 straightforward, but with some morphophonemic complications; these words all belong to the same $ga|s\varepsilon$ noun class:

būυg	"goat"	$bar{v}$ s	"goats"
sàbùa	"lover"	sàbùes	"lovers"
nūa	"hen"	nōɔs	"hens"
kūk	"chair"	kūgvs	"chairs"
zàk	"compound"	zà'as	"compounds"
dà'a	"market"	dà'as	"markets"
bùŋ	"donkey"	bùmıs	"donkeys"
tēŋ	"land"	tēεňs	"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:

```
būνg "goat"
                          + pìəlig
                                           "white"
                                                             \rightarrow b\dot{v}-pjəlig
                                                                                       "white goat"
                          + s\bar{i}'a
                                                             \rightarrow b\dot{v}-s\bar{\imath}'a
bῡυg "goat"
                                           "another"
                                                                                       "another goat"
                                           "white"
                                                            \rightarrow k\dot{\nu}q-piəliq
                                                                                       "white chair"
kūk
        "chair"
                          + pìəlıq
                                                             → kùg-kàŋā
                                                                                       "this chair"
k\bar{\upsilon}k
        "chair"
                          + kàṇā
                                           "this"
```

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.

Kusaal makes no grammatical distinction between male and female.

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 with a single suffix -da. There are few real irregularities, though unobvious consonant changes and vowel deletions again complicate the surface picture:

Dual-aspect verbs also have an imperative flexion -ma, 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:

```
\dot{O} d igi n ar{arepsilon}. "She's lying down." 3AN be.lying.down Foc. \dot{O} m \dot{o} r b \dot{v} \eta. "She has a donkey." 3AN have donkey.sg.
```

```
Ò gịm. "She's short."
```

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

```
\grave{O} \grave{a} n\bar{\varepsilon} b\bar{\imath}ig. "He's a child."
```

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:

```
\grave{O} k\bar{a}' b\bar{\imath}iga=\emptyset. "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: $k\bar{\nu}ub$ "killing", $k\bar{\nu}ud$ "killer", $k\bar{\nu}udi\eta$ "killing implement."

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. <code>gbigim-kvvd</code> "lion-killer."

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

```
\dot{M} tís dớ atà bớn 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, $n\bar{\varepsilon}$ "with" and $w\bar{v}v$ "like" ($n\bar{\varepsilon}$ 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:

```
\dot{m} \ b\bar{\imath}ig "my child" d\bar{a}u \ l\bar{a} \ b\hat{\imath}ig "the man's child"
```

Adverbs often appear as postpositions preceded by NP dependents, as with $z\bar{u}g$ "head" used adverbially in $t\acute{\epsilon}\epsilon b\grave{v}l$ $l\bar{a}$ $z\acute{u}g$ "onto the table."

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

```
m\dot{v}'ar\bar{\iota}-n "in a lake" (m\dot{v}'ar\varepsilon "lake", LF)
```

lā.

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

```
Lion:SG ART TNS kill donkey:PL ART.

"The lion killed the donkeys yesterday."

Gb\bar{\imath}gima\ l\bar{a}\ d\bar{a}a\ p\bar{\upsilon}\ k\bar{\upsilon}\ b\acute{\upsilon}\eta\ l\acute{a}a=\varnothing.

Lion:PL ART TNS NEG.IND kill donkey:SG ART=NEG.

"The lions didn't kill the donkey."
```

Gbīgim lā sá kỳ býmìs

The focus particle $n\bar{\varepsilon}$ may focus VPs or VP constituents (as after $\grave{a}\underline{\varrho}\check{n}$ "be something" above), but if no unbound words intervene between the verb and $n\bar{\varepsilon}$ 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":

```
N\bar{l}dlb kp\hat{l}id. "People die."

Person:PL die:IPFV.

N\bar{l}dlb kp\hat{l}id n\bar{\epsilon}. "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, primarily marked by a tone overlay and by the tone sandhi of subject pronouns. The overlay is absent in negative polarity or irrealis mood and with various preverbal particles; marking itself is absent after the clause-linker $k\grave{a}$ even in *coordinating* function, as in narrative:

```
Ò zàb dú'atà. "He's fought the doctor."
¡AN fight doctor:sg.
Ò gòs dú'atà. "He's looked at the doctor."
βAN look.at doctor:sg.
```

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

```
Kà ò záb dú'atà. "And he fought the doctor."
And 3AN fight doctor:sg.
Kà ò gōs dú'atà. "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 flexion -ma:

```
D\bar{a} g\bar{o}s d\dot{v}'at\bar{a}a=\emptyset! "Don't look at the doctor!" NEG.IMP look.at doctor:SG=NEG! but G\dot{o}sim d\dot{v}'at\dot{a}! "Look at the doctor!"
```

Main clauses frequently have time or circumstance adjuncts preceding the subject; conditional clauses, with $y\dot{a}'$ "if" after their own subjects, appear here:

```
Fù yá' bòɔd, m̀ ná tīsι f bύη.

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

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

Look.at:IMP doctor:sg!

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 tis "give" is used simply as means of adding an indirect object:

```
\dot{M} dāa kûes bùŋv ø tís dý'atà. 1SG TNS sell donkey:SG CAT give doctor:SG. "I sold a donkey to Doctor."
```

Clause catenation can introduce a different subject by using $k\grave{a}$ instead of n; one use is adnominal, with a meaning like a non-restrictive relative clause:

```
Lì à n\bar{\varepsilon} gb\bar{\iota}g\iota m l\acute{a} k\grave{a} \grave{m} \check{n}y\bar{\varepsilon}t. 3IN 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 n (frequently realised as segmental n) after the subject:

```
gb\bar{\imath}g\imathm\ l\acute{a} \emptyset k\bar{\upsilon} b\acute{\upsilon}\eta "the lion having killed the donkey" lion:SG ART NZ kill donkey:SG ART
```

One type of relative clause is internally-headed:

```
[Paul \grave{n} s\bar{b}b gb\acute{a}\mu\eta-s\bar{i}'a n t\acute{i}s Efesus d\acute{i}m l\bar{a}] \varnothing \breve{n}w\acute{a}. Paul NZ write letter-INDF.IN CAT give Ephesus one.PL ART CAT this. "This is [the letter Paul wrote to the Ephesians]." (NT heading)
```

Here $gb\grave{a}\underline{u}\eta$ - $s\underline{i}$ 'a is $gb\grave{a}\underline{u}\eta$ "book" compounded with the dependent pronoun $s\underline{i}$ 'a which marks it as antecedent, and the bracketed sequence is the relative clause.

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

```
d\grave{a}\underline{u}-k\grave{a}n\imath p\underline{u}'\bar{a} kpi l\bar{a} "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 t\bar{\iota} f t\hat{\iota}\iota m y\acute{\varepsilon} f\grave{\upsilon} n\bar{\imath}f d\bar{a} z\acute{a}b\bar{\varepsilon}=\varnothing.

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 have independency marking, but with personal pronouns altered as in indirect speech. They are used for reporting speech and after verbs expressing communication or thought. Most are introduced by $y\bar{\varepsilon}$ "that." There are logophoric uses of contrastive personal pronouns:

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.

```
D\bar{a}\mu d\acute{a} b\grave{\epsilon} \varnothing m\bar{\sigma}r\acute{i} \grave{o} p\mu'\dot{a}-y\bar{\imath}mm\acute{i}r, k\grave{a} p\mu'\bar{a} l\bar{a} y\bar{\epsilon} Man:sg this exist cat have san wife-single:sg and wife:sg art that \bar{\sigma}n p\bar{\nu} l\acute{\epsilon}m b\grave{o} od y\acute{\epsilon} od s\bar{\imath}d l\bar{a} d\acute{\imath} p\mu'\bar{a} y\acute{a} as\bar{\epsilon}=\varnothing. San.Chtr neg.Ind again want that san 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 $k\grave{a}$ for foregrounding other elements:

```
\dot{M} z\bar{u}gv_{\varnothing} z\acute{a}b\grave{\iota}d. "My head is hurting." (Reply to "Where is the pain?") Gb\bar{\iota}g\acute{\iota}m k\grave{a} m d\bar{\iota}a n\check{\iota}y\bar{\imath}e. "It was a lion that I saw."
```

Although there is no syntactic movement rule for interrogative words, they are frequently preposed using $k\grave{a}$, and focussing with n is compulsory for $\grave{a}n\hat{\sigma}$ 'on "who?" as subject even though it remains in situ before the verb.

```
Fè bôɔd bó=ø? "What do you want?" 2SG want what=cQ?

Bó kà fù ňyētá=ø? "What can you see?" What and 2SG see:IPFV=CQ?

Ànó'ɔnì ø kō bớŋ lá=ø?
Who cat kill donkey:SG ART=cQ?
"Who has killed the donkey?"
```

Preposing with $k\dot{a}$ is often simply due to ordering constraints and then has no foregrounding implication.

Kusaal narrative links clause after clause with $k\grave{a}$, omitting tense marking so long as the action is preceding in sequence, but including it when there are descriptive passages or "flashbacks":

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

```
À-P\bar{\nu}-z\acute{o}t-y\bar{\epsilon}l d\acute{a} a n\acute{\epsilon} o s\grave{a}am b\^{\eta}ig m\grave{a}'aa.

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

K\grave{a} d\~{a}ar y\~{\imath}nn\acute{\iota} k\grave{a} b\~{\imath}ig l\~{a} n\acute{\epsilon} o s\grave{a}am z\'{\imath}n\'{\iota}'l g s\~{o}n\~{s}id.

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

K\grave{a} b\~{\imath}ig l\~{a} t\acute{\iota} y\grave{\epsilon}l o s\grave{a}am y\~{\epsilon} ...

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 $d\grave{a}$ occurs only in the first clause. The second $k\grave{a}$ is preposing the time expression $d\bar{a}ar\ y\bar{\imath}nn\acute{\imath}$ in a foregrounding construction, while the first and third are carrying on the narrative.

2 Sound system

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. $s\acute{u}$ ' $\theta\eta$ " "rabbit" has three morae, while the corresponding Long Form $s\acute{u}$ ' $\theta\eta\grave{a}$ has four.

All vocalic morae form **syllables**, except for final morae of long and "overlong" (three-mora) vowels/diphthongs. Overlong vowel sequences are disyllabic, dividing after the first mora: Long Form $n\bar{u}$ -áa "hen." Syllables may be light (C)V or heavy $(C)VV\sim(C)VC\sim(C)VVC$. Of these, (C)VVC syllables are superheavy. A CV syllable is superlight if it is not word-initial, word-final or root-initial, and is preceded by another CV syllable which is not itself superlight, as with the bolded syllables in the Long Forms $d\bar{t}$ -sidabà "receivers", $s\bar{t}$ -grafitabà "lowerers", $m \geq l_1 t$ -2 "gazelle."

2.1 Consonants

The following symbols are used for consonant phonemes, with $kp\ gb$ as digraphs; values resemble the corresponding IPA symbols, except as noted below.

 $kp\ gb\ z\ v$ are only found prefix- or root-initially, and w only root-initially. Syllable-final $y\ w$ are replaced by the glides $\underline{i}/\underline{e}$ and \underline{u} respectively $\underline{3.6}$. η does not occur prefix- or root-initially. Phonemic h occurs only syllable-initially in loanwords, but these include the very common $h\bar{a}li$ "as far as."

Root syllables with no initial consonant are optionally realised with initial [?]: $\acute{v}v^{n\epsilon}$ "dry season" [?v:n]~ [v:n]; this is not regarded as a consonant phoneme.

 $k\ t\ p$ represent [kh] [th] [ph] prefix- or root-initially, [k] [t] [p] elsewhere. Except after prefixes, word-internal $k\ t\ p\ n$ represent /kk/ /tt/ /pp/ /nn/, but they are only realised as geminates in very slow speech. Word-final $g\ d\ b$ are partly devoiced, but still contrast with $k\ t\ p$.

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" versus ya'ap "potter." Apocope in Toende thus occurs in two steps, with the round for right-bound words and perfectives *following* word-final stop devoicing.

 $k\ g\ \eta$ are palatalised before front vowels, for some speakers even becoming palatal stops or affricates. They may represent palatal stops or affricates in loans:

```
t\acute{o}kl\grave{a}e"torch"\leftarrow English "torchlight"s\acute{o}g\grave{i}\grave{a}"soldier"(probably via Hausa sooj\grave{a})
```

Velars are labialised before rounded vowels.

Before a and b velars are pronounced further back, even as uvulars: $kbig\bar{a}$ [qwbiga] "hundred."

t d n s z l r represent alveolars in general, but s z are often dental, or even interdental; l is never velarised. Before u, s and z are sometimes heard as [5] [3]. s is often realised as [h] word-internally; it can represent h in loanwords:

```
\dot{A}l\acute{a}as\grave{i}d (d\^{a}ar) "Sunday" \leftarrow Hausa Lah\grave{a}d\grave{i} (\leftarrow Arabic) D\grave{a}sm\acute{a}an\grave{i} "SAbdu-r-Ra\hbar ma:n(i) (personal name) or D\grave{a}ham\acute{a}an\grave{i}
```

d represents [d], and r represents [r], except after an epenthetic vowel, where it is [l]. However, there is no contrast prefix- or root-initially, where [d] appears by default, but often [r] phrase-internally after vowels (always so within compounds):

```
n\bar{o}-d\hat{a}vg [norawg] "cock" n\bar{a}'-d\hat{a}ad [nara:d] "oxen" vs wid-d\bar{a}vg [wid:awg] "stallion"
```

d and r contrast elsewhere, though in rapid speech d can still resemble [r]:

```
èňdig
                   "unplug"
                                      Ēňrιg
                                                          "shift along"
                   "swell"
mōd
                                      mōr
                                                          "have"
yàad
                   "graves"
                                      yāar
                                                          "scatter"
                   "fight" (ipfv)
zàbıd
                                      zàbır
                                                          "fight" (gerund)
```

Word-initially, d will be written throughout, but following traditional orthography, root-initial r is generally used after prefix vowels: $t\bar{\imath}r\hat{a}an$ "neighbour", $\dot{a}raz\dot{a}k$ "riches", $\dot{a}raz\acute{a}n\grave{a}$ "heaven", $\dot{a}rak\acute{o}n$ " "one."

Within Western Oti-Volta only Mooré and Agolle Kusaal contrast r and d. Agolle r corresponds to Dagbani l but r elsewhere: Mampruli yaarim, Dagbani $yalim = y\grave{a}arim$ "salt"; Mampruli tubri, Dagbani $tibili = t\grave{v}bvr$ "ear"; Mampruli mari, Dagbani $mali = m\bar{o}r$ "have." Postvocalic Agolle/Mooré d correspond to r elsewhere: Mampruli/Dagbani $mori = m\bar{o}d$ "swell"; Mampruli moori, Dagbani $mori = m\bar{o}od$ "grass."

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

m is syllabic when standing alone as the 1st sg pronoun "I, my"; it does not assimilate to a following consonant.

The sequence $-m_1$ preceding liaison can absorb the vowel to become $-m_2$:

```
Gòsimī m! "Look at me!"
Gòsīm. "Look at me!" vs Gòsim! "Look!"
Gòsimí fò nû'ug! "Look at your hand!"
Gòsím fò nû'ug! id
```

 $kp\ gb$ represent $[kp]\ [gb];\ kp$ is unaspirated. They occur only before unrounded vowels, and in reduplication-prefixes for some speakers: kpbkparg or kbkparg "palm tree." Labialised velars might be analysed as allophones of $kp\ gb$ rather than $k\ g$; cf $k\bar{u}m$ "death" beside kp? "die"; $k\bar{b}br$ "bone", Moba kpabl; kpakbr "tortoise", Dagbani kpakplí.

In loanwords *kp gb* represent Hausa labialised velars:

```
bákpàe "week" ← Hausa bakwài "seven"
```

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:

```
\check{n}y\bar{\varepsilon} [\tilde{j}\tilde{\epsilon}] "see" \check{n}w\bar{a}dig [\tilde{w}\tilde{a}dig] "moon" \check{n}w\dot{\varepsilon}' [\tilde{w}\tilde{\xi}] "beat"
```

 $\check{n}y\,\check{n}w$ reflect earlier initial $\mathring{n}\,\widehat{\eta}m$ respectively, cf Dagbani $\mathring{n}y\acute{a}$ "see", $\mathring{n}mariga$ "moon", $\mathring{n}me$ "beat." Some Toende speakers retain initial $[\![\![\![\!]\!]\!]\!]$ Kusaal initial nasalised vowels reflect earlier initial \mathring{n} : Dagbani $\mathring{n}ubi$, Kusaal $\mathring{o}\check{n}b$ "chew."

2.2 Vowels

The vowel system displays marked **positional prominence**. Diphthongs, glottalisation, emic nasalisation and full quality contrasts appear only in roots <u>3.3</u>.

Agolle Kusaal has a nine-vowel system. Seven of these are written by default as $a \, \varepsilon \, \circ i \, u \, \iota \, v$, respectively [a] [ɛ] [i] [u] [ɪ] [v]; the corresponding long vowels contrast with short vowels in length, but not quality, and are written by doubling the vowel symbol: $b\bar{a}a$ [ba:] "dog." $M\dot{a}'aa$ "only" has a unique overlong monophthong. The vowel ι is more central after velars and labials, and v is slightly fronted after alveolars and v; v is fronted after alveolars: v is v in v in

Lax $\iota \ v$ do not appear after m or n in roots or prefixes. Distinctions of short i/ι and u/v have a very low functional load even in roots. The allophony $[\iota]\sim[i]$ and $[\upsilon]\sim[u]$ in epenthetic and prefix vowels 3.3 is ignored, only $\iota \ v$ being used in writing.

The two remaining vowels are the **broken vowels** \underline{ia} \underline{ua} ; the corresponding long vowels are \underline{ia} \underline{ua} . Though realised $\underline{[ia]}$ $\underline{[va]}$ $\underline{[ia]}$ $\underline{[ua]}$ as written, they pattern throughout as $\underline{monophthongs}$, and will be referred to as such below.

t <u>i</u> àk	[tɪ̯ak]	"change"	puāk	[pʊ̞ak]	"female"
kp <u>i</u> à'	[k͡pɪ̯a̞]	"shape wood"	k <u>i</u> à	[ki̞a]	"cut"
pìəlıa	[pɪleiq]	"white"	bū'es	[bues]	"ask"

Before y word-internally, ja ua are realised [ii] [vi] and written je ue.

```
biēyá [biɪja] "elder siblings" suēyá [so̞ɪja] "roads"
```

Word-final $i \ni u \ni 0$ only occur by monophthongisation in external sandhi $\underline{4.2}$ $\underline{4.3}$. Nasalised $i \ni \check{n}$ $u \ni \check{n}$ (including after m n) occur only before underlying *g, and in the ipfv of fusion verbs by analogy $\underline{3.7}$. Elsewhere they have fallen together with $\varepsilon \varepsilon \check{n}$ $\underbrace{50}$: cf $\underbrace{n5}$: "times", Mooré $n\acute{a}$ ooré, $n\acute{5}$ or "mouth", Mooré $n\acute{o}$ orè.

Short \underline{ia} \underline{ua} have just two origins. Apocope $\underline{3.2}$ shortens final \underline{ia} \underline{ua} :

```
kià SF of kìa "cut" kuā SF of kūa "hoe"
```

Elsewhere, $\underline{i}a \ \underline{u}a$ replace $\varepsilon \ \emph{o}$ before k and before underlying *g, which is deleted with vowel fusion $\underline{3.7}$. $B\grave{o}k$ "pit" (vs $b\underline{u}\grave{a}k$ "split") is due to the change $*\underline{u}akkv \rightarrow okkv$, while $t\bar{\varepsilon}k$ "pull" (vs $t\underline{i}\grave{a}k$ "change") is due to shortening of a long vowel before an original plosive cluster $*t\varepsilon\varepsilon kk\iota$; presumably $n\bar{o}k$ "pick up" is from $*nookk\iota$.

Toende Kusaal preserves the equivalents of the broken vowels as phonetic monophthongs, more open than the vowels corresponding to ε o $\varepsilon\varepsilon$ o o: Toende o: "waists" vs o: "sheep (pl)"; Toende o: Toende o: "ask" vs o: "ask" vs o: "depart." Proto-Kusaal preserved further contrasts: Mooré o: Corresponds to o: Mooré o: M

Non-glottalised long vowels are shortened word-internally before *k t p* and *y*:

gàad	"pass" pfv	gàt	"pass" ipfv
tēεg	"drag"	$tar{arepsilon}k$	"pull" (*tɛɛkkı)
tōɔg	"bitter"	tōę	"be bitter" (*tɔɔya)

The process also applies in loanwords: \grave{atiuk} "sea" \leftarrow Hausa \grave{teeku} , $k\acute{o}t\grave{v}$ "court." Short i u sometimes appear for expected ii uu. $S\bar{u}\check{n}f$ "heart" has a short $u\check{n}$ which is uniquely due neither to apocope nor shortening before y; $n\bar{i}f$ "eye" has a short vowel before $*nC \rightarrow C$; $b\grave{u}g\acute{v}m$ "fire" has the tonemes expected for $*b\grave{u}ug\acute{v}m$; Hausa $duuniy\grave{a}a$ "world" and $t\bar{i}l\grave{a}s$ "necessity" have become $d\bar{u}niya$ and $t\bar{i}l\acute{a}s$.

All sequences of dissimilar vowel symbols other than \underline{ia} \underline{ua} \underline{ie} \underline{ue} \underline{ie} \underline{ue} represent phonemic **diphthongs**. After a vowel symbol \underline{e} represents $[\underline{i}]$, \underline{i} is $[\underline{i}]$ (found only after \underline{u}), and \underline{u} represents $[\underline{v}]$:

sōeň	[sɔ̃ɪ]	"witch"	<i>mùi</i> [mũi̯]	"rice"
dāu	[daʊ̞]	"man"	<i>bjāuňk</i> [bjãgk]	"shoulder"

Unlike y w, $\not e \not i \not u$ do not form syllable boundaries. Final $-V \not e -V \not i -V \not u$ are glottalised before pause like short vowels (see below.) Initial ya contrasts with $\not ia$ in tenseness and timing: $\not i\bar a$ "seek" and $\not v\bar a$ "houses" contrast as $[va] \sim [va]$, not $[va] \sim [va]$.

The symbol e is used for [1] as a non-initial element of a diphthong, except after ε , and o is used for [v] as a non-initial element of a diphthong, except after a.

Diphthongs may be short, long, or overlong. Overlong diphthongs are realised as disyllabic with syllable division after the first mora. The only length contrasts in identical environments are $av\eta/au\eta$ and word-final ae/ae. Rounding diphthongs occur only word-finally and before velars, fronting diphthongs word-finally and before y.

Primary diphthongs arise from word-final Vw Vy 3.4 and from fusion, fronting and rounding 3.7 3.6. All also occur nasalised, and if not short, glottalised; those written glottalised below *only* occur glottalised.

		ia	[ia]	iaa	[ia:]
		įa'a	[ĭä:]		
		ua	[ua]	uaa	[ua:]
		υ'a	[ʊ̞a̞]		
ae	[aɪ̯]	ae	[aɪ]	aee	[aɪ:]
		ie	[iɪ]	iee	[iɪ:]
э́е	[ŭ]	o'e	[ŭ]		
uį	[ui̯]	ui	[ui]		
		ue	[uɪ]	uee	[uɪ:]
υĕ	[ΩĬ]	υ'e	[ດັາ]		
а <u>и</u>	[aʊ̞]	aυ	[aʊ]		
εŭ	[x̄͡ʒ]	εο	[ʊɜ]		
įац	[ĭaŭ]				
ι <u>μ</u>	[ɪ¤]				
		iu	[iu]		
		io	[iʊ]		

The diphthongs $v'a v \check{n}'a$ appear as $\underline{u}'aa \underline{u}\check{n}'aa$ respectively when LF-final. Long diphthongs become overlong before the polar-question prosodic clitic <u>4.1</u>.

Secondary diphthongs are created by *replacement* of final morae of word-final root vowels by [1] [v] before liaison words $\underline{4.2}$: ° [v] "him/her" replaces any preceding vowel mora by [v], never [u], and the postposed 2pl subject ^{ya} replaces any preceding vowel mora by [1], never [i]. Any of $a \in \mathcal{D} \cup i u$ may precede:

```
z\bar{u}ó-o [zuʊ:]"steal him"Long Form 3.2z\acute{u}o [zuʊ]"steal him"Short Formb\bar{\varepsilon}\imath y\acute{a} [bɛɪja]"be ye!"Long Formb\bar{\varepsilon}\imath [bɛɪ]"be ye!"Short Form
```

The symbol o represents [v] in the 3sg pronoun o, and the mora preceding it in liaison: thus $d\bar{a}vg$ [davg] "male", but e.g.

```
\dot{o} b\bar{i}ig [vbi:g] "her child" z\acute{u}o [zuv] "steal him" d\grave{a}'o [dav] "bought for him" \bar{a}\check{n}o [ã\tilde{v}] "be him/her"
```

Nasalisation is marked by a following \check{n} , but if the vowel or diphthong is also glottalised, \check{n} precedes the 'mark, and after initial y or w, \check{n} precedes the y or w:

tēεňs	[tɛ̃:s]	"lands"	<i>áňs</i> ὶb [ãsɪb]	"mother's brother"
gēň	[g̃̃[]	"get tired"	$g\tilde{\varepsilon}\breve{n}$ ' [$g\tilde{\varepsilon}$]	"get angry"
gēň'εd	[g̃̃e:d]	"get angry" ipfv	<i>ňwām</i> [ŵãm]	"calabash"

The \check{n} also precedes o [v] before the 3sg pronoun: $\bar{a}\check{n}o$ [$\tilde{a}\check{v}$] "be him/her." Nasalisation is **automatic** on long vowels after m n: $m\grave{\varepsilon}ed$ "build" ipfv [$m\tilde{\varepsilon}$:d].

Short $i\check{n}$ $u\check{n}$ are laxer than oral i u, but there are no short $*i\check{n}$ $*v\check{n}$. They nearly always arise from apocope $\underline{3.2}$ of $ii\check{n}$ $uu\check{n}$, as in $s\bar{i}i\check{n}f$ "bee" cb $s\bar{i}\check{n}$ -, $z\grave{u}u\check{n}g$ "vulture", cb $z\grave{u}\check{n}$ -; the only exception is $s\bar{u}\check{n}f$ "heart" (pl $s\bar{u}\check{n}y\acute{a}$), written svnf in KB.

Nasalised *iəň uəň* occur only in fusion verbs <u>3.7</u>.

Contrastive nasalisation is often the legacy of lost initial $*\eta *\eta *\eta \widehat{\eta m}$, or arises before underlying *ns *nf, as do all cases of $\iota\iota\check{n} \ \upsilon\upsilon\check{n}$: $p\iota\check{n}f$ "genet", pl $p\iota\iota\check{n}i$; $z\dot{\upsilon}'\upsilon\check{n}f$ "dawadawa seed", pl $z\bar{\upsilon}'\upsilon ni$; $t\dot{\varepsilon}\eta$ - $z\dot{\upsilon}\upsilon\check{n}s$ "foreign lands", sg $t\dot{\varepsilon}\eta$ - $z\dot{\upsilon}\eta$.

Glottalisation does not affect vowel quality. It is marked by 'following the first/only vowel symbol (including \underline{u}) other than \underline{i} :

```
d\dot{a}' [da] "buy" d\dot{a}'a [da:] "market" k\dot{u}'em [kuem] "water" p\underline{u}'\bar{a} [poa] "woman" but d\underline{i}\bar{a}' [daa] "get dirty"
```

Word-final short vowels and diphthongs ending statements and commands, but not questions, become glottalised; for example $d\bar{a}\underline{u}$ "man" is realised [dav]/[dav?], and $g\bar{\epsilon}\check{n}$ "get tired" falls together with $g\bar{\epsilon}\check{n}$ ' "get angry."

Farefare, Nabit and Talni also preserve vowel glottalisation: $y\bar{v}'vr$ "name", Farefare $y\dot{v}'\dot{v}r\dot{\varepsilon}$; $k\dot{u}'\theta m$ "water", Talni kwo?m; $kp\dot{a}'v\eta$ "guinea fowl", Nabit $kpa'u\eta$; $n\bar{o}-\check{n}y\hat{a}'a\eta$ "hen", Nabit $nonya'a\eta$. Nawdm has \hbar [?] in many cognate words, e.g. $mt\dot{a}\hbar'$ "three" = Kusaal $nt\dot{a}\check{n}'$; $n\dot{u}\hbar\dot{u}$ "arm, hand" = $n\hat{u}'uq$.

Glottalised short vowels nearly all arise by apocope 3.2. Besides $k\bar{a}'\underline{e}$ "not be" $(\leftarrow *kag\imath)$ all other cases precede m or η in closed syllables, e.g. $kp\grave{e}'\eta$ "strengthen", $l\bar{a}'\eta$ "set alight", $n\bar{i}'m$ "meat", $k\bar{b}'m$ "hunger", $s\grave{v}'\eta\bar{a}$ "well", $s\grave{v}'m$ "goodness" (but only $s\grave{v}\eta$ pl $s\grave{v}ma$ "good.") The vowels are traditionally written long: $sv'v\eta a$ etc.

Only Agolle Kusaal shows this phenomenon, and only some informants. It probably arose from gemination of m η ; KB has 385 examples of an svm to 47 of an sv'vm an an svm "is good", but 30 of ka' svm to 40 of ka' sv'vm ka' sv'mm "is not good."

 $Y\bar{a}m\sim y\bar{a}'am$ is probably a conflation of once-distinct $y\bar{a}m$ "sense" (Buli $y\acute{a}m$, Nawdm $r\acute{a}r\acute{m}$) and $y\bar{a}'am$ "gall bladder" (Farefare $y\acute{a}'\acute{a}m$, Buli $y\acute{a}am$, Nawdm $r\acute{a}fi\acute{m}$.)

2.3 Stress

Stress falls on the root syllables of free words, but it is subject to complex sandhi phenomena which have yet to be properly investigated. It is probably never contrastive; $s\bar{a}b\hat{\imath}l$ "black" and $S\bar{a}$ - $b\hat{\imath}l$ "Zebilla", for example, seem to be homophones, and some roots have been reinterpreted as prefixes: $d\hat{\imath}t\hat{\imath}\eta$ "right hand" is derived from $d\hat{\imath}$ "eat", but also appears as $d\hat{a}t\hat{\imath}\eta\eta$, while $b\bar{\imath}t\eta\eta$ "cup" is an instrument noun from $b\hat{\imath}d$ "plant seeds", but has the plural $b\bar{\imath}t\eta s$, by reanalysis as prefix $b\bar{\imath}t\eta s$.

Stress affects the realisation of the H toneme, but the relevant phenomena can be described by reference to syllable weight alone.

2.4 Tone

Tone is mostly distinctive as a syntactic marker, but lexical minimal pairs are not uncommon, e.g. $b\bar{v}k$ "weaken", $b\dot{v}k$ "cast lots"; $g\bar{a}\eta$ "choose", $g\dot{a}\eta$ "step over"; $k\bar{v}k$ "chair", $k\dot{v}k$ "ghost"; $p\bar{l}d$ "get bloated", $p\dot{l}d$ "put on a hat, shoes, ring."

The tone-bearing unit is the syllable $\underline{2}$. Every syllable carries a toneme, except for superlight syllables and catenator-n, which are toneless, and realised by extension of the toneme of the preceding syllable to cover both. Overlong diphthongs are disyllable, with syllable division following the first mora, and thus carry two tonemes, as in the Long Form $n\bar{u}\acute{a}a$ "hen."

There are four tonemes: High (H), marked with an acute: $g\acute{\epsilon}l$ "egg"; Mid (M), marked with a macron: $b\bar{a}\eta$ "ring"; Low (L), marked with a grave: $b\grave{o}k$ "pit"; and Circumflex (X), marked with a circumflex: $n\hat{u}'ug$ "hand." The circumflex toneme can only appear on a superheavy CVVC syllable; when such a syllable becomes open, H toneme replaces X. Words like $n\hat{u}'ug$ "hand" and $n\acute{a}af$ "cow" thus fall together tonally in their Long Forms 3.2 $n\acute{u}'ug\grave{o}$ and $n\acute{a}af\grave{o}$.

Kusaal M toneme corresponds to H in the other Western Oti-Volta languages. H and X tonemes are secondary. M syllables become H before a following L; after a preceding M or by the M-spreading external tone sandhi <u>4.4.3</u> superheavy L syllables become X and other L syllables become H.

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. X is realised as a falling tone from H to L pitch within the syllable; it differs from H on a superheavy syllable before pause, where the pitch fall occurs on the second mora: contrast $m\bar{a}n$ $s\hat{a}am$ "my father", $m\bar{a}n$ $s\hat{a}am$ "my guests."

Macrons and graves apply not only to the syllable they are written on, but to all following unmarked tone-bearing syllables until the next tone mark or until the end of the word, e.g. $b\bar{\epsilon}ogv$ -n for $b\bar{\epsilon}og\bar{v}$ -n "morning", $a\bar{n}rma$ for $a\bar{n}rma$ "boats." After an acute or circumflex, however, the next tone-bearing syllable is explicitly marked: $b\bar{v}n$ - $b\acute{o}od\grave{r}$ "desirable thing." After a prefix, a tone mark is written on the root even if the toneme is identical: $z\bar{\imath}nz\bar{a}u\eta$ "bat", $k\grave{v}kp\grave{a}rig$ "palm tree."

When *i* carries a tone mark the dot is written below, as in *bīig* "child."

A CV syllable is **superlight** if it is a word-internal non-root syllable and is preceded by another CV syllable which is not itself superlight, working from left to right. Superlight syllables are toneless, and realised with the toneme of the preceding syllable extending over them:

```
"They are not receivers."
        Bà kā'
                     d\bar{\imath}'əsíd\iotab\bar{a}=\emptyset.
        3PL NEG.BE receiver:PL=NEG.
        Lì kā'
                    m\acute{o}lif\ddot{o}=\emptyset.
                                                          "It's not a gazelle."
        3IN NEG.BE gazelle:SG=NEG.
                                                          "He didn't fight you."
vs
             p\bar{v}
                     z\acute{a}b\grave{i} f\ddot{5}=\emptyset.
        3AN NEG.IND fight 2SG.OB=NEG.
                                                          "But you did not agree." (Lk 13:34)
        Ka ya pv siakida.
        Kà và pū
                                                          (k = /kk/)
                            siákìdā=ø.
        And 2PL NEG.IND agree: IPFV=NEG.
```

H and X tonemes are in certain contexts realised with a preceding downstep, lowering the initial pitch to the level of the last preceding M toneme; the relationship to following tonemes is unaffected. Without an intervening pause,

```
HH → H↓H

HX → H↓X

MH → M↓H if the next syllable is superheavy CVVC

or if the next syllable precedes pause and is not L
```

Downsteps, normally unwritten, are marked with ↓ in the examples below. Downstep between HH and HX:

```
Kà m̀ gɔ̃s gɛ́l lā bēogυ-n.
```

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

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

but \dot{M} $g\acute{s}$ $\downarrow g\acute{\epsilon}l$ $l\bar{a}$ $b\bar{\epsilon}ogv$ -n.

1SG look.at egg:SG ART morning-LOC.

"I looked at the egg in the morning."

Kà m̀ **gɔ̃s náaf** lā bēogυ-n.

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

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

but \dot{M} **g** \acute{s} \downarrow **n** \acute{a} **a**f $l\bar{a}$ $b\bar{\epsilon}$ ogv-n.

1SG look.at cow:SG ART morning-LOC.

"I looked at the cow in the morning."

Kà m̀ **gɔ̄s nû'ug** lā bēogv-n.

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

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

but \dot{M} **q** \dot{s} $\downarrow n\hat{u}'uq$ $l\bar{a}$ $b\bar{\epsilon}oqv-n$.

1SG look.at hand:SG ART morning-LOC.

"I looked at the hand in the morning."

 $MH \rightarrow M \downarrow H$ before a superheavy *CVVC* syllable:

Lì $k\bar{a}$ $p\dot{v}$ - $k\dot{z}$ $j\tilde{n}$ $r\bar{\varepsilon}$ = \emptyset . "It's not a widow."

3IN NEG.BE widow:SG=NEG.

but Li à $n\bar{\varepsilon}$ \downarrow $p\acute{o}$ - $k\grave{o}$ \tilde{o} \tilde{n} r $l\bar{a}$. "It's the widow."

3IN COP FOC widow:SG ART.

Bīig lā **sá mè** yīr lā.

Child:SG ART TNS build house:SG ART.

"The child built the house yesterday."

but Bīiq lā ↓**sá mὲɛd** yīr lā.

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

"The child was building the house yesterday."

 $M\bar{a}n$ $b\dot{v}-s\dot{v}n$ $k\bar{a}'e=\emptyset$. "My good goat isn't there."

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

and $M\bar{a}n$ $k\acute{v}k\bar{j}r$ $k\bar{a}'e=\emptyset$. "My voice isn't there."

1SG.CNTR voice:SG NEG.BE=NEG.

but $M\bar{a}n \downarrow b\dot{v}$ -piəl $k\bar{a}'e=\emptyset$. "My white goat isn't there."

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

 $MH \rightarrow M \downarrow H$ when the next syllable is followed by pause, and is not L:

 $\dot{k}\dot{a}$ \dot{m} $\dot{q}\bar{b}\dot{s}$ $\downarrow \dot{b}\dot{b}\dot{\eta}$ $\dot{l}\bar{a}$. "And I looked at the donkey."

And 1SG look.at donkey:SG ART.

 $Y\bar{v}\downarrow q\acute{v}m \quad k\bar{a}'e=\emptyset.$ "There's no camel."

Camel:SG NEG.BE=NEG.

Lì à $n\bar{\varepsilon}$ \downarrow **náaf** $l\bar{a}$. "It's the cow."

3IN COP FOC COW:SG ART.

 \dot{O} $p\bar{v}$ $v\bar{a}dv \downarrow g\dot{c}d\bar{a} = \emptyset$. "He isn't scattering."

3AN NEG.IND scatter:IPFV=NEG.

Lì $k\bar{a}$ ' $b\bar{i}$ - $\downarrow p\dot{v}\eta\bar{a}$ = \emptyset . "It's not a girl."

3IN NEG.BE child-girl:SG=NEG.

Òρῦ ňγē ↓**sύ'υgā**=ø. "She didn't find a knife." 3AN NEG.IND see knife:SG=NEG. Lì kā' ňγį **ríf**5=ø. "It's not an egusi seed." 3IN NEG.BE egusi:SG=NEG. bύn lā bēogυ-n. Kà m̀ gɔ̄s And 1SG look.at donkey:SG ART morning-LOC. "And I looked at the donkey in the morning." (*lā* not prepausal) $Y\bar{\nu}g\acute{\nu}m$ $l\bar{a}$ $k\bar{a}'e=\emptyset$. "The camel's not there." Camel:SG ART NEG.BE=NEG. (*lā* not prepausal) Lì à nē **dôɔa** lā. "It's the hut." (MX not MH) 3IN COP FOC hut:SG ART. Ànó'ənì ø yādı**gídà=**ø? "Who is scattering?" (L after H) Who CAT scatter: IPFV=CO? Lì kā' $b\bar{\imath}$ - $p\acute{\upsilon}\eta\grave{a}a$ = \emptyset ? "Isn't it a girl?" (L after H) 3IN NEG.BE child-girl:SG=PQ? Ànό'ənὶ ø ňyē **sύ'υgà**=ø? "Who found a knife?" (L after H) CAT see knife:SG=CO. Who Ò pū $d\acute{v}g\grave{\varepsilon}\varepsilon=\emptyset=\emptyset$? "Didn't she cook?" (L after H) 3AN NEG.IND **cook**=NEG=PQ. "She didn't find a gazelle." Òρū

3AN NEG.IND see gazelle:SG=NEG.

(Superlight -l₁- intervenes before the

prepausal syllable -f5.)

but

2.5 Traditional orthography

Tone is unmarked. For word division see 3.1. KSS uses ng for η .

Before 2016, e o were used for ε o, i for i and u, and u for u and v; e o were sometimes also used for v o as root vowels. KB has the same basic conventions as this grammar but uses i for both [i] and [i]: $tiig\ tivg$ "tree", $biig\ b\bar{i}ig$ "child."

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

KB has ye "that", teŋ "land", keŋ "go" pfv, ken "go" ipfv for yē tēŋ kēŋ kēn, and on oŋa for the pronouns $\frac{\partial n}{\partial n}$, probably reflecting actual variants with [1] [v]: cf Toende tīŋ "land" versus meŋ mēŋ "self" (Mampruli tiŋŋa, maŋŋa.)

After a or ə epenthetic ı is often written e: sanrega sārıgá "prison."

ie is used for $i\theta$ and ie, but the contrast is marginal 4.3.

uo is used for uo and uo, but traditional orthography always separates the vowel symbols in the latter case: $bu'os\ b\bar{u}'os\ 'ask''$, $zu\ o\ z\acute{u}o$ "steal him."

KB writes -ue as -uoe and -ve 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 [io] is written io in the 1976 NT but ieu later: thus $kp\bar{i}$ on "strong" is kpi on in the 1976 NT, kpi eun in the 1996 NT and KB.

Traditional orthography uses e i u for e i u. The contrast ae/ae is expressed by writing aae (or aae) for ae, e.g. paae $p\bar{a}e$ "reach." The contrast av/au is unmarked. KB writes au or av consistently in each word, but not marking length: yavg yavg "grave", but na'araug $n\bar{a}'-davg$ "ox"; dau dau "man" but tavn tau "sibling of opposite sex." However, ambiguity is only possible before g: gbaug gbaug "skin", mangaug mangavg "crab." The symbols ia ua are used for both ia ua and ia ua: kia ia "cut", but ia ia "waist"; ia ia "hoe", but ia ia "lover." The conventions for marking glottalisation disambiguate ia ia ia "carve wood", ia ia "neighbour."

Before 2016, $\underline{u}'a$ $\underline{v}'a$ were usually written $\underline{o}'a$, but sometimes $\underline{u}'a$, like $\underline{u}'a$ [\underline{u} \underline{a}]. All are now written $\underline{u}'a$: $\underline{p}\underline{o}'a/\underline{p}\underline{u}'a$ "woman", $\underline{p}\underline{o}'ab/\underline{p}\underline{u}'ab$ "women."

Long Forms 3.2 corresponding to Short Forms where final -y becomes - \underline{e} are written with -ey-: vveya $v\bar{v}y\dot{a}$, Long Form of $v\bar{v}\underline{e}$ "be alive." Older NT versions also write $b\bar{v}n$ -v $\dot{v}y\dot{a}$ "living things" as bunveya, but KB has bvnvvya.

y is omitted in dunia dūnīya "world", laafia láafīya.

KB writes *bieya bieyá* "elder same-sex siblings", but *suoya sueyá* "roads", zuoya zueya "hills" etc; older sources have sueya, zueya.

For nasalisation, plain n is used for \check{n} , e.g. $t\varepsilon\varepsilon ns$ $t\bar{\varepsilon}\varepsilon\check{n}s$ "lands", $g\varepsilon n'$ $g\bar{\varepsilon}\check{n}'$ "get angry", $g\varepsilon n'\varepsilon d$ "get angry" (ipfv), $nwam\ \check{n}w\bar{a}m$ "calabash."

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) $g\bar{a}a\bar{n}$ [gã:] "ebony tree" versus daan (old: daan) $d\bar{a}an$ [da:n] "owner."

3 Word structure

Open word classes comprise verbs and nominals. Nominals are subdivided into nouns and adjectives, along with closed subclasses of quantifiers, adverbs, and pronominals. Ideophones are a distinct group. All other words are "particles."

Segmental rules apply in the order: consonant assimilation/epenthetic vowel insertion 3.5, vowel fronting/rounding 3.6, *g-deletion/vowel fusion 3.7, apocope 3.2. Tone Patterns allocate tonemes prior to all deletions of segments 3.8.1.

3.1 Word boundaries

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.)" Many bound forms are also best regarded as words. Nouns and adjectives have regular "combining forms" (cbs), used exclusively as the initial members of compounds: cbs may appear as dependents, but more often as NP heads before adjectives and even demonstratives: ti-kana "this tree." There are no consistent phonological differences between cbs and free words, and compounds may incorporate unbound words: [anzúrifa ne salima lá'-]maan "[silver and gold goods]-maker." Cbs are thus best regarded as bound words, not word fragments.

Word status for other bound forms depends on distinguishing them from affixes. Bound personal pronouns and many particles resemble free-word affixes segmentally, but clearly differ in tonal behaviour from affixes, and show no tendencies to fusion with hosts other than those also seen between free words.

As stress allocation does not distinguish between bound and free words as such, I will reserve the term "clitic" for prosodic clitics $\underline{4.1}$, and will elsewhere use the non-committal labels "left-bound" and "right-bound."

Boundness is distinct from the syntactic feature of *dependency*. Most openclass words are neither bound nor intrinsically dependent, and most particles are both bound and intrinsically dependent. However, combining forms, though always bound, may be dependents or heads, and bound personal pronouns are *never* dependent: Kusaal has no possessive pronouns.

In this grammar nominals with prefixes, loanwords, and unanalysable stems are written solid, but combining forms are hyphenated to the following word:

bùrkìn	"honest person"	kpùkpàrıg	"palm tree"
zī़m-gbâň'ad	"fisherman"	bù-pị̀əlıg	"white goat"
bù-kàṇā	"this goat"	bù-pị̀əl-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: $bvka\eta a\ b\dot{v}-k\dot{a}\eta\bar{a}$ "this goat", but $yamug\ bipu\eta$ (Acts 16:16, 1976) for $y\grave{a}mmvg-b\bar{i}-p\acute{v}\eta$ "slave girl."

Pronouns reduced to single consonants by apocope $\underline{3.2}$ are still written as independent words in the orthography of this grammar:

```
\dot{M} b\acute{o}od\bar{\iota} f. "I love you." [mbo:dɪf]
```

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

```
Fv bəədi ti. "You love us." [fvbə:dɪtɪ] Fv bəədī ti. 25G want 1PLOB.
```

Before 2016, the final mora before $2 \operatorname{sg} f$ was separated from the verb and joined to the pronoun as $if \ uf$; KB writes m f as objects solid with the preceding word:

```
M nye uf.
            (2016: nyεεf)
                               "I've seen you."
                                                        [mĩãỡf]
M ňγεο f.
1SG see 2SG.OB.
                               "You love me."
Fu boodi m. (2106: boodim)
                                                        [fwb:cdwl]
Fù bɔʻɔdī m.
2SG want 1SG.OB.
M bood if. (2106: boodif)
                               "I love you."
                                                        [mbo:dif]
M bóodī f.
1SG want 2SG.OB.
```

The liaison word 4.2° [σ] "him/her" loses its entire segmental form by apocope, after causing the final vowel mora of the preceding word to become [σ]. This mora is traditionally mistaken for the pronoun itself and written separately; in this grammar it is not separated, but is written σ as a concession to tradition, with the pronoun hyphenated to the host when it is not deleted by apocope:

```
Fv\ bood\ o. "You love her." [fvbo:dv] F\dot{v}\ bood\bar{o} \varnothing.
```

```
Fv pv bood oo.
                                           "You don't love her."
                                                                             [fʊpʊbɔ:dʊ:]
               b \acute{o} \circ d \acute{o} - o = \emptyset.
Fὺ ρῦ
2SG NEG.IND want-3AN.OB=NEG.
                                           "You've seen her."
                                                                             [fʊj̃ɛ̃ʊ̃]
Fυ ηνε ο.
Fù ἤγέο, ø.
2SG see
             3AN.OB.
                                           "You've not seen her."
                                                                             [f \sigma p \sigma \tilde{\epsilon} \tilde{\sigma}:]
Fυ ρυ ηγε οο.
Fὺ ρῦ
              ηνεό-ο=φ.
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. Traditionally they are written solid with the preceding word: pvvgvn, boodin. However, they follow flexional suffixes, and are preceded by liaison changes just like object pronouns; postposed ya is in complementary distribution with subject $y\grave{a}$, and locative $n\varepsilon$ has an allomorph $n\bar{\imath}$ with a vowel after apocope; they behave differently from flexional suffixes tonally. They are thus words, not flexions; they are hyphenated to the preceding word in the working orthography: $p\bar{v}vgv-n$ "inside", $b\grave{o}od\bar{\imath}-n$ "might wish."

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.

Traditional orthography always writes focus- $n\bar{\varepsilon}$ solid with preceding \dot{a} "be", and usually with other immediately preceding verb forms also; $n\bar{\varepsilon}$ "with" is written solid with preceding $w\bar{\varepsilon}n$ "resemble" by analogy:

```
O ane biig.
                                       "He/she's a child."
\dot{O} à n\bar{\varepsilon} b\bar{\imath}ig.
3AN COP FOC child:SG.
Ka o nindaa wenne nintan ne.
Κà
      ò
          nīn-dáa
                         wēn
                                     nē
                                           nīntāŋ nē.
And 3AN eve-face:sg resemble with sun:sg like.
"His face is like the sun." (Rev 10:1, 1996)
In KB w\bar{\varepsilon}n n\bar{\varepsilon} appears as nw\varepsilon n\varepsilon: Ka o nindaa nw\varepsilon n\varepsilon winnig n\varepsilon.
KB writes independent-perfective y\bar{a} 16.6.2 solid with the preceding verb:
                                       "Now he has gone." (2 Samuel 3:24)
Nannanna o gaadya.
Nānná-nā, ò gàad yā.
Now
             3AN pass PFV.
```

Older texts write -eya after consonants: gaadeya etc.

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 fv ane ninsaal ka ka' win ne.
Àmáa fv á nē nīn-sâal kà kā' wīnné=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 ne dunia gaadvg pv toi yaa
Àrazánà nē dūniya gáadvg pv tojyae.

Heaven with world passing NEG.IND be.difficult=NEG.
"The passing of heaven and earth is not difficult" (Lk 16:17)
```

3.2 Apocope

Every Kusaal word which can potentially stand clause finally has two surface forms, which differ in nearly all cases, the **Long Form** (LF) and the **Short Form** (SF.) For example, "child" usually appears as the SF $b\bar{i}ig$:

```
\dot{O} d\bar{a}a n y\bar{\epsilon} b\bar{\eta}ig. "She saw a child." 3AN TNS see child:sG. b\bar{\eta}ig l\bar{a} n\hat{u}'ug "the child's hand" child:sG ART hand:sG
```

Among other cases described below, a LF is found in the final word of clauses with a **negation** (negative particle or negative verb), of **questions**, both content and polar, and of clauses used as **vocatives**. Thus the LF $b\bar{i}iga$ is seen in

```
\grave{O} d\bar{a}a p\bar{v} \check{n}y\bar{\varepsilon} b\bar{i}iga=\varnothing. "He/she did not see a child." 3AN TNS NEG.IND see child:SG=NEG.

\grave{A}n\acute{o}'onì \varnothing d\bar{a}a \check{n}y\bar{\varepsilon} b\acute{i}ig\grave{a}=\varnothing?

Who cat this see child:SG=CQ?
"Who saw a child?"

\grave{M} b\bar{i}iga=\varnothing! "My child!"
1SG child:SG=VOC!
```

The SF is derivable from the LF by **apocope**. The term "apocope" will be used exclusively for this process below.

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 2.1) Word-final γ becomes γ after back vowels and zero elsewhere

The shortening changes of final diphthongs induced by apocope are

```
→ ia′
ia
        \rightarrow ia
                                                   ia'a
                                                                             u'aa \rightarrow u'a
                         ua
                                  → ua
ae
        → ae
                                                   ui
                         aυ
                                  → au
                                                            → uį
        \rightarrow Va
                                  → Ve
                                                            \rightarrow V_{D}
Vaa
                         Vee
                                                   Vvv
```

Identical changes occur with nasalised and/or glottalised diphthongs.

Apocope is described as a single rule, but comparative and internal evidence shows that loss of quality contrasts preceded 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>2.1</u>.

Examples:

```
Lì à nē kūk.
                                    "It's a chair."
3IN COP FOC chair:sg.
Κūk
         lā bódìg yā.
                                    "The chair has got lost."
Chair:sg art get.lost PFV.
Lì kā'
                                    "It's not a chair."
           k\bar{\nu}ka=\emptyset.
3IN NEG.BE chair:SG=NEG.
Lì à n\bar{\varepsilon} kýkàa=\emptyset?
                                    "Is it a chair?"
3IN COP FOC chair:SG=PQ?
Ànó'ɔnì σ ňyē kύkà=ø?
                                    "Who saw a chair?"
Who
          CAT see chair:sg=co?
```

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

Lì à nē dūk.
Dūk lā bódìg yā.
Lì kā' dūkó. /kk/
Lì à nē dūkóo?
Ànó'onì ňyē dūkó?

Lì à nē gbīgım.
Lì kā' gbīgımne.
Lì à nē gbígìmnee?
Ànó'ənì 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? Ànɔʻɔnì ňyē gbígımà?

Ò à nē dāu. Ò kā' dāv. Ò à nē dáùv? Ànó'ɔnì ňyē dáv?

Kà ò siák. And BAN agree.

 \dot{O} $p\bar{v}$ $s\underline{i}\acute{a}k\bar{\varepsilon}=\varnothing$. 3AN NEG.IND agree=NEG.

Kà ò dīgı. Ò pō dīgıyá.

Kà ò vūę. Ò pū vūyá.

Kà ò kịá. Ò pō kịa. "It's a cooking pot."
"The pot's got lost."
"It's not a pot."
"Is it a pot?"
"Who saw a pot?"

"It's a lion."
"It's not a lion."
"Is it a lion?"
"Who saw a lion?"

"It's salt."
"It's not salt."
"Is it salt?"
"Who saw salt?"

"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?"

"And he agreed."

"He didn't agree."

"And she's lying down."
"She isn't lying down."

"And she's alive."
"She's not alive."

"And she cut (it)."
"She hasn't cut (it)."

```
Kà ò pāe."And he reached (it)."Ò pō pāée."He hasn't reached (it)."
```

The appearance of clause-final LFs is triggered by following **prosodic clitics**, which have no segmental form themselves <u>4.1</u>. LFs occur clause-medially before **liaison words** <u>4.2</u>, and as the *citation* forms of **apocope-blocked** words. The exact shape of a LF differs in these different contexts. Length and quality of final vowels may be altered or neutralised, and final tonemes altered. For convenience, the LF preceding the negative prosodic clitic will be taken as basic segmentally. It shows underlying final short $-\iota - \nu$ as $-\varepsilon - \nu$, *- $-m\nu$ *- $-m\nu$ as -mm --mm and $-i\nu$ - $-u\nu$ as $-i\alpha$ - $-u\alpha$ <u>4.1</u>.

The LF is historically primary, but it can usually be predicted from the SF given the aspect of a verb or the natural gender of a noun, and in several cases historically expected LFs have been replaced by different forms corresponding to the same SFs. Apocope often does not lead to loss of contrasts despite deleting the segments which conditioned them, and working in reverse, such features can predict LFs from SFs; even words completely deleted by apocope remain recognisable from effects on preceding words. Some SFs are too short to show a tonal difference between Pattern H and all-M Pattern A, as with $k\bar{\nu}k$ "chair" and $d\bar{\nu}k$ "pot" above, but Tone Patterns are suprasegmental stem features 3.8.

Nevertheless, it is simplest to regard LFs as synchronically primary. With SFs ending in consonants the LF may end in $a \varepsilon$ or o; SF-final m n or l may or may not be geminated; -m may become -mn- instead of -mm-. Even before liaison, where vowel quality is neutralised, the same issues arise with consonants:

```
ka ban ka kikirbe'ednam daamne ba daa nye laafiya kà bàn kà kìkṛr-bɛ̂'ɛd-nàm dâamnī bá dāa nyē 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)
```

The default LF ending corresponding to SFs ending in a consonant is $-\varepsilon$. Thus with loans like $t\bar{\imath}l\acute{a}s$ "necessity", LF $t\bar{\imath}l\acute{a}s\grave{\varepsilon}$ from Hausa $tiil\grave{a}s$ id, and in e.g.

```
Pu'abi du'a sieba la wusa, sɔ' kae gat Joon nɛ [sic 3.1].

Pv̄'abí ø du'à sṣəba lā wv̄sa, 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 long monophthongs, front vowels or fronting diphthongs have LFs obtainable simply by lengthening the final vowel or diphthong, as do most but not all SFs ending in fronting diphthongs or front vowels:

zò	LF zòo	"run"	kūgá	LF kūgáa	"stones"
sīa	LF <i>s<u>ī</u>aa</i>	"waist"	sàbùd	ı LF sàbùaa	"girlfriend"
kpįà'	LF <i>kp</i> į¦a	"carve wood"	dāu	LF dāυ	"man"
wịdı	LF w ịdu	"horses"	pāe	LF <i>pāée</i>	"reach"
nịe	LF n <u>ì</u> ee	"appear"	dūe	LF <i>dūée</i>	"raise/rise"

A marginal exception to predictability is the fact that SFs ending in $\underline{i}a'$ $\underline{u}'\bar{a}$ may have LFs in $\underline{i}a'a$ $\underline{u}'aa$ instead of $\underline{i}'a$ $\underline{u}'a$ (see below.)

Some SFs ending in fronting diphthongs or front vowels have LFs in -ya. In two nouns this appears as a variant: $s\bar{a}\underline{e}\check{n}$ "blacksmith", LF $s\bar{a}e\check{n}$ or $s\bar{a}\check{n}ya$ and $s\bar{o}\underline{e}\check{n}$ "witch", LF $s\bar{o}e\check{n}$ or $s\bar{o}\check{n}ya$. All other LFs in -ya occur in single-aspect verbs 7.2, where LF -ya corresponds to all vowel-final SFs except in a few bare root forms:

```
dīgι LF dīgιyá "be lying" νῦς LF νῦγά "be alive"
```

Before liaison, even these verbs follow the *general* rule 4.2.

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.

b <u>ī</u> ig ^a	"child"	kūk ^a	"chair"
$dar{v}k^{\circ/}$	"pot"	s <u>i</u> àk ^ε	"agree"
gbīgım ^{nɛ}	"lion"	yàarım ^m	"salt"
dīgı ^{ya/}	"be lying down"	zì'e ^{ya}	"be standing"

When there is no superscript (other than /, see below) written after a SF ending in a vowel, the LF is segmentally the same but with prolongation of any final vowel except a $long\ monophthong\ 4.1$:

gbīgıma	"lions"	SF gbīgıma	LF gbīgımaa
mòlı	"gazelles"	SF mòlı	LF <i>mòl</i> ιι
gòň	"hunt"	SF gòň	LF gɔ̀ɔň
$d\bar{i}'e'$	"receive"	SF d <u>ī</u> 'e	LF d <u>ī</u> 'ée
nūa [/]	"hen"	SF <i>nūa</i>	LF nūáa
k <u>i</u> à	"cut"	SF k <u>i</u> à	LF k <u>ì</u> a
kuā	"hoe"	SF k <u>u</u> ā	LF kūa
dāu	"man"	SF dāu	LF dāυ
sāeň	"blacksmith"	SF sāeň	LF sāeň
dà'a	"market"	SF dà'a	LF dà'a
ànịi	"eight"	SF àníi	LF <i>àn</i> ịi

Words ending in LF $\dot{\mu}a'a$ $\dot{\mu}'aa$ are written with superscript ^a to distinguish them from words ending in LF $\dot{\mu}a'u'a$:

	kp <u>i</u> à'	"shape wood"	SF kp <u>i</u> à'	LF <i>kp</i> ị̀'a
but	d <u>i</u> ā' ^a	"get dirty"	SF dįā'	LF dįā'a
	k <u>u</u> ā	"hoe"	SF k <u>u</u> ā	LF kūa
but	pu'ā ^a	"woman"	SF puˈā	LF

So are words with LFs in -ya where the SFs changes the word-final -y to -e:

νōę ^{a/}	"be alive"	SF vṓe∕	LF vūyá
tōea/	"be bitter"	SF <i>tōe</i>	LF <i>tōyá</i>

A few cases must be written out separately, e.g. pāmm SF pāmnέ LF "a lot."

Intrinsic **LF-final tonemes** are L whenever the last stem toneme is L or H, but may be either M or H after stem-final M; superscript notation takes M as the default, writing $^{/}$ after forms with LF-final H: $d\bar{\nu}k^{\circ/}$ "pot", LF $d\bar{\nu}k\dot{\delta}$; $n\bar{u}a^{/}$ "hen", LF $n\bar{u}\dot{a}a$.

Words where X in the SF has to become H in the LF are written with SF tonemes: $n\hat{u}'ug^{\circ}$ "hand" LF $n\hat{u}'ug^{\circ}$; so are words with a toneless superlight syllable in the LF corresponding to a L closed final syllable in the SF: $n\acute{o}b\grave{i}r^{\varepsilon}$ "foot", LF $n\acute{o}b\imath r\grave{\varepsilon}$, $d\bar{\imath}'<table-row> s\acute{i}d\grave{\imath}b^{a}$ "receivers," LF $d\bar{\imath}'$ $s\acute{i}d\imath b\grave{a}$. The convention that macrons and graves apply to all following unmarked syllables means that no special notation is needed for the corresponding changes in words like $w\bar{a}b\upsilon g^{\circ}$ "elephant" or $d\grave{\imath}g\imath r^{\varepsilon}$ "dwarf."

Apocope-blocked words use LFs as *citation* forms. They lack the lowering of postconsonantal final ι υ to ε υ seen before prosodic clitics, but do change final $-m\upsilon$ to -mm. Final L tonemes are changed to M. Secondary LFs are created before prosodic clitics by prolonging short final vowels; except in Pattern A words 3.8, final M then becomes H. Apocope-blocking is seen with some nouns ending in $-\iota$ or $-\upsilon$, as a derivational feature in adverbs and quantifiers, as a downtoning measure with adjectives, and in many words with only one underlying mora, including pronouns.

būudı	"tribe"	bèdvgū [/]	"a lot"
sὺŋā [/]	"well"	yā [/]	"houses"

Blocked words which do not end in a short vowel add $-n\varepsilon$ for the secondary LF: $p\bar{a}mm$ SF $p\bar{a}mn\varepsilon$ LF "a lot"; $m\dot{a}'aa$ SF $m\dot{a}'an\varepsilon$ LF "only"; $g\dot{v}ll\bar{\iota}mm$ SF $g\dot{v}ll\bar{\iota}mn\varepsilon$ LF "only"; $k\dot{\sigma}\dot{\tau}\dot{\sigma}a^{n\varepsilon}$ "at all." The LF of $n\bar{v}\dot{\sigma}e^{n\varepsilon}$ "brightly, clearly" is similarly $n\bar{v}\dot{\sigma}e^{n\varepsilon}$ [$n\ddot{\tau}\ddot{\tau}$]. Cf $n\dot{\varepsilon}$ DK KT SB NT $n\dot{\varepsilon}n$ WK; clause-finally (all sources) $n\dot{\varepsilon}n^{\varepsilon}$ "also, too."

3.3 Roots, stems and flexions

Word structure is based on (C)V(C) or (C)VV(C) **roots**. All vowels may occur in roots. Root-final consonants may only be $b \ d \ g \ l \ m \ n \ s \ r$.

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** $V \ CV \ CVN \ CVsiN$ or CVliN, where N is a nasal homorganic with the following consonant and i is an epenthetic vowel: $t\bar{i}t\bar{a}'ar$ "big", $b\dot{v}mb\dot{a}rig$ "ant", $s\bar{i}lins\hat{i}u\check{n}g$ "spider." A few stems have two prefixes.

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

Prefixes and flexional suffixes show only the **affix vowels** $a \iota v aa \iota \iota vv$. Most bound words of the form (C)V(V) have the same vowel restrictions, though the various particles $n\bar{\varepsilon}$ show ε for ι . Prosodic clitics $\underline{4.1}$ cause short LF-final ιv to be lowered to ε \mathfrak{I} , here realised [e] [o]; short ιv remain as such only before apocopeblocking $\underline{3.2}$.

Prefix ι υ are realised [i] [u] when the first vowel mora of the root is i or u; as this is non-contrastive, the orthography uses ι υ throughout. Thus $t\bar{\iota}t\bar{a}'ar$ [tɪta̞:r] "big", $k\dot{\upsilon}k\bar{\jmath}r$ [kʊkɔr] "voice", but $k\dot{\iota}k\bar{\imath}r\iota g$ [kikirig] "fairy", $s\dot{\imath}s\dot{\imath}'\vartheta m$ [sisi̯əm] "wind", $s\bar{\imath}l\iota ns\hat{\imath}u\bar{n}g$ [silinsĩũg] "spider", $v\dot{\upsilon}l\iota nv\dot{\iota}u\bar{n}l$ [vulimvũ:l] "mason wasp", $d\dot{\upsilon}nd\dot{\iota}ug$ [dundu:g] "cobra" (KB dunduug.) Only [i] [u] occur after m or n: $n\dot{\imath}n$ - $t\bar{a}a$ [ninta:] "co-wife."

As affix vowels, short ι and υ contrast only after velars and word-initially: ι is the default after alveolars, and υ after labials, labiodentals and labiovelars, but prefixes show υ rather than ι before root $u/\upsilon/\upsilon$ ($d\upsilon nd\upsilon ug$ "cobra") and ι instead of υ before $i/\iota/\varepsilon$ ($kp\bar{\iota}kp\bar{\iota}n$ "merchant.") In flexions -mm appears in place of *- $m\upsilon$; ι appears after labial consonants only by analogy in pfv LFs like $z\grave{a}b\varepsilon$ "fight." Velars followed by affix-vowel υ could be analysed as labiovelars, with 3sg $\grave{o} \leftarrow *\eta m\grave{v}$.

Before vowel-initial flexions CVV root-stems become CVv or CVd 3.4.

No consonant clusters appear word-initially or finally except final -mm: $p\bar{a}mm$ "a lot." Few clusters are permitted within words. Homorganic nasal + C may occur where noun prefixes attach to a root or to another noun prefix: $k\hat{v}nd\hat{v}\eta^a$ "jackal", $g\bar{v}mp\bar{v}z\bar{\varepsilon}r^{\varepsilon/}$ "duck", $d\hat{a}nk\hat{o}\eta$ [daŋkɔŋ] "measles." Except in loanwords, the only other word-internal clusters permitted are kk tt pp $\eta\eta$ nn mm ll mn, of which kk tt pp $\eta\eta$ are written k t p η , and realised single except in very slow speech.

All other pairs of consonants arising in word formation either assimilate to a permissible cluster or single consonant, or insert an epenthetic vowel:

```
Stem nób- "leg" + sg -r\iota \rightarrow LF nób\iota r\grave{\epsilon} SF nób\grave{\iota} r d\bar{u}m- "knee" + sg -r\iota \rightarrow LF d\bar{u}mn\epsilon SF d\bar{u}m
```

The cluster mn is unstable. All informants have mm in the LFs of dual-aspect verb ipfvs like $k\grave{a}rımma$ "read", but a few examples of the original mn occur in NT:

```
ka\ ba\ li'\ ba\ toba\ ka\ pu\ wum\ na\ [sic\ 3.1] k\grave{a}\ b\grave{a}\ l\acute{\iota}\ b\grave{a}\ t\grave{v}ba\ k\grave{a}\ p\bar{v}\ w\acute{v}mn\bar{a}=\varnothing. 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 $r\varepsilon|aa$ class m-stems; thus SB has $gb\bar{\imath}g\imath mn\varepsilon$ "lion", $d\bar{\imath}umn\varepsilon$ "knee" whereas WK has $gb\bar{\imath}g\imath mm\varepsilon$, $d\bar{\imath}umm\varepsilon$.

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

```
m naan ku aan Kiristo tumtum na [sic 3.1].
m̀ nāan kύ āa-n Kiristo tύm-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 tυπτυππα)
```

Agent noun plurals usually show mn, as in $t\dot{v}m$ - $t\bar{v}mnvb$ "servants", but habitual adjectives from m-stem verbs show mm before epenthetic vowels: $b\bar{v}n$ - $t\acute{v}mm\grave{v}r$ "useful thing" (pl $t\bar{v}mna$ for some), $b\grave{v}$ - $s\bar{a}\breve{n}$ 'ammvr "goat for destruction" WK.

All examples of mna and $mn\varepsilon$ in KB cross word division by the criteria of this grammar, but mni is usual in plurals like tvmtvmnib "servants."

The default **epenthetic vowel** is ι . Before LF - $g \circ -\eta \circ$ it becomes v, remaining v in the SF <u>3.6</u>.

```
SF āandıg LF āandıga "black plum tree"
but SF gàadvg LF gàadvgo "(sur)passing"
pl SF mālıma LF mālımaa "sacrifices"
but SF mālvŋ LF mālvŋo "sacrifice"
```

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

```
gb\bar{\imath}g\imath m [\bar{g}b\imath g\imath m] "lion" y\bar{\upsilon}g\acute{\upsilon}m [\bar{\jmath}\upsilon g\upsilon m] "camel" d\bar{\upsilon}g\upsilon d [d\upsilon g\upsilon d] "cooking pots" d\bar{\upsilon}g\upsilon d\acute{\imath}b [d\upsilon g\upsilon d\imath b] "people who cook"
```

With other consonants rounding varies between sources. It is contrastive only before velars, where it can lead to reinterpretation of -ga as -go. WK has rounding with intervening b m or l, and with intervening mm even after unrounded vowels: $n\acute{o}b\grave{i}r$ "leg" but $n\~o bvg$ "grow", $k\~o lvg$ "river", $v\`o mmvg$ "slave."

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

```
t isid [tisid] "gives" s igid [sigid] "lowers" b igvr [bugur] "spirit's dwelling" k igvr [kugur] "stone"
```

Epenthetic vowels show two distinct levels of prominence. The weaker is seen in **superlight** CV syllables. A CV syllable is superlight if it is a word-internal non-root syllable and is preceded by another CV syllable which is not itself superlight, working from left to right. Bolded syllables are thus superlight in the LFs $d\bar{t}$ - ∂t - ∂

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

	SF <i>v</i> <u>i</u> id	LF v <u></u> iidέ	"owls"
but	SF v <u>ī</u> ug	LF v <u>ī</u> ugź	"owl"

3.4 Root alternations

Most roots ending in a vowel show a long vowel before all flexional and derivational suffixes: $k\bar{v}$ "kill" ipfv $k\bar{v}vd^{a/}$. Others have a short vowel throughout: $z\bar{u}g^{o/}$ "head" pl $z\bar{u}t^{\epsilon/}$, $z\bar{a}/$ "millet", $m\dot{u}i$ "rice", $k\bar{i}/$ "millet."

Some roots end in a vowel showing length alternations. All glottalised types are underlyingly *CVg 3.7. In flexion, non-glottalised types show long vowels before -ga -ga and short elsewhere, with following * $d \rightarrow tt$ * $b \rightarrow pp$ (but not * $m \rightarrow mm$ or * $l \rightarrow ll$):

dāvg ^o	"male"	cf <i>dāp</i> a	"men"
b <u>ī</u> ig ^a	"child"	cf <i>b</i> <u>ī</u> l ^a	"little"
dàɔgɔ	"hut"	pl $d\grave{ extit{d}}t^{arepsilon}$	
fūug ^{ɔ/}	"clothing"	pl $far{u}t^{arepsilon/}$	
<u> </u>	"see"	info žvātal	imn řudmíl
ňyε̄	see	ipfv <i>ňyēt^{a/}</i>	imp <i>ňyèm</i> a
$kar{arepsilon}$	"allow"	ipfv <i>kɛ̃t</i> a/	imp <i>kὲl</i> a
dì	"eat"	ipfv <i>dìt</i> a	imp <i>dìm</i> a

уį	"emerge"	ipfv <i>yį̄t</i> a/	imp <i>y</i> ịm ^a
ζÒ	"run"	ipfv <i>zòt</i> a	imp <i>zòm</i> a
$dar{v}$	"rise"	ipfv $dar{v}t^{\mathrm{a}/}$	imp <i>dùm</i> a
<i>lù</i> or <i>l</i> ị	"fall"	ipfv <i>lùt</i> ^a or <i>lịt</i> ^a	imp <i>lùm</i> ^a or <i>lìm</i> ^a

VV before sg -*ga* or -*go* may be introduced into the pl, optionally or always:

```
dāva<sup>o</sup>
                     "male"
                                                                pl dāadε
bīig<sup>a</sup>
                                                                pl bį̇̃is<sup>ε</sup>
                     "child"
pōɔqɔ/
                                                                pl pɔ̄ɔdɛ/
                     "field"
                                                                                                 p̄̄̄̄̄tε/
                                                                                      or
dàaga
                                                                pl dòɔdε
                     "hut"
                                                                                                 dàt<sup>ε</sup>
                                                                                      or
fūug<sup>o/</sup>
                                                                pl fūudε/
                                                                                                 f\bar{u}t^{\varepsilon/}
                     "clothing"
                                                                                      or
```

Before derivational suffixes the vowel is usually long:

d i $\imath s^{arepsilon}$	"feed"	<i>d</i> ì	"eat"
dàalım ^m	"masculinity"	$dar{a}p^{\mathrm{a}}$	"men"
$var{v}'vg^{arepsilon/}$	"come alive"	νōr ^{ε/}	"alive"
νį̇̃is ^{ε/}	"make go/come out"	νī	"emerge"

Exceptions are $y\bar{i}s^{\varepsilon}$ beside $y\bar{i}is^{\varepsilon}$; $g\bar{o}s^{\varepsilon}$ "look", ipfv $g\bar{o}t^{a}$ or $g\bar{o}sid^{a}$, imp $g\bar{o}m^{a}$ or $g\bar{o}sim^{a}$; and $t\bar{i}s^{\varepsilon}$ "give" ipfv $t\bar{i}t^{a}$ or $t\bar{i}sid^{a}$.

Gerunds in -bɔ always show long vowels: $d\bar{\imath}\iota b^{\circ}$ "food", $n\bar{\imath}y\bar{\varepsilon}\varepsilon b^{\circ}$ "seeing"; so do all regular gerunds in -rɛ: $n\bar{\jmath}$ -lôɔrɛ "fasting" ("mouth-tying"), $f\bar{\iota}$ -yɛ̂ɛrɛ "shirt-wearing", but WK has $n\bar{\iota}$ -lôrɛ "place for tying up cows", $m\bar{\iota}$ -lôrɛ "place for tying up horses."

Historically, such roots probably ended in a consonant preserved before vowelinitial suffixes, assimilated before homorganic consonants, or deleted with vowel fusion. There is evidence for *CVw and * $wb \rightarrow pp$ in $d\bar{a}\mu$ "man" (Mooré $r\acute{a}oa$) pl $d\bar{a}p^a$; $t\bar{a}\mu\bar{n}'$ "sib of opposite sex" pl $t\bar{a}\bar{n}p^{a\prime}$; $t\grave{o}\bar{n}$ "shoot" (Mooré $t\~{a}o$) $t\bar{a}\bar{n}p^o$ "war."

Kusaal CVV roots with CVt- allomorphs typically have Mooré cognates with fronting diphthongs or front vowels: e.g. Mooré $z\grave{o}e$ "run" $l\grave{v}\iota$ "fall", ipfvs $z\grave{o}eta$, $l\grave{v}\iota ta$, versus $k\acute{v}$ "kill", ipfv $k\acute{v}vd\grave{a}$. Mooré shows much less levelling in such cases. Sporadic monophthongisation of *Vy explains $l\grave{u}\sim l\grave{\iota}$ "fall", and contrasts like Kusaal $d\grave{o}zg^{o}$, Mampruli duu, Mooré $r\grave{o}og\acute{o}$ vs Hanga $d\grave{u}$, Farefare $d\grave{e}eg\grave{o}$, Dagaare $d\grave{i}\acute{e}$ "hut, room."

Nawdm cognates show $Vr: t\grave{\varepsilon}' \varepsilon g^a$ "baobab", Mooré $t\grave{\circ} \varepsilon g\acute{a}$, Nawdm $t\grave{\circ} d$ pl $t\grave{\circ} r\acute{a}$ (where Nawdm $*rr \to d$); $d\grave{\varepsilon} \varepsilon g^a$ "warthog", Mooré $r\grave{\varepsilon} oog\acute{o}$ ($\leftarrow *r\grave{\varepsilon} eg\acute{o}$), pl reto, Nawdm $d\grave{\circ} d$ pl $d\grave{\circ} r\acute{a}$. Nawdm r continues Proto-Oti-Volta *r (perhaps $[r^j]$); in Proto-Western-Oti-Volta single *r became *y root-initially, after short root vowels, and word-internally before *a; otherwise Agolle Kusaal and Mooré continue r as a distinct phoneme, but in the other languages it falls together with the reflexes of either *d or *l 2.1.

Kusaal	Nawdm	
('n) y ị́ '	(m) r éĥ	"two"
dὲεg ^a	dὸ r á (pl)	"warthog"
zì'e ^{ya}	jeĥ r a	"be standing"
yàa r ım ^m	yáà r ش	"salt"
nōɔ r ε/	nóó ŕ	"mouth"
tὺbυ r ε	tób ŕ	"ear"
mō r a∕	$ma\mathbf{d}a \ (d \leftarrow rr)$	"have"
yį r €/		"house"
mɔ̄ d ε	тэ d	"swell"
mɔ̃ɔ d ^ɛ	móó $oldsymbol{\acute{t}}$	"grass"
	(\hat{n})\mathbf{y}\tilde{\psi}\text{'} d\hat{\varepsilon}\varepsilon^a y\hat{a}\mathbf{r}^i\text{m}^m n\bar{o}\mathbf{r}^{\varepsilon}\text{t} t\hat{v}\text{b}\varepsilon^\varepsilon} m\bar{o}\mathbf{r}^{a/} y\bar{v}\mathbf{r}^{\varepsilon}\text{m} m\bar{o}\mathbf{d}^\varepsilon}	(\grave{n}) yı́' (m) réh $d\grave{\epsilon} eg^a$ $d\grave{\sigma} fa$ (pl) $z\grave{l}'e^{ya}$ $jehra$ $y\grave{a}$ arım m $y\acute{a}$ arım m $n\check{o}$ or $^{e/}$ $n\acute{o}$ or $^{e/}$ $t\acute{o}$ b e $t\acute{o}$ b e $m\ddot{\sigma}$ ra/ m ada $(d\leftarrow rr)$ $y\bar{l}$ r $^{e/}$ $m\ddot{\sigma}$ d e m ad

When not the reflex of *rr, Agolle r after a short root vowel is due to analogy or borrowing. Thus $kp\grave{a}r^\epsilon$ "lock" (= Dagbani kpari, not *kpali) probably has r from an obsolete * $kp\grave{a}r^a \leftarrow *kparra \leftarrow *kpadra$ "be locked", cf $g\grave{v}l^\epsilon$ "suspend", $g\grave{v}l^l$ "be suspended", and the irregular correspondences in Mampruli nyarinnu, Dagbani nun, Toende nun arin, Agolle nu "boat" suggest borrowing. The change *nu itself leads to remodelling: cf the gerunds nu nu its nu "recall."

Buli has r for *rr but $y/i/\varnothing$ for single *r: $y\acute{e}r\acute{i}$ "house", tara "have" (= $t\bar{a}r^{a/}$), $ng\grave{a}$ - $y\grave{e}$ "two", $t\bar{u}ik$ "baobab", $d\grave{u}ok$ "warthog", $d\grave{o}k$ "hut", $n\acute{o}ai$ "mouth." Moba has l throughout: $\acute{n}l\acute{e}$ "two", $\acute{n}l\grave{o}\grave{o}\grave{b}$ "six" (= $\grave{n}y\^{u}eb$), $l\bar{o}o\acute{n}$ "close" (= $y\grave{o}$), $t\bar{u}b\grave{l}$ "ear", $t\bar{o}ol\grave{g}$ "baobab", $d\bar{o}ol\grave{g}$ "pig." Byali has $dy\bar{a}$ "two", $t\bar{e}eb\bar{u}$ "baobab", $d\bar{n}g\bar{e}$ "warthog", $n\bar{u}\bar{i}$ "mouth", and Waama $y\rlap{e}n\acute{i}$ "two", $t\bar{o}or\acute{i}b\bar{u}$ "baobab", $d\bar{o}r\acute{i}b\bar{u}$ "warthog", $n\acute{o}r\bar{e}$ "mouth."

The roots of $s\bar{a}\varrho\check{n}^a$ "blacksmith" and $s\bar{\jmath}\varrho\check{n}^a$ "witch" show no CVt- allomorphs (cf Mooré $s\tilde{a}ado$ "smithing", $s\tilde{o}odo$ "witchcraft"), and were perhaps originally ${}^*CV\~n$.

Before the noun class plural suffix -aa, unglottalised CVV-stems insert -y-, with shortening of long vowels, with i
eta u
eta becoming $\underline{i}
eta \underline{u}
eta [\underline{i}
eta] [\underline{u}
eta]$, found solely in this context. Historically, this may represent analogical introduction of the *r of the sg suffix before pl -aa; the regular Nawdm pattern is $n\acute{o}\acute{o}\acute{r}$ "mouth" pl $n\acute{o}\acute{o}r\acute{a}$.

```
aāĭr<sup>ε/</sup>
                   "ebony fruit"
                                                          pl gānyá (short sg vowel from pl)
                   "stick, club"
bàlàar<sup>E</sup>
                                                          pl bàlàya
kùkɔ̃r<sup>ε/</sup>
                   "voice"
                                                          pl k\dot{\nu}k\bar{\nu}y\dot{a} (*CVy- root)
n̄ɔɔrε/
                   "mouth"
                                                          pl nōyá
z\bar{v}vr^{\varepsilon}
                   "tail"
                                                          pl zūya
bīər<sup>ε/</sup>
                   "elder same-sex sib"
                                                          pl biēyá
z\bar{u}er^{\epsilon}
                   "hill"
                                                          pl zuēya
```

However, *CV'V* root-stems change to *CVd*- before -aa:

```
t\bar{\imath}t\bar{a}'ar^{\varepsilon} "big" pl t\bar{\imath}t\bar{a}da p 
ight)\bar{n}' 
ight) r^{\varepsilon} "cripple" pl p 
ight)\bar{n}da y \bar{v}' v r^{\varepsilon} "name" pl y \bar{v}da y \bar{u}' e r^{\varepsilon} "penis" pl v u \bar{a}da
```

These may be original *CVd-stems, with * $Vdr \rightarrow V'Vr$ after short root vowels and cb based on the sg. Current forms with CVd- before sg $r\varepsilon$ would be levelled on the pl (pl remodelled on sg would look like a cb); many such words are commoner in the pl, e.g. $kp\varepsilon nd\iota r^{\varepsilon l}$ "cheek." Deverbal nouns are remodelled on finite forms, and adjectives level stems across classes. $P\underline{u}'\dot{a}$ - $s\bar{a}d\iota r^{\varepsilon l}$ "young woman" had former a|ba agreement: cf Mooré $p\dot{v}g$ - $s\dot{a}d\dot{a}$ id. Languages without glottalisation treat these stems exactly like CVV-, but the rules for all CVV-stems before -aa differ across subgroups.

Stems in *-ag- *- $\underline{i}ag$ - *- $\underline{i}ag$ -

```
b\dot{a}'ar^{\mathcal{E}} "idol" (Farefare b\dot{a}gr\dot{\epsilon}) pl b\dot{a}'a or b\dot{a}da s\dot{a}'ar^{\mathcal{E}} "forest" pl s\dot{a}\dot{a}'a "reservoir, dam" pl mu'\dot{a}a or m\dot{v}'ada
```

A derivational change $*rq \rightarrow dq$ appears in

	15	"tie"	lɔ̄dιg ^{ε/}	"untie"
cf	lóe	"tie" (Mooré)	lódgè (or lókè)	"untie" (Mooré)
	$par{v}$	"divide"	pūdιg ^{ε/}	"divide"
cf	pύi	"divide" (Mooré)		
	bòı	"get lost" (Toende)	bòdιg ^ε	"lose, get lost":
	yāar ^{ε/}	"scatter"	yādιg ^{ε/}	"scatter"

*CVw roots become glottalised before derivational *g and *s, probably reflecting another historical consonant cluster change; thus $y\dot{\varepsilon}$ "dress oneself", $y\dot{\varepsilon}\varepsilon g^{\varepsilon}$ "undress oneself", $d\dot{\iota}$ "eat", $d\dot{\iota}\iota s^{\varepsilon}$ "feed", but

	kò	"break" intrans	kà'ag ^ɛ	"break" trans/intrans
	pàɔd ^a	"be few"	pà'ag ^ε	"diminish"
	vṓeٍa∕	"be alive"	$var{v}'vg^{arepsilon/}$	"make, come alive"
cf	vəpa	"live things" (Farefare)	$v\bar{v}$ ' $vs^{arepsilon/}$	"breathe, rest"
	kàɔlúŋɔ	"broken"	kà'ɔs ^ε	"break several times"
	tòň	"shoot"	tàň'əs ^ɛ	"hunt"

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

nō	"tread"	nōbá	"feet"	
cf nao	"tread" (Mooré)			
s วิวทั $r^{arepsilon}$	"liver"	səbri	"liver" (Mamprul	i)
sãoore	"liver" (Mooré)	sabili	"liver" (Dagbani)	

There are few CVb- stems in the $r\varepsilon |aa$ noun class. $N\acute{o}b\grave{i}r^{\varepsilon}$ "foot" has introduced -b- from the plural (Toende sg $n\eth$ ' $\eth t$) and $t\grave{v}bvr^{\varepsilon}$ "ear" may have done so.

Apparent $CVV \sim CVg$ alternations appear in $w i d^a$ "draw water" ipfv beside $w k^{\epsilon}$ pfv ($\leftarrow *w i g g \iota$) and v i "uproot", $v k^{\epsilon} i d$ ($\leftarrow *v i g g \iota$).

Some CVC roots have CVVC allomorphs. Alternation may appear in derivation:

tūvma	"work" noun	tùm ^m	"work" verb
yέoŋ	"one"	yīuŋɔ/	"single"
kāal ^{ε/}	"count"	kāl ^{lε/}	"number"
tūvlúg ^o	"hot"	tūl¹a∕	"be hot"

CVC is invariable before derivational suffixes other than -lum- "-ness" and the -y- of stative verbs; thus $s\acute{a}ann\`{u}m^m$ "strangerhood", $kp\bar{l}m^m$ "be strong", but

màal ^ε	"sacrifice" (verb)	mālvŋ ^ɔ	"sacrifice" (noun)
pìəlıg ^a	"white"	pèlıg ^ε	"whiten"
kpį̇˙oŋ°	"strong"	kpὲ'ŋ ^ε	"strengthen"
l $ day{i} eg b^{arepsilon}$	"become"	lèbıg ^ε	"turn over"
tūvlúg ^o	"hot"	tūlιg ^{ε/}	"heat"
yāar ^{ε/}	"scatter"	yādıg ^{ɛ/}	"scatter"
$dar{arepsilon}$ ε $\eta^{ m a}$	"first"	dὲŋ ^ε	"go first"
pį̀əb ^ε	"blow" (flute)	pὲbιs ^ε	"blow" (wind)
yùul ^ɛ	"swing" intransitive	yùlıg ^ɛ	"swing" transitive

Alternation appears in flexion in a few nouns:

```
zı́ıŋ^a (\leftarrow *ziimga) zı̄mı́ zı̄m- "fish" náaf^o (\leftarrow *naagf^o) nı̄igı́ nā'- (\leftarrow *nag-) "cow" wáaf^o(\leftarrow *waagf^o) wīigı́ wā'- (\leftarrow *wag-) "snake" pīim^m/ pīmá "arrow" yv̀^om^mE yv̀^oma "year"
```

3.5 Consonant clusters

The changes described below precede deletion of postvocalic *g.

Except between a prefix and a root, adjacent consonants within a word either assimilate to kk pp tt $\eta\eta$ mm nn ll mn or insert an epenthetic vowel (ι by default.)

This table shows the treatment of possible pairs, with θ representing the insertion of an epenthetic vowel. There are gaps where combinations are unattested.

1↓ 2→	g	d	b	m	n	r	S	1	f	У
g	kk	ə	ə	ə	ð	ə	ə	Ә		ə
d	ə	tt	ə	Ә		Ә	Ә			r
b	ð	ə	pp	[mm]	ð	ə	Ә	Ә		Ә
m	ŋŋ	mn	mm	mm		mn	[:s]	nn		mm
n	ŋŋ	nn	mm	ð		nn	~s	nn	~f	nn
r	ð	ə	ə	ə		r	Ә	tt	ð	
S	ð	ə	ð	ə		ð	ə			S
1	Ә	nn	Ә	Ә		11	Ә	11	Ә	11

The unusual change $ld \rightarrow nd \ (\rightarrow nn)$ is found throughout Western Oti-Volta.

The change $bm \to mm$ only occurs after a short root vowel, whereas $ms \to \tilde{s}$ never occurs after a short root vowel, and is optional elsewhere.

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

$tar{arepsilon}\eta^{ m a}$	"land"	pl	$tar{arepsilon}arepsilonreve{arepsilon}arepsilon^arepsilon$	← *tɛnsı
kùlıŋ ^a	"door"	pl	kùlıs ^ɛ	← *kvlınsı

For the pl $b\bar{v}tus^{\varepsilon}$ of $b\bar{v}tu\eta^{a}$ "cup" see 2.3.

* $\mathbf{n}\mathbf{f}$ 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:

$$n\bar{i}f^{Ol}$$
 "eye" pl $n\bar{i}ni$ pí inf^{O} "genet" pl $p\bar{i}ini$

*ss inserts an epenthetic vowel in the pl $p\bar{u}sis^{\epsilon/}$ of $p\bar{u}sig^{a/}$ "tamarind." All other plurals in $-sis^{\epsilon}$ in my materials are for *-sinsi. * $P\bar{u}s^{\epsilon/}$ would appear to show no ending in SF; substitution of a flexion from a different noun class is inhibited by the strong association of tree names with the $ga|s\epsilon$ class and of fruits with $r\epsilon|aa$ and $go|d\epsilon$.

The word $\check{n}w\bar{a}m^{\mathrm{m}\epsilon}$ WK "calabash" has * $mr \rightarrow nn$ for some speakers ($\check{n}w\bar{a}n^{\mathrm{n}\epsilon}$ SB), and the pl may be remodelled on the sg: $\check{n}w\bar{a}na$ (Lk 11:39, 1976) $\check{n}w\bar{a}ma$ SB WK; cf 1976 NT $kobkennib = k\grave{o}\check{n}b + k\bar{n}mnub^a \leftarrow *k\~ob + kumduba$ "herdsmen."

Derivation precedes flexion in consonant cluster formation.

Stem-final kk pp tt $\eta\eta$ mn nn never assimilate further; mm assimilates only with $mmm \rightarrow mm$ in imperatives. Thus e.g. $k\bar{\jmath}t^{\epsilon/}$ "slaughter", ipfv $k\bar{\jmath}tid^a$; dam^m "shake", ipfv $dammid^a$ ipfv, gerund $dammid^a$ but imperative dam^{ma} .

However, stem-final $ll\ r(r)$ assimilate the initial of the noun class suffix $-r\varepsilon$: $k\dot{\nu}g$ - $d\bar{\varepsilon}l^{l\varepsilon}/$ "chair for leaning on." This assimilation has led to the sg SF forms of agent nouns from single-aspect verbs in $ll\ r(r)$ being reinterpreted as $r\varepsilon|aa$ class $\underline{5.3.1}$.

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-: $p\hat{i}bindg\hat{a}$ "lid, cover." The Mooré equivalent of the assume-stance derivational suffix -n- 9.1.1 is -nd-: $z\tilde{i}ndi=z\hat{i}n'in^{\epsilon}$ "sit down"; $v\hat{a}bende=v\hat{a}bin^{\epsilon}$ "lie prone"; $t\hat{a}bende$ "get stuck to" of Kusaal $t\hat{a}b^{\epsilon}id$. The corresponding Nawdm suffix is -nt-: $je\hat{n}ra$ ipfv $=z\hat{i}'e^{ya}$ "be standing, $je\hat{n}nt$ pfv $=z\hat{i}'en^{\epsilon}$ "stand up." Simplification of mm to single m appears in single-aspect verbs 9.1.2.1.

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

Regular *n*-stem verbs never assimilate *nm in imperatives. They always assimilate * $nd \rightarrow nn$ in the ipfv after short root vowels, but nowhere else; this may reflect the origin of derivational n from *nn.

bùn ^ɛ	bùn ^{na}	bùnım ^a	"reap"
dìgın ^ε	dìgınıd ^a	dìgınım ^a	"lie down"
gὸ'ɔn ^ε	gà'ɔnıd ^a	gà'ɔnım ^a	"extend neck"

N-stem gerunds never show assimilation: $b\bar{u}nib^{\circ}$, $diginvg^{\circ}$.

M-stems always assimilate in the imperative. They regularly assimilate in the ipfv whenever an epenthetic vowel would have been left in a superlight syllable in the LF, although NT/KB occasionally has unassimilated forms to avoid ambiguity:

```
wòm<sup>m</sup> wòm<sup>ma</sup> wòm<sup>ma</sup> "hear"
```

but ka nan kpen womid ye m bee li poogin nannanna la.

kà nán kpèn wòmid yé m̀ bée lì pōogo-n nānná-nā lā.

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

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

When an epenthetic vowel would not be in a superlight syllable in the LF of gerunds or imperfectives, either assimilation or epenthesis is possible:

tōɔm™/	tɔ́ɔm ^{ma} /tɔ̄ɔmída	tòɔm ^{ma}	"depart"
kàrım ^m	kàrım ^m /kàrımıd ^a	kàrım ^{ma}	"read"

The corresponding gerunds are $t \acute{o} j^{\circ}/t \bar{o} m \acute{o} g^{\circ}$ and $k \grave{a} r \upsilon j^{\circ}/k \grave{a} r \iota m \upsilon g^{\circ}$.

Epenthesis is clearly motivated by the avoidance of ambiguity for WK and DK, who use assimilated forms exclusively as LFs and before the focus particle $n\bar{\epsilon}'$:

```
\dot{M} p\bar{v} k\acute{a}r\grave{n}mm\bar{a}. "I'm not reading." 
\dot{M} k\acute{a}r\grave{n}m n\bar{\varepsilon}. "I'm reading." 
K\grave{a} b\grave{a} k\acute{a}r\grave{m}. "And they were reading." 
K\grave{a} b\grave{a} k\acute{a}r\grave{m}. only "And they read."
```

Examples for assimilation versus epenthetic vowel insertion:

```
gìka
                                         "dumb" sg
                                                                       gigis^{\epsilon} pl
*gg \rightarrow kk
                cf kɔ̃lıqa
                                         "river" sq
                                                                       kɔ̃lıs<sup>ε</sup> pl
*dd \rightarrow tt
                    bùt<sup>a</sup>
                                         "plant" ipfv
                                                                       bὺdε pfv
                cf dvavda/
                                         "cook" ipfv
                                                                       d\bar{v}g^{\varepsilon} pfv
                    s\bar{p}^{0/2}
                                         "writing" ger
                                                                       s5bε pfv
*bb \rightarrow pp
                cf kpārīb<sup>o</sup>
                                         "locking" ger
                                                                       kpar^{\varepsilon} pfv
                    kàn<sup>nε</sup>
*ld \rightarrow nn
                                         "bags" pl
                                                                       kàlvg<sup>o</sup> sg
                cf zūebídε
                                         "hairs" pl
                                                                       zūebύg<sup>o</sup> sg
*mg \rightarrow \eta\eta
                    bùn<sup>a</sup>
                                         "donkey" sg
                                                                       b\dot{v}mis^{\epsilon} pl
*ng \rightarrow \eta \eta
                    gbàun<sup>o</sup>
                                         "book" sg
                                                                        gbàna pl
                                                                       ňwādιs<sup>ε/</sup> pl
                cf ňwādıga/
                                         "month" sq
*nr \rightarrow nn
                    tān<sup>ne</sup>
                                         "earth" sg
                                                                       tāna pl
                    d\bar{u}m^{n\epsilon}
*mr \rightarrow mn
                                         "knee" sg
                                                                       dūma pl
                    aέllε
*lr \rightarrow ll
                                         "egg" sg
                                                                       qε̄lá pl
*rr \rightarrow r
                    kùkpàr<sup>E</sup>
                                         "palm fruit" sg
                                                                       kùkpàra pl
                cf diair<sup>e</sup>
                                         "dwarf" sq
                                                                       dì qa pl
                    sáam<sup>ma</sup>
                                                                       sāan<sup>a/</sup> sg
                                         "strangers" pl
*nb → mm
                cf nīdıba/
                                         "people" pl
                                                                       nīda/ sa
*mb \rightarrow mm \quad k\bar{\imath}m^{mo}
                                         "shepherding" ger kìm<sup>m</sup> pfv
               cf kādıb<sup>o</sup>
                                         "driving off" ger
                                                                       kàd<sup>€</sup> pfv
                    Bùl<sup>le</sup>
*]] → ]]
                                         "Buli"
                                                                       Bùlis^{\epsilon}
                                                                                            "Bulsa"
*rl \rightarrow tt
                    B\bar{a}t^{\epsilon/}
                                                                       Bārıs<sup>ε/</sup>
                                         "Bisa language"
                                                                                            "Bisa people"
                                         "Dagbani"
                                                                                            "Dagomba"
*ml \rightarrow nn
                    Dàgbān<sup>nɛ/</sup>
                                                                       Dàgbām<sup>ma/</sup>
                    Gōrín<sup>ne</sup>
                                         "Farefare"
                                                                       Gūrís<sup>ε</sup>
*nl \rightarrow nn
                                                                                            "Farefare people"
```

3.6 Vowel changes 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 v\bar{v}e LF v\bar{v}y\acute{a} "be alive" SF t\bar{o}e LF t\bar{o}y\acute{a} "be bitter" SF s\bar{a}e\breve{n} LF s\bar{a}\breve{n}ya "smith" SF s\bar{o}e\breve{n} LF s\bar{o}\breve{n}ya "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 [1]:

```
s\bar{\jmath}\check{n}'e^{ya/} \leftarrow *s\tilde{\jmath}'\check{\jmath}ya "be better than" s\bar{\upsilon}'e^{ya/} \leftarrow *s\upsilon'\upsilon ya "own" (cf s\bar{\upsilon}'\upsilon l\acute{\iota}m^m "property")
```

Short unrounded root vowels become diphthongs in \underline{u} before LF * $\eta\eta\nu$ * $kk\nu$:

```
gb\grave{a}\mu\eta^{\circ}\leftarrow *gba\eta\eta\upsilon"book"pl\ gb\grave{a}nal\bar{a}\mu k^{\circ}\leftarrow *lakk\upsilon"goods item"pl\ l\bar{a}'ad^{\varepsilon}y\bar{\imath}\mu\eta^{\circ l}\leftarrow *y\imath\eta\eta\upsilon"single"pl\ y\bar{\imath}n\acute{a}
```

```
bj\bar{a}\mu\bar{n}k^{\circ} \leftarrow *bj\bar{a}kkv "shoulder" pl bj\bar{a}\bar{n}'ad^{\varepsilon}
b\hat{o}k^{\circ} \leftarrow *b\mu akkv "pit" pl b\hat{v}'ad^{\varepsilon}
```

Unrounded second morae of long vowels become [σ] before LF * $g\nu$ * $\eta\eta\nu$:

```
d\grave{a}\upsilon g^{\circ} \leftarrow *daag\upsilon "log" pl d\grave{a}ad^{\varepsilon} f\check{\varepsilon}\check{n}'\circ g^{\circ/} \leftarrow *f\check{\varepsilon}'\check{\varepsilon}g\upsilon "ulcer" pl f\check{\varepsilon}\check{n}'\varepsilon d^{\varepsilon/}
```

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]:

```
v\bar{\imath}ug^{\circ/} \leftarrow *viigv "owl" pl v\bar{\imath}id^{\varepsilon/} but d\dot{a}b\bar{\imath}og^{\circ} \leftarrow *dabi\ni gv "coward" pl d\dot{a}b\bar{\imath}\ni d^{\varepsilon} kp\bar{\imath}'\circ\eta^{\circ} \leftarrow *kpi'\ni \eta\eta v "strong" pl kp\bar{\imath}'\ni ma
```

No parallel case with uu/uv occurs, because of the rule * $uegv \rightarrow 22gv$:

```
S\dot{a}'d\dot{a}b\dot{b}og^{\circ} \leftarrow *Sa'dabuegv "place of the Sarabose S\dot{a}'d\dot{a}b\dot{u}es^{\varepsilon} clan" l\bar{a}m-f\hat{o}og^{\circ} \leftarrow *lam-fuegv "toothless" (l\bar{a}m^{m\varepsilon/} "gum", fue "extract")
```

Pl vowels are remodelled on the sg: $l\bar{a}m$ - $f\hat{o}od^{\varepsilon}$ "toothless." The only stem in final $u\theta$ in the $go|d\varepsilon$ class is the formally-plural $z\dot{u}\theta d^{\varepsilon}$ "friendship", where there is no sg with go. The only $go|d\varepsilon$ stems in $i\theta$ are $d\dot{a}b\bar{i}og^{\circ}$ "coward", $kp\bar{i}o\eta^{\circ}$ "strong", and $pio\eta^{\circ}$ (? tones) "bald", and there is stem alternation before $ga|s\varepsilon$ and $go|d\varepsilon$ suffixes in

b <u>į</u> 'a	$b\bar{l}$ ' ∂s^{ϵ}	b <u>i</u> à'-	"bad"
$bar{arepsilon}'og^{\circ}$	$b\bar{arepsilon}'arepsilon d^arepsilon$	bὲ'-	

 $B\bar{\imath}$ ' $\partial m^{\rm m}$ "enemy" shows the same root with derivational *m. The alternation suggests a rule * $i\partial gv \rightarrow \varepsilon v gv$, parallel to * $u\partial gv \rightarrow \partial gv$, with the pl vowels again remodelled on the sg. The broken vowel of $d\dot{a}b\bar{\imath}og^{\circ}$ "coward" is perhaps carried over from an obsolete * $d\dot{a}b\bar{\imath}\partial m^{\rm m}$ "coward" (= Mooré $r\dot{a}b\dot{\varepsilon}\varepsilon m\dot{a}$.)

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

```
ar{a}aar{n}dig^a \leftarrow *ar{a}adiga "black plum tree"
but g\grave{a}advg^o \leftarrow *gaadigv "(sur)passing" (gerund)
pl mar{a}lima \leftarrow *malimaa "sacrifices"
but mar{a}lv\eta^o \leftarrow *mali\eta\eta v "sacrifice"
```

3.7 Consonant deletion and 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 $b\bar{a}'a$ "diviner" and winbagr for $w\bar{\imath}n$ - $b\hat{a}'ar$ "altar."

```
*agV\rightarrow a'a*aňgV\rightarrow aň'a*įagV\rightarrow įa'a*įaňgV\rightarrow įaň'a*yagV\rightarrow v'a (word-final y'aa)*yaňgV\rightarrow vň'a (word-final yň'aa)
```

 $\underline{i}a'a \ v'a \ \underline{i}a\breve{n}'a \ v\breve{n}'a$ contrast with $i'a \ u'a \ i\breve{n}'a \ u\breve{n}'a$, except when shortened by apocope.

This rule applies later than the assimilation $*gg \rightarrow kk \ 3.5$; thus

	pįāň' ^a	"speak" pfv	pi̯āň'ad ^{a/}	ipfv	
	pu'ā ^a	"woman"	pū'ab ^a	pl	(a ba class)
but	zàk ^a	"compound"	zà'as ^ɛ	pl	$(ga s\varepsilon \text{ class})$
	lāuk ^o	"item of goods"	lā'adε	pl	$(g \circ d \varepsilon \text{ class})$
	p <u>i</u> àuňk ^o	"word"	p <u>i</u> àň'ad ^ε	pl	$(go d\varepsilon \text{ class})$
	puāk ^a	"female" (adj)	$par{v}$ ' $as^{arepsilon}$	pl	$(ga s\varepsilon \text{ class})$
	bàk ^o	"pit"	bὺ'ad ^ε	pl	$(gs d\varepsilon \text{ class})$

*g is deleted after aa iə uo and their glottalised counterparts (but not after $av \ \varepsilon o \ io \ 22$ resulting from rounding before *gv.) When an affix vowel follows the *g, fusion creates overlong diphthongs (similarly with the glottalised vowels):

*aaga	<i>→ aa</i> <u>4.1</u>	*aagı	→ aee
*iəga	→ iaa	*iəgı	→ iee
*иөда	→ uaa	*иөді	→ uee

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

```
b\bar{a}a \leftarrow *baaga "dog" pl b\bar{a}as^{\epsilon} s\bar{i}a \leftarrow *si\theta ga "waist" pl s\bar{i}\theta s^{\epsilon} s\dot{a}b\dot{u}a \leftarrow *sabu\theta ga "lover" pl s\dot{a}b\dot{u}\theta s^{\epsilon}
```

The diphthongs *aee iee uee* appear in dual-aspect "fusion" verbs with stems in *Caag *Cieg *Cueg and their glottalised counterparts:

```
p\bar{a}e^{l} \leftarrow *paagi "reach" kp\dot{i}'e \leftarrow *kpi'egi "approach" cf kp\dot{i}'es^{\epsilon} "neighbours" d\bar{u}e^{l} \leftarrow *duegi "raise, rise"
```

Original open nasalised $*\tilde{\epsilon}\tilde{\epsilon}*\tilde{\jmath}\tilde{\jmath}$ only undergo vowel breaking 2.2 before *g, elsewhere falling together with the reflexes of former close $*\tilde{e}\tilde{e}*\tilde{\jmath}\tilde{\jmath}$ as $\epsilon\epsilon\tilde{n}$ $\delta\tilde{\jmath}\tilde{n}$: breaking occurs in all contexts where *g would suffer deletion and nowhere else.

Alternations arise in nouns and adjectives in the $ga|s\varepsilon$ class between SF-final $ia\check{n}\ ua\check{n}$ and word-internal $\varepsilon\varepsilon\check{n}\ \partial\partial\check{n}$ before a consonant, and in derivation between fusion verb forms from *- g_1 , ending in SF $ie\check{n}\ ue\check{n}$, and cognate forms with $\varepsilon\varepsilon\check{n}\ \partial\partial\check{n}$:

zìň'a	"red" $ga s\varepsilon$ class sg	z èň' $arepsilon s^arepsilon$	"red" $ga s\varepsilon$ class pl
		zèň'og°	"red" $g_{\mathcal{I}} d\varepsilon$ class sg 3.6
dùaň	"dawadawa" sg	d ὸͻἤ $s^{arepsilon}$	"dawadawa" pl
Mùa	"Mossi person"	M òɔs arepsilon	"Mossi people"
		Màɔgɔ	"Mossi country"

Word structure 3.7

```
nìe
                      "appear"
                                                                 n\grave{\varepsilon}\varepsilon l^{\varepsilon}
                                                                                        "reveal"
ην\bar{u}'e'
                      "set alight"
                                                                  ην̄_0'ος ε/
                                                                                        "smoke" (noun)
sūeň<sup>/</sup>
                      "anoint"
                                                                 sōň
                                                                                        "rub"
sūň'e/
                      "become better" WK
                                                                 sōň'e<sup>ya/</sup>
                                                                                        "be better than" (\leftarrow *s\tilde{\sigma}'\tilde{\sigma}ya)
```

When $aa\ aa\"ie\"ie\"ue$ 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 3.8.1.

```
n\acute{a}af^{\circ} \leftarrow *naagfv "cow" pl n\bar{i}ig\acute{i} d\acute{i}' \ni r^{\varepsilon} \leftarrow *di' \ni gri "receiving" (d\bar{i}' e^{f} "receive" \leftarrow *di' \ni gi) v\acute{u}er^{\varepsilon} \leftarrow *vuegri "fruit of red kapok"
```

However, broken $i \ni \tilde{n}$ ue \tilde{n} appear instead of $\epsilon \epsilon \tilde{n}$ $22\tilde{n}$:

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

3.8 Tone Patterns

The distribution of tonemes on an open-class word, prior to any effects of external tone sandhi or tone overlay, is specified by a **Tone Pattern**, a suprasegmental feature of the word *stem* which allocates individual tonemes to all tone-bearing units of each complete word belonging to the flexional paradigm, with the precise instantiation changing as the segmental form changes. Nominals show only three basic distinct Patterns (H, L and A), and verbs only two (H and A.)

Pattern H	initial H or	MH		
Pattern L		all-L (but with non-initial H in longer <i>m</i> -stems)		
Pattern A	(for "altern	(for "alternating")		
	nominals:	all-M in sg/pl	all-L in cb	
	verbs:	all-M in irrealis	all-L in other moods	

Any tonemes after H are L.

Allocation precedes apocope and all synchronic rules which delete segments. Later loss of segments may result in unexpected distributions of tonemes.

Superlight syllables $\underline{2}$ are toneless. If a superlight LF syllable becomes closed in the SF, it must acquire a toneme: this is M after a preceding M syllable, and L otherwise, e.g. LF $k\bar{u}gvr$ (i.e. $k\bar{u}g\bar{v}r$) "stone", LF $n\acute{o}bir$ SF $n\acute{o}bir$ "foot."

A single flexional paradigm only shows more than one Tone Pattern in the case of agent nouns which drop derivational -d- in the sg and cb.

Analogous Patterns appear throughout Western Oti-Volta, with Pattern A alternating all-H/all-L. Pattern A has been taken as tonally unmarked, realised all-L by default but changed to all-H either by copying of a suffix H toneme (Akanlig-Pare and Kenstowicz 2002) or when a form is stressed (Olawsky 1999, Anttila and Bodomo 1996.) However, stressed verb forms are often all-L, and the Kusaal evidence also supports tone-copying: unlike almost all other open-class words, all-L Pattern A forms are not followed by M spreading and show L before liaison, apart from verb imperfectives, which probably originated as Pattern L derivatives. Derivational suffixes may change Pattern A forms to Pattern L and *vice versa*, which is difficult to reconcile with an analysis of Pattern A as intrinsically toneless; it may simply be intrinsically all-L, whereas Pattern L has an underlying non-initial M toneme usually deleted by internal tone sandhi but responsible for the H seen in longer *m*-stems.

For descriptive purposes it is sufficient simply to show Tone Patterns in terms of the resulting surface toneme distributions, and to classify derivational suffixes by the Patterns they produce; this is the approach adopted below.

3.8.1 Nouns and adjectives

Examples will be given as sg, pl, cb <u>5.1</u>. Cbs are always affected by apocope. **Noun prefixes** <u>10</u> are ignored in counting stem syllables below. Prefixes are L or M: L prefixes do not affect the rest of the tone pattern, while M prefixes only affect cbs, which always have H/X after the prefix.

Cbs from *CV*-stems sometimes behave tonally like prefixes:

pū-kpāad ^{a/}	pū-kpāadíb ^a	pū-kpá-	"farmer" <u>10.1</u>
zūg-kūgvr ^{ɛ/}	zūg-kūga	zūg-kúg-	"pillow" <u>5.2</u>
kā-wēnnιr ^{ε/}	kā-wēnna	kā-wέn-	"corn"

Pattern H displays H on the first syllable if it is superheavy in the LF, but otherwise has the initial tonemes MH; note that the H toneme falls on the *third* syllable if the second is superlight in the LF. Any tonemes following H are L. Cbs are allocated tonemes as if the final syllable were open.

$var{v}r^{arepsilon/}$	νūyá	νūr-	"alive"
$y\bar{i}r^{arepsilon/}$	yā [/]	у <u>і</u> -	"house"
fūug ^{ɔ/}	fūud ^{ε/}	fū-	"shirt, clothes"
$dar{v}k^{\circ/}$	dūgυd ^{ε/}	$dar{v}g$ -	"cooking pot"
n <u>ī</u> d ^{a/}	n <u>ī</u> dıb ^{a/}	n <u>ī</u> n-	"person"
kūgυr ^{ε/}	kūgá	kūg-	"stone"
$gar{ extit{z}}t^{\mathrm{a}/}$	<i>gōtíb</i> a /tt/	gōt-	"seer, prophet"
sābılíg ^a	sābīlís ^ε	sābīl-	"black"
sābíl ^{lɛ}	sābılá		
yūgύm ^{mε}	yūgvmá	yūgum-	"camel"
dį̄¹əsa∕	d <u>ī</u> 'əsídìb ^a	$dar{\it i}$ 'əs-	"receiver"
sūgvríd ^a	sūgvrídìb ^a	sūgvríd-	"forgiver, forbearer"
kū'alíŋ ^a	kū'alίs ^ε	kō'alíŋ-	traditional smock
<i>sú</i> 'θη ^a /ŋŋ/	$sar{u}$ ' em í $s^{arepsilon}$	$sar{u}$ ' $ heta\eta$ -	"rabbit"
sāan ^{a/}	sáam ^{ma}	sāan-	"stranger, guest"
sáannìm ^m			"strangerhood"

H appears on the last syllable of LFs ending in root vowels followed by mm or in overlong diphthongs, while the corresponding SFs have M toneme:

nūa [/]	SF <i>nūa</i>	LF <i>nūáa</i>	"hen"
νōm ^{m/}	SF võm	LF νύmm	"life"
dāam ^{m/}	SF dāam	LF dáamm	"millet beer"

Loss of underlying segments may shift the H toneme to the left. H may appear on a *superlight* syllable if it is preceded by *r* derived from **rr*:

```
ňyįríf<sup>o</sup> ňyįrí "egusi seed"
```

Many words have a long root vowel followed by a segment which has been deleted either by reduction of a consonant cluster to a single consonant 3.5 or by deletion of *g 3.7. The first syllable still behaves as superheavy and carries H:

```
níis<sup>ε</sup>
                                   (beside n_{\overline{i}im}(s^{\epsilon})
                                                                               "birds" (sg níiŋa /ŋŋ/)
                 ← *niinsı
píıňf<sup>o</sup>
                 ← *punfv
                                   (pl pīiní)
                                                                               "genet"
wáaf<sup>o</sup>
                 ← *waagfv
                                  (pl wįigi)
                                                                               "snake"
váaba
                 ← *yaagba
                                                                               "grandparent"
                                                                               "fruit of red kapok"
vúθr<sup>ε</sup>
                 ← *vuøgri
náar<sup>ε</sup>
                                   gerund of nāe/
                                                                               "finishing"
                 ← *naagrı
dí¹ər<sup>ε</sup>
                                   gerund of d\bar{\imath}'e'
                                                                               "getting"
                 ← *di'əgrı
púň'er<sup>ε</sup>
                                   gerund of pūň'e/
                                                                               "rotting"
                 ← *pɔ̃'ɔ̃grı
```

A few root-stems show a different irregularity: in sg/pl forms with consonant-initial flexions, the initial syllable carries X if it is superheavy and H otherwise. As usual, syllables after H carry L whenever they are not superlight. Forms with vowel-initial suffixes and cbs are regular.

nû'ug ^o	$n\hat{u}$ ' $us^{arepsilon}$	$nar{u}$ '-	"hand, arm"
à-gâvňg ^o	à-gâaňd ^ɛ	à-gāň-	"pied crow"
gbêɛňm ^m		gbēň-	"sleep"
nóbìr ^ɛ	nōbá	nōb-	"foot, leg"
$g lpha l^{\mathrm{l} \epsilon}$	gēlá	$gar{arepsilon}l$ -	"egg"
kísùg ^o	k <u>ī</u> sá	k <u>ī</u> s-	"hateful, taboo" (adj)
áňsὶb ^a	āňs-nám ^a	āňs-	"mother's brother"

So too the gerunds $s \acute{o} \check{n} s \grave{i} g^a$ "talking", $g \acute{o} s \grave{i} g^a$ "looking", $k \grave{i} k \acute{i} r \grave{o} g^o$ "hurrying." The superheavy X syllables only occur in the SFs: corresponding LFs have open initial syllables with H: LF $n \acute{u} ' u g \grave{o}$ "hand", tonally identical to the LF $w \acute{a} a f \grave{o}$ "snake."

Some of these words have probably lost a segment: s r can represent older ss rr, and cf Mooré $g\tilde{a}oobg\delta$ "pied crow." $N\hat{u}'ug^{\circ}$ "hand" has added further class suffixes to old $o|\varepsilon$ class forms: cf Nawdm $n\hat{u}h\hat{u}$ pl $n\hat{u}h\hat{u}$. $N\hat{o}b\hat{u}r^{\varepsilon}$ "leg" is remodelled segmentally on the basis of the plural: cf Toende sg $n\bar{o}'\bar{o}t$ pl noba.

Examples for Pattern H with prefixes:

dàyūug ^{ɔ/}	dàyūud ^{ε/}	dàyū-	"rat"
Bùsáŋ ^a	$B\grave{v}s\^{a}a\breve{n}s^{arepsilon}$	Bὺsāŋ-	"Bisa person"
zīnzāuŋɔ/	zīnzāná	zīnzáuŋ-	"bat"
gūmpūzēr ^{ɛ/}	gūmpūzēyá	gūmpūzér-	"duck"
pīp <u>ī</u> rıg ^{a/}	p ī p $ar{i}$ rı $s^{arepsilon/}$	pīp <u>í</u> r-	"desert"
tīntōňríg ^a	tīntōňrís ^ɛ	tīntóňr-	"mole" $(r \leftarrow *rr)$

Pattern L shows L on all syllables, except with *m*-stems:

sὺ'υg ^a	sὺ'υs ^ε	$s\grave{v}$ '-	"knife"
zàk ^a	zà'as ^ɛ	zà'-	"dwelling-compound"
mòlıf ^o	mòlı	mòl-	"gazelle"
pùgvdıb ^a	pùgud-nàm ^a	pùgud-	"father's sister"
<i>sàal</i> a	sàalıb ^a	sàal-	"human"
nວ່ŋເd ^a			"lover"
bàɔdım ^m			"will"
zòtım ^m			"fear"
dàalım ^m			"maleness"

M-stems show H on the syllable before the m unless this is either a root syllable or follows a light root syllable. Any tonemes after H are L.

	sàam ^{ma}	sàam-nàm ^a	sàam-	"father"
	mὲεŋ ^a	m $ε$ ε m ι s $ε$	mὲεŋ-	"turtle"
	àĭrvŋº	àŭrıma	àňrvŋ-	"boat"
	kàrvŋº or kàrımvg	^ე		"reading" (gerund)
	yàlvŋ ^o	yàlıma	yàlvŋ-	"wide"
	zìlım ^{mɛ}	zìlıma	zìlım-	"tongue"
But	sìilíŋ ^a	s ilímis $^{\epsilon}$ or s ilís $^{\epsilon}$	sှìilíŋ-	"proverb"
	zàaňsúŋº	zàaňsímà	zàaňsúŋ-	"dream"
	nờŋılím ^m		nàŋılím-	"love"
	sùŋıdím-tāa			"co-helper" <u>9.2.1.4</u>
	dàalím ^m	dàalímì $s^{arepsilon}$	dàalím-	"male sex organs"
	b <u>ì</u> 'isím ^m			"milk"

Tonally exceptional forms are $b \dot{u} g \acute{v} m^{\rm m}$ cb $b \dot{u} g \acute{v} m$ - or $b \dot{u} g \ddot{v} m$ - "fire", $t \grave{a} d \iota m \acute{t} s^{\epsilon}$ "weakness", $b \grave{u} d \iota m \acute{t} s^{\epsilon}$ "confusion."

Pattern L with prefixes:

kùkpàrıg ^a	kùkpàrıs ^ɛ	kùkpàr-	"palm tree"
sāmán ^{nε}	sāmánà	sāmán-	"courtyard"

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

būvg ^a	$bar{v}vs^{arepsilon}$	bὺ-	"goat"
tān ^{nε}	tāna	tàn-	"earth"
$s\bar{\imath}d^{\mathrm{a}}$	sīdıb ^a	sìd-	"husband"
p <u>u</u> 'ā ^a	pū'ab ^a	pu̞'à-	"woman, wife"
sā'ab ^o	no pl	sà'-	"millet porridge"
<i>gb</i> īgιm ^{nε}	gbīgıma	gbìgım-	"lion"
ňwāaŋ ^a	ňwāamιs ^ε	ňwàaŋ-	"monkey"
mēεd ^a	mēεdιb ^a	mὲεd-	"builder"
s <u>i</u> ākıd ^a	siākıdıb ^a	siàkıd-	"believer"
būtıŋ ^a	$bar{v}tus^{arepsilon}$	bùtıŋ-	"cup"
mēεdιŋ ^a	$mar{arepsilon}arepsilon d\iota s^arepsilon$	mὲεdιŋ-	"building tool"

When derived from Pattern A verbs, agent nouns which have -d- only in the plural have Pattern L sg and Pattern A pl (the cb is in any case all-L) 3.8.4:

pὺ'υs ^a	pv̄'vsıdıb ^a	ρὺ'υs-	"worshipper"
PU 00	poostats	PU 03	WOIDIIIPPOI

Pattern A all-M LFs become all-L before the interrogative clitics <u>4.4.1</u>. Certain Pattern A words show **LF-final H** instead of M before negative prosodic clitics, but not liaison words. For WK this occurs with LFs of more than two syllables not ending in a long vowel or -a, and disyllabic LFs in -mmV or -mm. Some speakers allow H optionally before the interrogative prosodic clitics.

yūgvdır ^{ε/}	yūgvda	yùgvd-	"hedgehog"
ňwāaŋ ^a	ňwāamıs ^{ε∕}	ňwàaŋ-	"monkey"
bāŋıd ^a	bāŋıdıb ^{a/}	bàŋıd-	"wise man"
kpārīdīŋ ^a	kpārιdιs ^{ε/}	kpàrıdıŋ-	"thing for locking"
gbīgιm ^{mε/}	gbīgıma	gbìgım-	"lion"
z̄ɔm ^{mε/}	zōɔma	zòɔm-	"fugitive"
tādım ^{m/}	tād≀m≀s ^{ε/}	tàdım-	"weak person"
Lì à nē gbīgımı	mέε?	"Is it a lion?" V	WK only; rejected by DK
Lì à nē gbígìmmee?		"Is it a lion?" l	ooth WK and DK

Pattern A with prefixes:

dàk <u>ī</u> ig ^a	dàk <u>ī</u> is ^ε	dàk <u>ì</u> -	"sib-in-law via wife"
fūfūm ^{mε}	fūfūma	fūfúm-	"envy; stye"

3.8.2 Verbs

Pattern L has merged with A in verbs, probably through the regular falling together of most perfectives (which resemble nominal cbs structurally) and by the development of imperfectives from *derived* stems <u>3.8.4</u>. Further levelling has extended to all but a few gerunds.

Dual-aspect verbs have three finite forms 7.1 but the ma-imperative is found only with tone overlay 16.6.2. Perfective and imperfective will be cited below, in that order. Single-aspect verbs have just one finite form, which is imperfective.

Pattern H, as in nominals, displays H on the first syllable if it is superheavy in the LF, but otherwise shows the initial tonemes MH, with H falling on the *third* syllable if the second is superlight in the LF. Any tonemes following H are L. Unlike nominals, verbs show no anomalies due to deletion of segments.

2-mora-stem perfectives show M(M) before the negative clitic, becoming L(L) before interrogative clitics. However, they show final H before liaison-word pronouns:

Ò pū dūgε.	"She didn't cook."
Ò pū dúgὲε?	"Didn't she cook?"
Kà ò dūgí lī	"And she cooked it."

Examples for Pattern H:

ňyē	ňyēt ^{a/}	"see"
$kar{v}$	kūνd ^{a/}	"kill"
$dar{v}g^{arepsilon}$	$dar{v}gvd^{\mathrm{a}/}$	"cook"
$k ar{u} l^{arepsilon}$	kūn ^{na/}	"go home"
yād≀g ^{ε/}	yādıgíd ^a	"scatter"
mɔ̄ɔl ^{ɛ/}	mớɔn ^{na}	"proclaim"
dīgıl ^{ɛ/}	$dar{\imath}g$ í $n^{ ext{na}}$	"lay down"
nōk ^{ε/} /kk/	nōkíd ^a /kk/	"take"
<i>lāŋím</i> ^m /ŋŋ/	<i>lāŋím^{ma} /</i> ŋŋ/	"wander searching"
	νōę ^{a/}	"be alive"
	$d\bar{\imath}g\imath^{\mathrm{ya}/}$	"be lying down"
	t <u>ī</u> 'i ^{ya/}	"be leaning" (objects)
	zāňl ^{la/}	"be holding"

As with nominals, H appears on the last LF syllable when it ends in a root vowel before -mm or in an overlong diphthong, while the corresponding SF has M:

```
t\bar{\jmath} \supset m^{\mathrm{m}/} SF t\bar{\jmath} \supset m LF t\dot{\jmath} \supset m "disappear" p\bar{a}e^{l} SF p\bar{a}e LF p\bar{a}\acute{e}e "reach"
```

For the tonemes of stative verbs like $kp\bar{l} \partial m^{ma/}$ "be strong" see 9.1.2.1. Fusion verbs show no sign of g in the imperfective tonally, or in agent nouns:

pāe ^l	pāad ^{a/}	"reach"
$dar{\imath}$ ' e^{\prime}	$dar{\imath}$ 'ə $d^{\mathrm{a}/}$	"get"
pūň'e [/]	pūň'ed ^{a/}	"rot" WK

Contrast the corresponding gerunds: $p\acute{a}ar^{\epsilon} d\acute{l} \cdot \partial r^{\epsilon} p\acute{u} n' \partial r^{\epsilon}$.

Pattern A shows all tonemes L in indicative and imperative, all M in irrealis.

bὺd ^ε	$b\grave{v}t^{\mathrm{a}}$	"plant"
dì	$d it^{ m a}$	"eat"
mὲ	mὲεd ^a	"build"
zàb ^ε	zàbıd ^a	"fight, hurt"
bù <i>θl</i> ε	bùen ^{na}	"call"

bòdιg ^ε	bòdıgıd ^a	"get lost, lose"
nìŋε	nຸ້າໆເd ^a	"do"
màal ^ɛ	màan ^{na}	"sacrifice"
d ì g ı n arepsilon	dìgınıd ^a	"lie down"
wàŋım ^m	wàŋım ^{ma}	"waste away"
sį̀ilım ^m	sìilım ^{ma}	"cite proverbs"
zàaňsım ^m	zàaňsım ^{ma}	"dream"
	tàbı ^{ya}	"be stuck to"
	vèn ^{na}	"be beautiful"

As with nominal Pattern A, the last LF toneme in the irrealis is M:

```
Ò nà bɔdıq.
                                "He'll get lost."
Ò nà vēn.
                                "She'll be beautiful."
Ò kỳ zābε.
                                "She won't fight."
Ò kù bɔ̄dιgε.
                                "He won't get lost."
Ò nà bòdigee?
                                "Will she get lost?" 4.1
Ò kù bɔdıgıda.
                                "She won't be getting lost."
Ò kù būenna.
                                "She won't be calling."
Ò nà bɔdıgı m.
                                "He will lose me."
                                "He will not lose me."
Ò kù bādigi má.
Ò kù bādīgīdī má.
                                "He won't be losing me."
Ò kù zābidi-né.
                                "He wouldn't have been fighting."
Ò kù sīilımm.
                                "She won't cite proverbs" WK
Ò nà zāb nâ'ab lā.
                                "He'll fight the chief."
```

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

```
\grave{O} k\grave{v} z\bar{a}b\acute{o}-o. "He won't fight him." or \grave{O} k\grave{v} z\bar{a}bo-o. "He won't fight him."
```

3.8.3 Other word classes

Quantifiers, adverbs and particles with the segmental structure of nouns have similar tonal structures; they may also show apocope-blocking 3.2. For the tonemes of bound liaison words see 4.4.2. Left-bound particles with SF CV which are not liaison words carry M or L; M changes to H in the LF CVV. Tonally unique is independent-perfective $y\bar{a}$ 16.6.2, which remains M before the negative prosodic clitic and becomes L before the interrogative clitics 4.1:

```
Lì bòdig nē. "It's lost." (focus-n\bar{\epsilon}^l)
Lì bòdig née? "Is it lost?"
but Lì bòdig yā. "It's got lost."
Lì bòdig yàa? "Has it got lost?"
```

3.8.4 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 or A Patterns, or vice versa, but this does occur regularly in derivation of assume-stance verbs 9.1.1. $G\bar{\imath}\eta\imath l\acute{\imath}m^{m}$ "shortness", from the Pattern A adjective $g\bar{\imath}\eta^{a}$ "short", possibly represents a five-mora-stem Pattern A toneme allocation (but of $g\bar{\imath}in\check{\imath}l\acute{\imath}m^{m}id$.)

Pattern H roots which show irregular tonemes in root-stem nominal forms are regular in all derived forms and in cognate verbs:

áňsìb ^a	"maternal uncle"	āňsíŋ ^a	"sister's child"
kį́sùg ^o	"hateful"	k <u>ī</u> s ^{a/}	"hate"
gósìg ^a	"looking"	$gar{\jmath}s^{arepsilon}$	"look"

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

```
b\bar{\imath}ig^{a} "child" b\dot{\imath}ilim^{m} "childhood" (-l-) n\dot{a}'ab^{a} "chief" n\bar{a}'am^{m} "chiefship" (-m-)
```

When added to L or A roots the derivational suffixes b g l s always produce Pattern L nominals, while d m may produce either Pattern L or Pattern A. The suffix n may produce Pattern A when it is derived from *nd *ld 3.5.

All regular gerunds have predictable Tone Patterns:

from Pattern H verbs: Pattern H from Pattern A verbs: from 2-mora-stem perfectives: Pattern A from all others: Pattern L

```
d\bar{v}g^{\varepsilon} "cook" \rightarrow d\bar{v}gvb^{\circ/}

n\bar{o}k^{\varepsilon/} "take" \rightarrow n\bar{o}kir^{\varepsilon}

d\bar{\iota}g\iota^{\varepsilon/} "lay down" \rightarrow d\bar{\iota}g\iota^{\circ}g^{\circ}

m\dot{\varepsilon} "build" \rightarrow m\bar{\varepsilon}\varepsilon b^{\circ}
```

$s \grave{v} \eta^{arepsilon}$	"help"	\rightarrow	$s\grave{v}\eta\iota r^{arepsilon}$
dìgın ^ɛ	"lie down"	\rightarrow	dìgınvg ^o
zàaňsım ^m	"dream"	\rightarrow	zàaňsúŋ ^ɔ

Gerunds derived with *d from Pattern A verbs are likewise Pattern L: $b \grave{o}odim^m$ "will", $m\grave{\varepsilon}ed(m-t\bar{a}a)$ "fellow-builder." This Pattern-L-deriving *d is probably historically identifiable with the d preceding the original ipfv -a in dual-aspect verbs before extensive levelling produced a unitary flexional suffix -da. This accounts for the fact that Pattern L and A dynamic imperfectives have merged, and that they show behaviour resembling nominal Pattern L, with no change to all-M despite the fact that they are followed by M spreading and show final M tonemes before liaison.

In dynamic single-aspect verbs, the *y of the ending -ya behaves tonally like dual-aspect *d. Stative verbs derived with *y keep the Tone Pattern of the nominal, but their Patterns have been reanalysed in terms of those of dynamic verbs.

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

from Pattern H verbs

from Pattern A verbs:

containing derivational -dotherwise

Pattern H

Pattern A

Pattern L

The suffix *d in these formations is Pattern-A-deriving: $b\bar{o}odir^{\varepsilon}$ "desirable", $m\bar{\varepsilon}\varepsilon di\eta^a$ "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.

4 External sandhi

External sandhi includes segmental contact phenomena, tone sandhi, and complete or partial suppression of apocope.

Sandhi after right-bound words differs from that after unbound forms, even before left-bound words. Perfectives behave as if right-bound in tone sandhi and in final stop devoicing in Toende Kusaal 2.1; verbs monophthongise final fronting diphthongs phrase-internally like cbs, and unlike singulars even before the article: $s \grave{a} \check{n} - k \grave{a} \eta \bar{a}$ "this blacksmith" but $s \bar{a} e \check{n} l \bar{a}$ "the blacksmith."

4.1 Prosodic clitics

Prosodic clitics have no segmental form, but cause a preceding word to appear as a Long Form, completely suppressing apocope. Mooré has clause-final *yé* after negative VPs, and vocative and interrogative clitics are 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." The concept of prosodic clitics as *words* is also useful in describing complex clause structures.

All four prosodic clitics cause lowering of short LF-final ι υ to ε ϑ respectively, which are realised slightly closer in this case than as root vowels.

Before prosodic clitics, and in forms with apocope-blocking, final -mv and -mv become -mm whenever the m is not geminated. The final m was presumably once syllabic, but currently -mm is non-tone-bearing [m:]. Word-final $i\partial u\partial u$ diphthongise to $ia\ ua$ before prosodic clitics: pfv LF $k\dot{l}a$ "cut" vs ipfv $k\dot{l}\partial d$, pfv LF $k\bar{u}a$ "hoe" vs ipfv $k\bar{u}\partial d$. None of these changes occur before liaison.

Overlong monophthongs, unlike diphthongs, are not permitted before prosodic clitics; they reduce to long. This results in words which have segmentally or even tonally identical SF and LF, as for example:

	s <u>ī</u> a	"waist"	SF s <u>ī</u> a	LF s <u>ī</u> aa	← *siəga
but	bāa	"dog"	SF <i>bāa</i>	LF <i>bāa</i>	← *baaga
	$k\bar{v} + 0$	"kill him/her"	SF <i>kύo</i>	LF <i>kύο</i> [- <i>o</i>]	both [kʊ:]

The **negative prosodic clitic** appears at the end of a clause containing a negated or negative verb <u>16.5</u>. Superscript notation represents LFs as they appear before the negative prosodic clitic segmentally, with lowering of short final $\iota \nu$ to $\varepsilon \circ$; long final $\iota \iota \nu \nu$ are not lowered:

```
Lì k\bar{a}' n\acute{o}bir\bar{\epsilon}=\varnothing. "It's not a leg (n\acute{o}bir^{\epsilon})." 
3IN NEG.BE leg:SG=NEG.
```

```
Lì k\bar{a}' d\bar{v}k\acute{o}=\varnothing. "It's not a pot (d\bar{v}k^{\circ l})."

3IN NEG.BE pot:SG=NEG.

Bà k\bar{a}' m\acute{o}l\bar{\imath}\imath=\varnothing. "They are not gazelles (m\grave{o}l\imath)."

3PL NEG.BE gazelle:PL=NEG.
```

LFs of the same form appear with some single-word clause adjuncts. Thus, in KB, written $b\varepsilon ogv$ always precedes liaison, while the clause adjunct is always $b\varepsilon ogv$; the apocope-blocked $b\dot{\varepsilon} dvg\bar{v}'$ "a lot" is always written $b\varepsilon degv$, but KB always writes $bv zugv b\bar{v} zugv because", dinzugv because ", dinzugv d$

```
bō zúgō, bà zī' ónì tòmi 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)

Fò ná kūl bēog. "You'll go home tomorrow."

2SG IRR go.home tomorrow.

Bēogó fò ná kūl. "You're going home tomorrow." SB
Tomorrow 2SG IRR go.home.
```

bozugo ba zi' one tumi m la naa.

but

Occasional examples of such LFs are seen ending $y\dot{a}$ '-clauses:

```
Kikirig ya'a mor buude, fun tis o ka o lebig o moogin.

Kìkirig yá' mōr būvdɛ, fūn tísò ø kà ò lɛ̀big ò mōɔgv-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.)
```

The **vocative prosodic clitic** ends a vocative clause. It has similar segmental effects to the negative clitic.

```
M b̄isε=ø! "My children!"

1SG child:PL=VOC!

Pu'aa, bɔ ka fʊ kaasida?

Pu̯'āa=ø, bɔ́ kà fʊ kāasidà=ø?

Woman:SG=VOC, what and 2SG cry:IPFV=CQ?

"Woman, why are you crying?" (Jn 20:13)
```

```
dau onε an yadda niŋida
dāu όnὶ àň yàddā-niŋὶdā=ø
man:sg rel.sg cop faith-doer:sg=voc
"You man, who are a believer!" (1 Cor 7:16)
```

The two **interrogative prosodic clitics** end questions. Final vowel length distinctions are neutralised to short in content questions, long in polar questions. This results in a five-way $a \in \mathcal{D} \cup \mathcal{D}$ contrast in final vowels by quality alone:

```
Ànó'ənì, ø ňyē nóbırè=ø?
                                           "Who saw a leg (n5bir^{\epsilon})?"
Who
            CAT see leg:SG=CQ?
Lì à n\bar{\varepsilon} n\acute{o}bir\dot{\varepsilon}\varepsilon=\emptyset?
                                           "Is it a leg?"
3IN COP FOC leg:SG=PO?
Ànό'ənὶ ňyē kύkà?
                                           "Who saw a chair (k\bar{\nu}k^a)?"
Lì à nē kúkàa?
                                           "Is it a chair?"
Ànó'ɔnì ňyē dūkó?
                                           "Who saw a pot (d\bar{\nu}k^{\circ/}?"
                                           "Is it a pot?"
Lì à nē dūkóo?
Ànó'ənì ňyē mólì?
                                           "Who saw gazelles (m\grave{j}l\iota)?"
Ànó'ənì ňyē bédugú?
                                           "Who saw a lot (b \dot{\epsilon} d \nu q \bar{\nu}^{\prime})?"
```

4.2 Liaison

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

Left-bound liaison words are always preceded by liaison. The locative particle n^{ε} 13.3 attaches directly after nominal sg or pl forms; discontinuous-past n^{ε} 16.3.2 and the postposed 2pl subject pronoun ya 18.3 attach directly after verb forms. In this grammar, these words are hyphenated to the preceding host word, except when ya is deleted by apocope. The bound object pronouns m^{a} f^{o} o li ti ya ba 12.4.1 attach directly to a verb word or after n^{ε} or ya . Except for o , they are written separate.

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} 12.6, $\dot{a}n\hat{s}'$ on "who?" 12.4.4, nominaliser- \dot{n} 21, catenator-n 19, and all words with the number prefixes \dot{a} $b\dot{a}$ $b\dot{v}$ or the manner-adverb prefix \dot{a} 10.2. Liaison is only invariable before pronouns preceded by a verb within a VP, but older texts show liaison more widely.

```
Tì gòsí bà bịis. "We looked at their children."

1PL look.at 3PL child:PL. (Liaison before bà "their")
```

When the LF preceding liaison ends in a short vowel it becomes ι . For some speakers, this ι becomes υ after g preceded by a rounded root vowel. LF-final -mm behaves as - $m\iota$; - $i\vartheta$ - $u\vartheta$ remain as such, not becoming -ia -ua. LFs ending in an overlong vowel sequence reduce to long, and fronting diphthongs are simplified to monophthongs. Certain liaison words then induce further quality changes in the preceding LF, as discussed below.

Examples of the basic liaison changes:

```
k\bar{\nu}k^{a}
                       "chair"
                                              + n^{\varepsilon} "at"
                                                                                            k\bar{\nu}k\iota-n^{\epsilon/}
d\bar{v}k^{5/2}
                       "toq"
                                              + n^{\varepsilon} "at"
                                                                                            dūkί-n<sup>ε</sup>
bòod<sup>a</sup>
                       "want"
                                                         "us"
                                                                                            bàodī tí
יים ככֿמ
                       "field"
                                                                                            p\bar{z}za\dot{v}-n^{\epsilon}
                                              + n^{\varepsilon}
                                                         "at"
vàva
                       "grave"
                                                                                            v a v a \bar{v} - n^{\epsilon/2}
                                              + n^{\varepsilon}
                                                         "at"
tì)m<sup>m</sup>
                       "send"
                                                                                            tòmi tī/
                                                          "us"
                                              +t\iota
dāam<sup>m/</sup>
                                                                                            dāamí-n<sup>€</sup>
                       "beer"
                                              + n^{\varepsilon}
                                                         "at"
kù'em<sup>m</sup>
                                                                                            k\dot{u}'\theta m\bar{\iota}-n^{\epsilon/}
                       "water"
                                              + n^{\varepsilon}
                                                         "at"
                                                                                \rightarrow
                                                          "And they saw me." (\check{n}v\bar{\varepsilon} "see")
Kà bà ἤyέε m.
Kà bà kíə lī.
                                                         "And they cut it." (kià "cut")
                                                                                            d\bar{a}'a-n^{\epsilon/}
dà'a
                       "market"
                                              + n^{\varepsilon} "at"
                                                                                            páa tī/
pāe<sup>/</sup>
                       "reach"
                                              +t\iota
                                                         "us"
                                                                                            píə tī/
pīe<sup>/</sup>
                       "wash"
                                                         "us"
                                              +t\iota
                                                                                            dúe tī/
dūe/
                                                         "us"
                       "raise"
                                              +t\iota
```

Single-aspect verbs with LFs ending in -ya make forms analogous to those of fusion verb perfectives. They drop -ya, monophthongise diphthongs and prolong preceding short vowels:

```
s\bar{v}'e^{ya/} "own" + l\iota "it" \rightarrow s\acute{v}'v\ l\bar{\iota}' v\bar{v}e^{a/} "live" + n^{\epsilon} dp \rightarrow v\bar{v}v-n^{\epsilon/}
```

Fronting of the second mora of a LF-final long vowel occurs before the 2pl object pronoun ya exactly as before word-internal y 3.6, with any back mora becoming e [1] but no change to front morae:

```
B\grave{a} b\grave{o}>d\bar{\imath} y\acute{a}."They love you."K\grave{a} b\grave{a} ny\acute{e}\varepsilon y\bar{a}."And they saw you (pl)." (ny\~{e} "see")butK\grave{a} b\grave{a} k\acute{v}e y\bar{a}.[kvija]"And they killed you (pl)." (ny\~{e} "see")K\grave{a} b\grave{a} k\acute{v}e y\bar{a}.[kirja]"And they cut you (pl)." (ny\~{e} "see")
```

This recreates a fronting diphthong in fusion verb pfv forms:

```
K\grave{a}\;b\grave{a}\;p\acute{a}a\;b\bar{a}. "And they reached them." (p\bar{a}e^{l} "reach") but K\grave{a}\;b\grave{a}\;p\acute{a}e\;y\bar{a}. "And they reached you (pl)."
```

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° "you":

```
Kà bà kậə f or Kà bà kậo f.
Kà bà ňyέε f or Kà bà ňyέο f.
M gbáň'a f or M gbáň'v f.
"And they cut you."
"And they saw you."
```

Rounding is invariable in the 1996 NT, probably reflecting an orthographic decision to write uf rather than if consistently for the spurious object pronoun "you."

The 3sg animate object pronoun ^o [v] "him/her" and the postposed 2pl subject pronoun ^{ya} lose their entire segmental form in their SFs. Both completely override the vowel quality of the pre-liaison mora, creating **secondary diphthongs** 2.2.

The mora before o becomes o 3.1 [v], always lax. In the LF this mora fuses with the [v] of the LF of the pronoun itself create a long vowel [v:], written o-o:

<i>bòɔd</i> a	"want"	+ 0	\rightarrow	SF <i>bòɔdō</i>	LF <i>bòɔdó-o</i>	[:ʊb:cd]
từm ^m	"send"	+ °	\rightarrow	SF tùmo	LF tùmo-o	
йу $ar{arepsilon}$	"see"	+ 0	\rightarrow	SF <i>ňyέο</i>	LF <i>ἤyēó-o</i>	
$zar{u}$	"steal"	+ 0	\rightarrow	SF <i>zúo</i>	LF zūó-o	[zuʊ:]
dì	"eat"	+ 0	\rightarrow	SF dìo	LF dìo-o	
k <u>i</u> à	"cut"	+ 0	\rightarrow	SF k <u>ì</u> o	LF k <u>ì</u> o-o	
pāe [/]	"reach"	+ 0	\rightarrow	SF <i>páo</i>	LF <i>pāó-o</i>	
$par{i}e^{\prime}$	"wash"	+ °	\rightarrow	SF <i>pío</i>	LF <i>p</i> į̇́ó-o	
$dar{u}e^{\prime}$	"raise"	+ °	\rightarrow	SF dúo	LF <i>dūó-o</i>	

```
Mane a o. "I am he." (Jn 18:5, 1976)

M\bar{a}n\iota_{\varnothing} = \alpha \bar{n}_{\varnothing} = \alpha \bar{n}_{\varnothing} (\dot{a}\underline{e}\check{n}^{a} "be")

1SG.CNTR CAT COP 3AN.OB.
```

Before ^{ya} the preceding mora becomes lax [1]; after front root vowels the effect thus differs from that preceding *ya* or word-internal *y*:

SF	gàsımī_ø	"look ye!"	Tradi	tional:	gosimi		
LF	gàsımī_yá	<u>18.3</u>	Tradi	tional:	gosimiya		
	$kar{v}$	"kill"	+ ya	\rightarrow	SF kōe	[kʊɪ]	LF kōe-yá
	k <u>i</u> à	"cut"	+ ya	\rightarrow	SF <i>k<u>i</u>e</i>	[kiɪ]	LF k <u>i</u> e-yá
	pāe [/]	"reach"	+ ^{ya}	\rightarrow	SF <i>pāe</i>		LF pāe-yá
	p <u>i</u> e/	"wash"	+ ya	\rightarrow	SF <i>p<u>i</u>e</i>		LF p <u>i</u> e-yá
	$dar{u}e^{\prime}$	"raise"	+ ^{ya}	\rightarrow	SF <i>dūe</i>		LF dūe-yá
but	bὲ	"be"	+ ya	\rightarrow	SF <i>bε</i> ι	[bɛɪ]	LF <i>bēι-yá</i>

Nominaliser-n 21 combines with a preceding pronoun subject to produce a special set of pronouns 12.4.1, but for my informants it is segmental zero in all other contexts, with pre-liaison M tonemes changed to H. Older texts frequently show n and/or liaison, but n is nearly always omitted after words with SFs ending in nasal consonants. In KB, n (without liaison) occurs mostly after foreign proper names.

After pause, catenator-n 19 is a syllabic nasal assimilated to the position of the following consonant. Elsewhere, WK has liaison before segmental zero:

```
Kà ò zóɔ ø k\bar{\epsilon}\eta n\bar{a}. "And he came running" And 3AN run CAT come hither.

Bōɔ ø l\dot{a}=ø? "What's that?"

What CAT that=co?
```

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 "auxiliary" verbs. This is most 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 zūobid wūsa kálli ø àň sị'əm

2PL hair:PL all number:SG NZ COP INDEADV
"how much the number of all your hairs is" (Lk 12:7)

tuum kanɛ ka m tummi tisid Wina'am la.
tùum-kànı kà m túmmī ø tísìd Wínà'am lā
work-REL.SG and 1SG work:IPFV CAT give:IPFV God ART
"The work which I do for God" (Rom 15:17)
```

Particularly in written materials, the quality of the final vowel mora before liaison words beginning with \dot{a} - is not predictable from the phonology alone.

Before an3'on^{ϵ} "who?", the manner-adverb prefix a- and the personifier-particle allomorph a- the LF-final vowel is ι , or ν after a velar preceded by a rounded vowel:

```
Ò nịní àlá."She did thus."3AN do ADV:thus(contrast àlá "how many?" below)yeli Abaa"said to Dog" KSS p20yèli À-Bāasay PERS-dog:SG
```

Fusion verbs $\underline{7.1}$ show forms in final e [1] in these cases, instead of the monophthongs aa i
eq ue usual before another word in the VP $\underline{4.3}$:

```
"... tying Dog's tail" 12.6 KSS p20
... n lớɔ À-Bāa zôvr
... 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, àeňa "be something" always appears as àaň, not àeň.

Ka fo aan ano'one? "And who are you?" (Jn 1:19)
Kà fò áaň ànó'onè=ø?
And 2SG COP who=CQ?
```

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

```
\dot{M} m\acute{o}r n\bar{\varepsilon} b\bar{\imath}is\acute{a} \grave{a}t\acute{a}\breve{n}'. "I have three children." 1SG have FOC child:PL NUM:three.
```

```
Pὲεdá àlá=ø? "How many baskets?" basket:PL NUM:how.many=cQ? (contrast àlá "thus" above)
```

Informants usually contract $-\dot{a}$ \dot{a} - to \dot{a} - and $-\dot{i}$ \dot{a} - to $-\dot{a}$ - or $-\dot{i}$ -:

```
N\bar{u}'-b\acute{p}is álá k\grave{a} f\grave{v} n\check{y}\bar{\varepsilon}t\acute{a}=\varnothing? hand-small:PL NUM:how.many and 2SG see:IPFV=CQ? "How many fingers do you see?"
```

```
Gòsimí lá! or Gòsim álá! "Keep on looking!"
```

The number prefix a- originated as * ηa - 10.2, but prefix-initial * η disappeared early throughout Western Oti-Volta. The personifier particle and the manner-adverb prefix originally began with consonants which, though now also deleted, persisted long enough for consonant-initial sandhi to be preserved (cf French "H aspiré.")

WK and DK round the LF-final vowel before \dot{o} "his/her", though all written sources show -i (- ι):

```
B\grave{a} g\grave{o}s\acute{v} \grave{o} b\bar{i}ig. "They've looked at her child." 3PL look:at 3AN child:sg.
```

The pronoun y^a becomes $-n\hat{\iota}$ - before liaison. The pronoun was historically *pa, regularly becoming $*y\tilde{a}$ with subsequent loss of nasalisation; when -a is deleted by apocope, y is also deleted. Before a liaison word, -a was not deleted but became ι , before which p became p-. (Cf also $n\hat{\iota}p^{\varepsilon}$ "do" = Toende Kusaal $\tilde{e}\eta$, locative $n^{\varepsilon} \sim n\bar{\iota}' =$ Toende $-\iota$, $n\hat{\iota}e$ "appear" = Toende $y\tilde{e}e$, $n\bar{\iota}p^a$ "body"= Mooré $y\tilde{\iota}nga$.)

```
D\bar{a}d\bar{o}lliy\acute{a}=\varnothing!"Follow ye not!"NEG.IMP follow 2PL.SUB=NEG!"Receive ye!"D\grave{l}'əm\bar{l}\varnothing!"Receive ye!"D\grave{l}'əm\bar{l}-n\acute{l}b\bar{a}!"Receive ye them!"receive:IMP-2PL.SUB 3PL.OBD\grave{l}'əm\bar{l}-n\acute{o}\varnothing!"Receive ye her!"receive:IMP-2PL.SUB 3AN.OB.
```

```
Biise, siakimini ya du'adib noya.

B̄iise=ø, siakimī-ní yà dū'adib nóyà.

Child:PL=VOC, agree:IMP-2PL.SUB 2PL parent:PL mouth:PL.

"Children, obey your parents." (Eph 6:1)

D̄iˈəmī-ní àlá! "Keep ye on receiving!"

receive:IMP-2PL.SUB ADV:thus! (Realised Dì'əmī-ní lá! or d̄iˈəmī-n álá!)
```

4.3 Segmental contact

The initial consonant and emic nasalisation of the deictic particle $\check{n}w\grave{a}$ "this" are lost when it appears as a dependent after a word ending in a consonant:

	b <u>ī</u> is ňwá	"these children"	[bi:sa]
	zàam ňwá	"this evening"	[za:ma]
but	pu̞'ā ňwá	"this woman"	[pʊ̯awã]

The initial l of the definite article $l\bar{a}^l$ assimilates totally to a preceding word-final -r, and [r:] simplifies to [r]:

```
y\bar{l}r lā "the house" [jira] p\dot{v}-k\dot{v}\bar{l}a "the widow" [pvk\tilde{v}:ra]
```

Toende Kusaal shows this assimilation after all final consonants (Niggli 2012). The 1976 NT occasionally shows forms like nidiba for $n\bar{l}dib$ $l\bar{a}$ "the people."

Initial n of focus- $n\bar{\varepsilon}^l$ 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 kpịid nε̄.	"They're dying."	[ba k̄pi:dε]
Μ̀ zót nē.	"I'm afraid."	[a:tcz mॄ]
M̀ mớr nε̄ bṭ̄isá àyṭʿ.	"I have two children with me."	[jį:sa:ji]
Lì pè'el nē.	"It's full."	[lɪ pɛ̞:l:ɛ]
Lì sàň'am nē.	"It's spoilt."	[lɪ sã̞: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 n but not m:

dànkòŋ	"measles"	[daŋkɔŋ]
n <u>ī</u> n-bámmā	"these people"	[nimbam:a]
nàm zī'	"still not know"	[nanzı]

```
N-B\bar{i}l Mbillah (personal name) [mbil] but N n \delta \eta \bar{i} = f. "I love you." [mnonff]
```

Final nasals of prefixes are written m before p b m, and m everywhere else. Within phrases, word-final short vowels denasalise before initial n or m:

```
\dot{a}w\acute{a} n\bar{a} "like this here" (\dot{a}nw\acute{a} "like this") k\bar{\epsilon} n\bar{a} "come hither" (k\bar{\epsilon}n" "come")
```

Some right-bound $CV\bar{n}$ - elements lose nasalisation even when the following consonant is not a nasal. Thus with compounds of $s\bar{u}\bar{n}f^{\circ/}$ "heart" like $s\bar{u}$ - $m\acute{a}lis\`{n}m^m$ "joy", $s\bar{u}\bar{n}$ - $kp\^{l}$ 'o η ' "boldness", $s\bar{u}\bar{n}$ - $p\^{e}\epsilon n^{n\epsilon}$ "anger" the 1996 NT and older sources write $sumalism\ sukpi$ 'o η /sukpi'eu $\eta\ supeen$, reflecting the bleaching and phonological simplification which has created noun prefixes from some original cbs 10.1. KB restores the nasalisation in writing: sunkpi'eu η "boldness", $sunp\epsilon\epsilon n$ "anger."

With $\grave{a} \not e \check{n}^a$ "be something/somehow" there is loss of nasalisation before the focus particle $n\bar{\epsilon}^{/}$ (for the loss of the $\not e$ see below):

```
\dot{M} \acute{a} n\bar{\varepsilon} d\bar{a}\dot{u}. "I'm a man." but L\grave{i} \grave{a}\check{n} s\acute{v}\eta\bar{a}. "It's fine."
```

Older written materials write $a\check{n}$ directly before a complement as a not ann, but KB consistently has an [\tilde{a}] whenever the form is not followed by $n\bar{\epsilon}'$.

Cbs, and verb forms which are not VP-final, may not end in fronting diphthongs unless the next word begins with y; diphthongs are replaced by corresponding monophthongs: $a\underline{e} \to a$; $o\underline{e} \to o$; $v\underline{e} \to v$; $ae \to aa$; $ve \to vv$; $ie \to i\vartheta$; $ue \to u\vartheta$. Thus $s\bar{a}\underline{e}\bar{n}$ $l\bar{a}$ "the blacksmith", but $s\dot{a}\bar{n}-k\dot{a}\eta\bar{a}$ "this blacksmith" and e.g.

```
"She owns a lorry." (s\bar{v}'e^{ya/} "own")
Ò sờ'υ lớr.
                            "It's good." (àeňa "be something")
Lì àň súŋā.
                            "[You] arose how?" 25 (d\bar{u}e^{/} "arise")
Dúθ wēlá?
Ti γa'a νυe, ti νυnε tis Zugsɔb la.
Tì vá' vūe,
                  tì vú
                              nē ø tís Zūg-sób
                                                           lā.
1PL if be.alive, 1PL be.alive FOC CAT give head-NULL.AN ART.
"If we live, we live to the Lord." (Rom 14:8): (v\bar{v}e^{a/}) "be alive")
Èŭrigim
                Ø
                     pāa dύ'atà.
Shift.along:IMP CAT reach doctor:SG.
"Shift along up to the doctor." (p\bar{a}e^{/} "reach")
```

```
Dāu lā kā' d\circ2\sigma5. l\circ4\sigma8.
```

Man:SG ART NEG.BE room:SG-LOC ART=NEG.

"The man's not in the room." ($k\bar{a}$) before a complement, in the same VP)

```
but D\bar{a}u k\bar{a}'e d\acute{o}g\bar{v}-n l\acute{a}a=e.
```

Man:sg neg.be room:sg-loc art=neg.

"There's no man in the room." ($k\bar{a}'e$ before an adjunct)

Fronting loss is regular in my informants' speech and in the audio version of the NT, but older written materials very frequently still write diphthongs:

```
voen = v\bar{v}v-n "would live" (Gal 3:21, 1996)

Kristo\ da\ faaɛn\ ti = Kristo\ da\ faan\ ti "Christ saved us." (Gal 5:1)
```

 $\grave{A} \not e \breve{n}^a$ "be something" is always aa or aan before liaison; the rarity of phrase-final $\grave{a} \not e \breve{n}$ inhibits the introduction of analogical spellings. $F\bar{a} e \breve{n}'$ "save" is perhaps written faaenn etc to distinguish the forms from $f\bar{a}\breve{n}$ "rob"; the 1996 NT has two instances of the certainly spurious imperative faaenm. (Cf $\underline{11.1}$ on faangid "saviour.") Clearcut errors like Nonjilim pu naae da (1 Cor 13:8, 1996 NT) for KB Nonjilim pu naada "Love does not come to an end" confirm that the orthographic tradition has written diphthongs for undoubted monophthongs.

4.4 Tone sandhi

External tone sandhi follows apocope and the tone overlay of independency marking <u>16.6.1</u>. M dropping and the tone changes induced by interrogative prosodic clitics apply before other external tone sandhi rules, which then apply left to right.

4.4.1 Before prosodic clitics

Before the negative prosodic clitic, LF-final L syllables are changed to M.

mòlı	"gazelles"	SF mòlı	LF mòlīı
yàarım ^m	"salt"	SF yàarım	LF yàarīmm
tìum ^m	"medicine"	SF tìım	LF tīımm

This applies later than external tone sandhi induced by preceding words:

Pattern H words written in superscript notation with a following acute mark [/] place the H on the last syllable of the LF, replacing any SF M toneme:

fūug ^{ɔ/}	"shirt, clothes"	SF <i>fūug</i>	LF <i>fūugó</i>
pāe [/]	"reach"	SF <i>pāe</i>	LF <i>pāée</i>
nūa [/]	"hen"	SF nūa	LF nūáa
yā'	"houses"	SF <i>yā</i>	LF <i>yáa</i>
bὲdυgῦ [/]	"a lot"	SF bèdvgū	LF bὲdυgύυ
gāaň [/]	"Nigerian ebony"	SF gāaň	LF <i>gáaň</i>
tāuň [/]	"opposite-sex sib"	SF tāuň	LF <i>táυ</i> ň
dāam ^{m/}	"millet beer"	SF dāam	LF dáamm
ν̄ῡm ^{m/}	"life"	SF vūm	LF vớmm

When the liaison word ^o "him/her" follows a perfective ending in a root vowel, the SF has H toneme, but the corresponding LF-final overlong diphthong carries MH:

```
ňyέο "see him/her" SF ňyέο LF ňyēó-ο
```

The changes before the vocative clitic resemble those before the negative clitic, though the audio NT version sometimes shows a change of final H tone to falling (found also with vocatives for some Hausa speakers, Jaggar p18.)

Like many other West African languages, Kusaal signals questions with a final falling intonation. All questions end with a L or H toneme. Both **interrogative prosodic clitics cause preceding words with all-M tonemes to change to all-L.** This is a change of tonemes, not just a matter of intonation, and it precedes M spreading, to which the new L tonemes are subject <u>4.4.3</u>. In Kusaal (unlike Dagbani) this lowering only affects the final word, not a sequence of several all-M words.

```
Ànɔʻɔnì, ø ňyέ bà bìiga=ø?
Who
         CAT see 3PL child:sG=co?
"Who saw their child (bīiga)?"
                                 "Who saw a child?" tonally identical to
Ànó'ənì ňyē bíigà?
Ànó'ənì ňyē sú'ugà?
                                 "Who saw a knife (s\dot{v}'vq^a)?"
Fù bôɔd bó?
                                 "What (b\bar{2}) do you want?"
Ànó'ənì ňyē zuéyà?
                                 "Who saw hills (zuēya)?"
M ná bōdig.
                                 "I will get lost."
M ná bòdιgεε?
                                 "Will I get lost?"
                                 "She didn't cook."
Ò ρῦ dῦqε.
```

"Didn't she cook?"

Ò pū dúgὲε?

4.4.2 Before liaison

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 m̀ zábì bā."And I've fought them."Kà m̀ pv̄ zábì fō."And I didn't fight you."M̀ zábī bá."I've fought them."M̀ pv̄ bóɔdī fó."I don't love you."M̀ pv̄ bóɔdī báa."I don't love them."Kà m̀ pv̄ zábì báa."And I didn't fight them."Anó'ɔnì kóv bá?"Who has killed them?"SF kóv bā
```

The locative particle n^{ε} has the same tonal effects on the preceding word as the negative prosodic clitic, changing final L to M:

```
p̄ɔ̄ɔgɔ/
                                                   "field"
                                                                                    + n^{\varepsilon}
                                                                                                                                       \rightarrow p\bar{o}og\dot{v}-n<sup>ε</sup>
                                                                                                                                       \rightarrow b\overline{i}iq\iota-n<sup>ε/</sup>
                 bīig<sup>a</sup>
                                                   "child"
                                                                                    + n^{\varepsilon}
                                                                                                                                                                                         WK
but
                 m\dot{v}'ar^{\varepsilon}
                                                   "dam, lake" + n^{\epsilon}
                                                                                                                                       \rightarrow m\dot{v}'ar\bar{\iota}-n^{\epsilon/}
                                                                                                                                       \rightarrow y \dot{a} a d \bar{\iota} - n^{\epsilon/}
                 vàadε
                                                   "graves"
                                                                                    + n^{\varepsilon}
                                                                                                                                                                                         WK
                 kōvdíb<sup>a</sup>
                                                   "killers"
                                                                                    + n^{\varepsilon}
                                                                                                                                       \rightarrow k\bar{\nu}\nu dib\bar{\imath}-n^{\epsilon/}
                                                                                                                                                                                         WK
```

Discontinuous-past n^{ε} and 2pl y^{a} always impose M on the preceding syllable:

```
d\bar{v}q^{\varepsilon}
                                                                                                              \rightarrow d\bar{\nu}q\nu-n^{\epsilon/}
                                          "cook"
                                                                     + n^{\varepsilon}
                                                                                                              → bòdιgī-n<sup>ε/</sup>
              bàdιgε
                                          "lose"
                                                                     + n^{\varepsilon}
              vādιa<sup>ε/</sup>
                                                                     + nε
                                                                                                              \rightarrow v\bar{a}d\iota a\iota - n^{\epsilon/}
                                          "scatter"
              kūυda∕
                                                                                                              \rightarrow k\bar{\nu}\nu d\iota - n^{\epsilon/}
ipfv
                                          "kill"
                                                                     + n^{\varepsilon}
                                                                                                              \rightarrow v\bar{a}digid\bar{i}-n^{\epsilon/}
              yādigid<sup>a</sup>
                                          "scatter"
                                                                     + n^{\varepsilon}
ipfv
              Dā
                              d\bar{b}lli y\dot{a}=\emptyset!
                                                                                   "Follow ye not!"
              NEG.IMP follow 2PL.SUB=NEG!
```

Indicative perfective forms without the independency-marking tone overlay change LF-final $M \to H$ before bound object pronouns; final L and H are not affected:

```
b\grave{o}dig^{\epsilon} "lose" +m^{a} "me" \rightarrow b\grave{o}digi\ m^{a} d\grave{i} "eat" +li "it" \rightarrow d\grave{i}i\ l\bar{\imath}^{l} v\bar{a}dig^{\epsilon l} "scatter" +m^{a} "me" \rightarrow v\bar{a}digi\ m^{a}
```

```
d\bar{v}a^{\varepsilon}
                                "cook"
                                                               "it"
                                                                                    → dūaí lī/
but
                                                     + li
          g\bar{c}s^{\epsilon}
                                "look"
                                                     + o
                                                               "him/her"
                                                                                    → aōsó
                                                                                                         LF gɔ̄só-o
                                                     + m<sup>a</sup> "me"
                                                                                    \rightarrow k \dot{\nu} \dot{\nu} m^a
          kΰ
                                "kill"
```

Pattern H fusion verb perfectives behave exactly like *CVV*-stems:

```
p\bar{a}e^{l} "reach" +m^{a} "me" \rightarrow p\acute{a}a m^{a} d\bar{i}^{!}e^{l} "get" +ba "them" \rightarrow d\acute{i}^{!}\partial b\bar{a}^{l}
```

After all other verb forms, including all imperfective forms and all forms with independency-marking tone overlay <u>16.6.1</u>, object pronouns change LF-final L to M:

```
zàbıda
             "fights"
                           + m<sup>a</sup> "me"
                                               → zàbidī ma/
             "fights"
                           + o
                                               → zàbıdō
                                                             LF zàbidó-o
zàbıda
                                  "him/her"
dìta
             "eats"
                                  "it"
                                               → dìtī lí
                           + li
vādīgida
             "scatters"
                           + ba "them"
                                               → yādıqídī bá
vādigida
             "scatters"
                           + o
                                  "him/her"
                                               → yādıgídō LF yādıgídó-o
kūυd<sup>a/</sup>
             "kills"
                           + m<sup>a</sup> "me"
                                               → kūvdí ma
kōpda/
             "kills"
                           + 0
                                  "him/her"
                                               → kūυdó
                                                             LF kvvdó-o
```

With independency-marking:

```
bàdιgε
                 "lose"
                                 + m<sup>a</sup> "me"
                                                          → bàdıgī ma/
bàdıq<sup>E</sup>
                 "lose"
                                 + o
                                         "him/her"
                                                          → bàdı qō
                                                                           LF bàdıgó-o
vādιg<sup>ε/</sup>
                                 + m<sup>a</sup> "me"
                 "scatter"
                                                          → yàdıgī ma/
v\bar{a}dig^{\epsilon/}
                 "scatter"
                                 + 0
                                         "him/her"
                                                          → yàdıgō
                                                                           LF yàdıgó-o
```

Word-final \bar{o} becomes \dot{o} -o before prosodic clitics, and \dot{o} becomes \bar{o} -o before the negative clitic, as expected:

```
Kà bà zábò. "And they fought him."

Kà bà pō zábō-o. "And they didn't fight him."
```

SF-final H corresponds to LF-final MH if the LF ends in an overlong diphthong:

```
Kà bà ňyέο."And they saw her."Kà bà pō ňyēó-o."And they didn't see her."
```

Irrealis forms of Pattern A verbs have M before liaison; final *o-o* can be H or M:

```
Ò nà bɔdıqı m.
                                   "He will lose me."
   Ò kỳ bɔdıgı má.
                                   "He will not lose me."
   Ò nà b5d qu bá.
                                   "She will lose them."
   Ò kỳ bɔdıaı báa.
                                   "She won't lose them."
   Ò kù bɔdıgıdı má.
                                   "He won't be losing me."
   Ò kỳ zābidi má.
                                   "He won't be fighting me."
   Ò kù zābó-o.
                                   "He won't fight him."
or Ò kỳ zābo-o.
                                   "He won't fight him."
```

Toneme changes induced by liaison words *follow* external tone sandhi induced by words before the host; thus $d\dot{a}'a$ "market" + n^{ϵ} "at" $\rightarrow d\bar{a}'a - n^{\epsilon/}$; $m\dot{\epsilon}$ "build" + n^{ϵ} dp $\rightarrow m\bar{\epsilon}\epsilon - n^{\epsilon/}$; $k\dot{v}$ "kill" [$k\bar{v}$ with independency marking] + m^a "me" $\rightarrow k\bar{v}v$ $m^{a/}$; but

```
\grave{O} b\grave{\epsilon} n\acute{\epsilon} d\hat{a}'a-n. "She is at market" D\bar{a}\mu l\bar{a} m\hat{\epsilon}\epsilon-n. "The man built (earlier today.)" D\bar{a}\mu l\bar{a} k\hat{v}v m. "The man has killed me."
```

However, the toneme on the liaison word itself is the same as it would have been *without* the toneme changes induced by preceding words:

```
\grave{O} k\bar{\nu}\upsilon b\acute{a}. "She has killed them." D\bar{a}\mu l\bar{a} k\acute{\nu}\upsilon b\acute{a}. "The man has killed them."
```

Except for catenator-*n*, which is toneless, all liaison words which are not left-bound begin with a fixed-L toneme <u>4.4.3</u>. Preceding M becomes H; noun LFs ending in a short vowel show final H.

```
Kà bà dìtī bá. "And they were eating them."
And 3PL eat:PFV 3PL.OB. (ipfv without independency marking)
but Kà bà dìtí bà dītb. "And they were eating their food." (ML → HL)
And 3PL eat:IPFV 3PL food.

bane na yel Zugsobi ba tuuma a si'em la
bànı nà yēl Zūg-sóbí bà tūvmá ø àň sṛ'əm lā
REL.PL IRR say head-NULL.AN 3PL deed:PL NZ COP INDEADV ART
"Those who will tell the Lord how their deeds are." (Heb 13:17, 1996)
```

Before the fixed-L $\underline{4.4.3}$ of nominaliser- \dot{n} final M likewise becomes H. Except after subject pronouns, this is often the only sign of the presence of the particle:

```
D\bar{a}\mu l\bar{a} z\acute{a}b n\hat{a}'ab l\bar{a}. "The man has fought the chief." man:sg art fight chief:sg art
```

but $d\bar{a}\mu$ $l\acute{a}$ \emptyset $z\grave{a}b$ $n\grave{a}'ab$ $l\bar{a}$ "the man having fought the chief" man:SG ART NZ fight 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:

```
amaa o kena ye o tum tisi ba àmáa ò k\bar{\epsilon} n\bar{a} y\dot{\epsilon} ò t\acute{u}m ø t\grave{i}si b\bar{a} but 3AN come hither that 3AN work CAT give 3PL.OB "but he came to serve them" (Mt 20:28)

\grave{M} n\acute{o}k s\acute{v}\'ug\grave{v} ø k\acute{i}a n\~im l\~a.

1SG pick.up knife:SG CAT cut meat:SG ART.
"I cut the meat with a knife."
```

4.4.3 M spreading

With no intervening pause, most words cause an initial L toneme in a following word to change to X toneme on superheavy syllables and H on others, unless the L toneme is "fixed", when any preceding M becomes H instead <u>2.4</u>. M spreading follows

```
all words ending in M toneme all words not bound to the right  \begin{array}{ccc} except \ for & \text{verb perfectives (unless ending in M)} \\ & & \text{noun or adjective plurals ending in -$a$ or -$i$} \\ & & \text{certain forms affected by M dropping 4.4.4} \\ \\ & \text{bound subject pronouns} \end{array}
```

Catenator-n is transparent to M spreading <u>4.4.2</u>.

Independency marking affects M spreading after subject pronouns, VP particles and verb forms <u>16.6.1</u>. M spreading does not follow clause adjuncts. Its occurrence is otherwise unaffected by clause structure:

```
B\grave{a} t\grave{i}s n\hat{a}'ab l\bar{a} b\acute{v}\eta. "They gave the chief a donkey (b\grave{v}\eta^a)." 
3PL give chief:SG ART donkey:SG. 
B\grave{a} \check{n}w\grave{\epsilon}' n\hat{a}'ab l\bar{a} s\acute{v}\eta\bar{a}. "They beat the chief well (s\grave{v}\eta\bar{a}')." 
3PL beat chief:SG ART good:ADV.
```

Absent M spreading after nominal plurals in $-\acute{a}$ or $-\acute{\iota}$:

 \dot{M} dìga lú yā. "My dwarfs have fallen down."

but \dot{M} yōgvmá lù yā. "My camels have fallen down." 1SG camel:PL fall PFV.

Absent M spreading after perfectives without independency-marking tone overlay, not ending in M:

Kà m gōs nâ'ab lā."And I've looked at $(g\bar{o}s^{\epsilon})$ the chief."Kà ò gōs nâ'ab lā."And he's looked at the chief."but Kà m záb nà'ab lā."And I've fought $(zàb^{\epsilon})$ the chief $(nà'ab^a)$."Kà ò záb nà'ab lā."And he's fought the chief."

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 $k\grave{a}$ "and":

right-bound pronouns \dot{m} $f\dot{v}$ \dot{o} $l\dot{i}$ $t\dot{i}$ $y\dot{a}$ $b\dot{a}$ personifier particle \dot{a} -/ \dot{n} pronoun "who?" \dot{a} $n\hat{o}$ 'on $^{\epsilon}$ nominaliser (all forms) \dot{n} words with number or \dot{a} - $b\dot{a}$ - $b\dot{v}$ -

manner-adverb prefixes

linker particle kà

Initial \dot{a} - in loanwords may be treated as fixed-L by analogy. If there is no intervening pause, a preceding M toneme must become H:

Bà kòudī bá. "They kill them." 3PL kill:IPFV 3PL.OB.

but $B\grave{a}\;k\grave{v}vd\acute{\iota}_b\grave{a}\;b\bar{v}vs.$ "They kill their goats."

Lì à $n\epsilon$ à-dàal $\delta\eta$. "It's a stork"

3IN COP FOC PERS-stork:SG.

3PL kill:IPFV 3PL goat:PL.

```
Ò aòsī bá bédvaū.
                               "She looked at them a lot."
                                                               (ba object)
Ò gòsí bà bèdugū.
                               "She looked at a lot of them."
                                                               (bà possessive)
ba diib n vit na'aten la na zug
bà díib à vịt
                       ná'-tēn
                                   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'an n ti paae ya tuona la.
wūv sáa, ø nāanı jáňk yà ňyá'an n tí
                                             páe yà tùona
                                                                  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)
```

Fixed-L syllables *are* changed to M before the negative prosodic clitic 4.4.1; thus $n\dot{\epsilon}$ $t\dot{\iota}$ "with us" but

```
Amaa o pv lal nɛ tii.

Àmáa ò pv̄ lāl nɛ́ tī\iota=ø.

But 3SG NEG.IND be.far with 1PL=NEG.

"But he is not far from us." (Acts 17:27)
```

After words ending in M, this sandhi is straightforwardly recognisable as tone spreading. 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 be attributed to floating tonemes delinked by apocope, but in this case M spreading is synchronically mostly determined by syntactic role and by analogy, and prior tonal behaviour persists even after remodelling by *addition* of segments. Words with identical L-final sg and cb, like $m\grave{a}$ "mother", $z\mu\grave{a}$ "friend", $d\acute{v}$ "at \check{a} " "doctor", $l\grave{a}nnug$ "squirrel" show M spreading after sg but not cb, and unlike perfectives, the bare-stem imperfectives $b\grave{\varepsilon}$ and $n\grave{o}g$ are followed by M spreading.

4.4.4 M dropping

M dropping 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, M dropping may have arisen by dissimilation of adjacent M tonemes to ML, analogous to Meeussens's Rule (Nurse and Phillippson p65); it is seen after M-final words and after free predependents which mostly originally had M flexions, as shown by M spreading.

M dropping affects only the one following word, which may be a cb.

Pattern H or A words without prefixes change all tonemes to L.

M prefixes change to L; the rest of the stem is unaffected.

Pattern L words and words with L prefixes are completely unaffected.

M dropping applies before M spreading; in the majority of cases the preceding word also induces M spreading, and the new initial L becomes X or H.

M dropping also precedes tonal changes induced by following liaison words:

```
d\bar{a}u l\bar{a} p\acute{o} g\bar{v}-n "in the man's field (p\bar{o} g^{o})" like d\bar{a}u l\bar{a} d\acute{o} g\bar{v}-n "in the man's hut (d\grave{o} g^{o})"
```

Examples with a cb as head:

bù-pị̀əlıg ^a	"white goat"	bù-pāalíg ^a	"new goat"
bį̄-pύŋ-pj̀əlιgª	"white girl"	bị̄-púŋ-pāalígª	"new girl"
nō-pị́əlìg ^a	"white hen"	nō-páalìg ^a	"new hen"

With a cb as dependent $(n\bar{z})r^{\epsilon/}$ "mouth", $d\bar{t}|\partial s^{a/}$ "receiver" pl $d\bar{t}|\partial s(d\bar{t})b^a$):

```
n\bar{\partial}-d\hat{i}'\partial s^a "chief's interpreter" pl n\bar{\partial}-d\hat{i}'\partial s\hat{i}dib^a
```

There is no M dropping after personal pronouns:

m̀ bį̃ig	"my child"	m̀ tìug	"my tree"
mān b <u>ī</u> ig	"my child"	mān tîıg	"my tree"
mān yūgúm	"my camel"	mān gbīgım	"my lion"

M dropping after words which do not also induce M spreading:

```
\dot{m} \dot{b} \dot{e} \dot{g} \dot{g}
```

M dropping after free NPs also followed by M spreading:

dāu b <u>î</u> ig	"a man's child"	nà'ab b <u>î</u> ig	"a chief's child"
dāu lā yúgùm	"the man's camel"	dāu lā gbigim	"the man's lion"

Unlike M spreading, M dropping occurs only within NPs and AdvPs; there is thus a tonal minimal pair between

```
Bà tìs n\hat{a}'ab l\bar{a} b\hat{\mu}ig. "They've given (it) to the chief's child." (M dropping applied to b\bar{\mu}ig "child")

Bà tìs n\hat{a}'ab l\bar{a} b\bar{\mu}ig. "They've given the chief a child." (No M dropping applied to b\bar{u}ig)
```

It occurs regardless of the meaning or role of the preceding dependent:

```
m\bar{z} g v - n \ w \acute{a} b \dot{v} g \ l \ddot{a} "the wild (in-the-bush) elephant (w \ddot{a} b v g^{3/})"
```

M dropping follows cb heads, but never uncompounded heads:

```
k\bar{u}g-yínnì "one stone" with yínnì as adjective 12.5.1 but k\bar{u}gvr yīnní "one stone" wābvg lā "the elephant" wābvs p\bar{i}iga "ten elephants"
```

The final element of a compound induces following M spreading in accordance with the usual rules <u>4.4.3</u> regardless of whether it has been subject to M dropping:

bὺ-wōk	"tall goat"	nō-wók	"tall hen"
bù-wɔ̃k-pí̞əlìg	"tall white goat"	bù-wōk-páalìg	"tall new goat"
nō-wók-pị̀əlıg	"tall white hen"	nō-wók-pāalíg	"tall new hen"
bù-wōk dîıb	"tall goat's food $(d\bar{\imath}\imath b^{\circ})$ "	nō-wók dîıb	"tall hen's food"

A word of less than three syllables affected by M dropping and M spreading after a free predependent is not itself followed by M spreading. Thus, using the frames "the man's $(d\bar{a}\underline{u}\ l\bar{a})$ X has got lost $(b\hat{o}d\iota g\ y\bar{a})$ " and "my elder same-sex siblings' $(\dot{m}\ b\underline{i}\bar{e}y\acute{a})$ X has got lost":

Pattern H and A nouns, affected by M dropping:

	wābug ^{o/} pōɔg ^{o/} bāŋ ^a pūug ^a	"elephant" "field" "ring" "inside"	Dāu lā wábùg bòdıg yā. Dāu lā pôog bòdıg yā. Dāu lā báŋ bòdıg yā. Dāu lā pûug bòdıg yā.	
but	wābvg ^{o/}	"elephant"	M bịēyá wàbvg bódìg yā.	no M spreading
	bāŋ ^a	"ring"	M bịēyá bàŋ bódìg yā.	no M spreading
	yūgvdır ^ɛ	"hedgehog"	M bịēyá yùgvdır bódìg yā.	no M spreading
	yūgvdır ^ɛ	"hedgehog"	Dāu lā yúgvdìr bódìg yā.	three syllables

Contrast Pattern L nouns, which are not subject to M dropping:

```
b \dot{v} \eta^a "donkey" D \bar{a} \mu \ l \bar{a} \ b \dot{v} \eta \ b \dot{o} d \dot{v} g \ y \bar{a}.
\dot{a} \ddot{n} r v \eta^o "boat" D \bar{a} \mu \ l \bar{a} \ a \ddot{n} r \dot{v} \eta \ b \dot{o} d \dot{v} g \ y \bar{a}.
d \dot{o} g \dot{o} \dot{o} "house" D \bar{a} \mu \ l \bar{a} \ d \dot{o} g \ b \dot{o} d \dot{v} g \ y \bar{a}.
```

Those Pattern H nouns which have an irregular intrinsic initial H or X toneme seem unchanged after M dropping and spreading, and by analogy have unchanged following tone sandhi; words like $n\acute{a}af^{\circ}$ "cow" fluctuate:

```
à-gâvňg° "pied crow" Dāu lā gâvňg bódìg yā.
náaf° "cow" Dāu lā nâaf bódìg yā or Dāu lā nâaf bòdıg yā.
```

M dropping applies sequentially, reflecting the substructure of NPs and AdvPs. When M dropping affects the first component of an existing compound, the second component retains any previous M dropping and spreading effects:

The order of applications of M dropping may also be revealed by the absence of M spreading after some words affected by M dropping:

```
[fūug dôɔg] "tent" (fūugɔ/ "cloth", dòɔgɔ "house") pv̀'vsvg [fûug dôɔg] "tabernacle" (pv̀'vsvgɔ "worship") but Li k\bar{a} [[[dāu lā bi̞ig] bi̞ər] nâaf] zv̀vrē.

"It's not the man's child's elder-same-sex-sibling's cow's tail." WK (bi̞iga "child" bi̞ərɛ/ "elder sib of same sex" náafɔ "cow" zv̄vrɛ "tail")
```

5 Noun flexion

5.1 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 frequent occurrence, as it is the regular method of construing a noun with a following dependent 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-bíla* "star" (KB *nwadbil*) suggest that consonant-final cbs once ended in an epenthetic vowel.

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 Long Forms of the suffixes, as the a|ba, $ga|s\varepsilon$, $go|d\varepsilon$, $r\varepsilon|aa$ and fo|u **noun classes**. Two unpaired non-count suffixes bo mm 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 only a natural gender system opposing persons and non-persons, with pronouns based respectively on the original a|ba and $r\varepsilon|aa$ classes. 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 $go|d\varepsilon$ stems ending in m n following a short vowel, which always use the plural suffix -aa instead of $-d\varepsilon$, as do all gerunds with sg go. Mampruli and Dagbani also show -a for the plural of m n stems in this class (cf Mampruli gbannu "skin", pl gbana), so this suppletion is probably driven by the fact that cluster assimilation would cause the expected plural to resemble a $r\varepsilon|aa$ sg. Suppletion does not take place in Mooré or Farefare, where the $go|d\varepsilon$ pl suffix has a rounded vowel, unlike the $r\varepsilon|aa$ sg. cf Mooré $g\~aong\`o$ "skin" pl $g\~ando$.

Adjectives avoid potentially ambiguous suffixes altogether <u>6</u>.

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 -ga may result in LFs ending in -a, as in $n\hat{u}'ug^a$ "hand", and a|ba stems in l n following a short root vowel show LF $-\varepsilon$ with l and n geminated, as if the suffix were $r\varepsilon$, e.g $Bin^{n\varepsilon}$ "Moba person."

Two subclasses are semantically motivated: a subclass of a|ba referring to older/important people uses ba as the singular suffix, and names of languages belong to a subclass of $r\varepsilon|aa$ with the singular suffix $l\varepsilon$.

The classes are thus as follows:

a ba ba (sg)	sīd ^a nà'ab ^a	sīdıb ^a nà'-nàm ^a	sìd- nà'-	"husband" "chief"
ga sɛ	būvg ^a	būυsε	bὺ-	"goat"
gɔ dε	dòɔgɔ bū'θsύgɔ	dòɔd ^ɛ bū'esá	dò- bū'es-	"hut" "question"
rε aa lε	nɔ̄ɔrɛ/ Kūsâalɛ	nōyá	nō-	"mouth" "Kusaal"
fɔ u	mòlıf ^o	mòlı	mòl-	"gazelle"
bo	sā'ab ^o		sà'-	"porridge"
mm	<i>t</i> ìı <i>m</i> ^m		tì-	"medicine"

Stems in m with long root vowels in the a|ba class avoid the plural suffix ba; some $ga|s\varepsilon$ class nouns with human reference have alternative plurals with ba; countable nouns in the mm class form plurals with -aa or $-s\varepsilon$ or $n\grave{a}m^a$; and the small $f\flat|\iota\iota$ class has some members with $f\flat|\iota\iota$ suffixes in only one number. The sg suffix la is found only in the irregular adjective $b\bar{\imath}l^a$ "little."

Few other cases of irregular sg/pl pairing occur; examples are

$par{arepsilon}'og^{\circ/}$	$par{arepsilon}^{arepsilon}arepsilon s ^{arepsilon/}$		$par{arepsilon}$ '-	"sheep"
gbè'og°	gbè'ɛd ^ɛ		gbὲ'-	"forehead"
	gbèda			
b <u>i</u> āuňk ^o	bi̯āň'ad ^ɛ	WK	biàň'-	"shoulder"
	b <u>i</u> āň'ada	SB		

A few nouns end in $-\iota$ or $-\upsilon$ with apocope-blocking 3.2:

būudı	bùud-	"tribe"
nà'ası		"honour"
kābırí		"entry permission"
sūgvrú		"forbearance"

They are probably loans from related languages without apocope, like $k\bar{\imath}ib\acute{\nu}$ "soap" from Mampruli. Cognates of $b\bar{u}ud\imath$ show that $-d\imath$ represents the $d\varepsilon$ pl suffix: Mooré $b\acute{u}ud\imath$ "family, kind" sg $b\acute{u}ug\imath$. $N\grave{a}$ "ası may be $s\varepsilon$ pl. $K\bar{a}b\imath r\acute{\iota}$ and $s\bar{u}g\imath r\acute{\nu}$ may be $r\varepsilon$ sg, with $k\bar{a}b\imath r^{\varepsilon l}$ "ask for admission" and $s\bar{u}g\imath r^{\varepsilon l}$ "forbear" as back-formations.

As with almost all noun class systems, there are correlations between class membership and meaning, though there are frequent exceptions. These associations can be exploited to change the significance of a stem <u>8.2</u>.

The a|ba class has exclusively human-reference membership, though many nouns referring to people belong to other classes. A subclass of nouns for elders and other important people uses plural ba as singular.

The $ga|s\varepsilon$ class has general membership but includes the great majority of tree names, many larger animals, and tools. Ethnic group names mostly belong to a|ba or $ga|s\varepsilon$; the place inhabited by the group has sg -ga.

The $g_{\mathcal{I}}|d\varepsilon$ and $r\varepsilon|aa$ 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 $g_{\mathcal{I}}|d\varepsilon$ are pejorative: $b\bar{a}l\bar{\varepsilon}rvg^{\mathcal{I}}$ "ugly person", $d\dot{a}b\bar{\iota}og^{\mathcal{I}}$ "coward", $z\bar{\jmath}lvg^{\mathcal{I}}$ "fool." Some originally a|ba nouns have been reallocated to $r\varepsilon|aa$ for phonological reasons e.g. $b\bar{\iota}er^{\varepsilon l}$ "elder same-sex sibling."

The $l\varepsilon$ subclass includes all names of languages.

The small $f_0|u$ class includes two groups: animals, and small round things. It contains all names of seeds. No $f_0|u$ noun refers to people.

The bz class has only three members known to me that are not gerunds: $s\bar{a}^{\dagger}ab^{2}$ "millet porridge, TZ", $t\bar{a}\bar{n}p^{2}$ "war" and $k\bar{\iota}^{\dagger}\iota b^{2}$ "soap."

The mm class includes names of liquids and substances and abstract nouns. There are few count nouns, and none referring to people or animals. Names of liquids are all mm or bo or formally plural.

The class membership of regular deverbal nouns is predictable.

The sg SF is usually enough to identify the noun class, given whether the word has human reference. Vacillation between classes and the assignment of loanwords to classes confirm that speakers do use such criteria to determine class membership.

Nouns with sg SFs ending in long monophthongs or in unrounded vowels followed by velars all belong to $ga|s\varepsilon$ except for $b\bar{a}'a$ "traditional diviner" and $n\dot{a}y\bar{i}ig^a$ "thief", both a|ba. Those ending in rounding diphthongs before velars all belong to $g\flat|d\varepsilon$; those in rounded monophthongs before velars are $g\flat|d\varepsilon$ or $ga|s\varepsilon$.

Human-reference nouns in SF -m are a|ba, some of the ba-sg type, like $s\grave{a}am^{ma}$ "father"; exceptional is $z\~{o}om^{n\epsilon}$ "fugitive" ($r\epsilon|aa$). Human-reference nouns ending in a long vowel before r are $r\epsilon|aa$. All remaining human-reference nouns are a|ba.

All nouns in SF -f belong to $f_2|u$.

Underived mass nouns in -m belong to mm, and in -b or -p to the $b \circ class$.

Non-human-reference count nouns ending in l n r belong to $r\varepsilon|aa$, as do those ending in m apart from a few mm-class count nouns like $p\bar{u}um^{m/}$ "flower." $P\bar{l}im^{m/}$ "arrow" is a relic of a "long thin things" $o|\varepsilon$ class, lost in Western Oti-Volta.

5.2 Remodelled combining forms

For levelling between sg and pl forms see <u>3.4</u> <u>3.6</u>.

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.

nį̄fɔ/	n <u>ī</u> ní	n <u>ī</u> n- or n <u>ī</u> f-	"eye"
zìň'a	$z\grave{\epsilon}\breve{n}'arepsilon s^arepsilon$	zi̯àň'- or zèň'-	"red" (adjective)
wōk ^{ɔ/}	wā¹ad ^{ε/}	wā'- or wōk-	"long, tall" (adjective)
tāňp ^o		tàňp-	"war"
zūg ^{o/}	$zar{u}t^{arepsilon/}$	zū- or zūg-	"head"

Mooré and Toende show zu- consistently in cases where Agolle has $z\bar{u}g$ -: Mooré zusoaba, Toende zusoaba, Agolle zusoaba, "Lord" is very frequently read zusoaba in the audio version of the NT. The cb zusoaba sometimes behaves tonally like a noun prefix 3.8.1.

Head-first compounds are formed with complete freedom, which leads to a greater tendency to levelling of cbs than in modifier-first compounds. Thus the cb of $n\bar{i}f^{ol}$ "eye" is $n\bar{i}n$ - as dependent but $n\bar{i}f$ - as head: $n\bar{i}n$ -dáa "face", $n\bar{i}n$ -tám^m "tears", $n\bar{i}n$ -gótìs^{ϵ} "spectacles" but $n\bar{i}f$ -ká $\eta\bar{a}$ "this eye." $Gb\grave{a}\underline{u}\eta^{\circ}$ "letter, book" now has the cb $gb\grave{a}\underline{u}\eta$ -, but the dependent cb $gb\grave{a}n$ - still occurred in the 1976 NT gbanmi'id $gb\grave{a}n$ - $m\bar{i}'id$ "scribe" ("book-knower"), KB $gbau\eta mi'id$.

With m and n stems, remodelled forms are now regular:

zīnzāuŋɔ/	zīnzāná	zīnzáuŋ-	"bat"
àňrvŋ ^o	àňrıma	àňrvŋ-	"boat"

So too with *CV*-stems in the $r\varepsilon$ | aa class:

gbēr ^{ε/}	gbēyá		gbēr-	"thigh"
kὺkɔ̃r ^{ε/}	kùkōyá		kùkōr-	"voice"
		(but	kùkō-títā'ar	"loud voice" NT)

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	$kar{\imath}'$	k <u>ī</u> - or kā-	"cereal, millet"
lā'af ^o	l <u>ī</u> gıdı	là'- or lì̞g-	"cowrie" pl "money"

Two words have distinct sg- and pl-reference cbs:

dāu	dāp ^a	dàụ-	sg <i>dàp</i> - pl	"man, male person"
tāuň [/]	tāňp ^{a/}	tāuň-	sg <i>tāňp</i> -pl	"sib of opposite sex"

Disambiguation is clearly involved with some longer remodelled cbs:

kàlvg ^o	kòn ^{nε}	kòlvg-	"bag"
lànnıg ^a	lànnıs ^ε	lànnıg-	"squirrel"
kòlvg-kàŋā	"this bag"	cf cb <i>kòl</i> - from	<i>kɔ̃lıg</i> ª "river"
lànnıg-p <u>ì</u> əlıg	"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: $d\dot{a}\underline{u}$ - $s\dot{v}\eta$ "good man", vs sg $d\bar{a}\underline{u}$ "man"; $d\dot{a}p$ - $s\dot{v}ma$ "good men", vs pl $d\bar{a}p$ "men."

Traditionally, remodelled cbs are written as separate words, and as there is no tone marking this may lead to ambiguity: e.g. $yamug\ bipu\eta$ (Acts 16:16, 1976) for $yamug\ bi-pu\eta$ "slave girl" not $yamug\ bi-pu\eta$ "slave's girl" 12.8.1.2.

5.3 Paradigms

By default, class suffixes attach after a stem-final epenthetic vowel or root vowel. Complications arise from consonant assimilation, rounding before $-g_2 -k_2 -\eta_2$, deletion of *g after $aa i \ni u \ni aa \check{n} \in \check{n} \supset \check{n}$, and with CVV-stems before a, u and aa.

5.3.1 a|ba

Most stems ending in consonants straightforwardly show -a in the sg:

sīd ^a	sīdıb ^a	sìd-	"husband"
n <u>ī</u> d ^{a/}	n <u>ī</u> dıb ^{a/}	n <u>ī</u> n- irreg	"person"
sàal ^a	sàalıb ^a	sàal-	"human being"
kpāad ^{a/}	kpāadíb ^a	kpāad-	"farmer"
kūυd ^{a/}	kūυdíb ^a	kบิบd-	"killer"
kpīkp <u>ī</u> n ^{na/}	kpīkp <u>ī</u> nníb ^a	kpīkpín-	"merchant"
yūvm-yû'vm ^{na}	yūvm-yû'vmnìb ^a	yōυm-yû'υm-	"singer"
bì-pīt ^{a/}	bì̞-p̄̄̄tíba	bì-pīt-	"younger child"
wād-tís ^a	wād-tísìb ^a	wād-tís-	"lawgiver" NT
zà'-nō-gúr ^a	zà'-nō-gúrìb ^a	zà'-nō-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>3.8.1</u>. Many also have $n\grave{a}m^a$ plurals.

kùes ^a	kūesıdıb ^a	kùes-	"seller"
dì̞ˈəsa	dį̇̃'əsıdıb ^a	dì̞ˈəs-	"receiver"
tù'as-tù'as ^a	tù'as-tū'asıdıb ^a	tù'as-tù'as-	"talker"
sīgıs ^{a/}	s <u>īg</u> ısídìb ^a	sīฺgเร-	"lowerer"
dìıs ^a	dìıs-nàm ^a	dìıs-	"glutton"

The same behaviour is found with agent nouns from a few other verbs too:

sòs ^a	<i>sōsıdıb</i> a	sòs-	"beggar"	
tìs ^a	tīsıdıb ^a	tìs-	"giver"	WK
kī̞sa/ or ki̞sıda/	k <u>ī</u> sıdíb ^a	kį̇̃sıd- (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"
ňw <u>ī</u> -ték ^a	ňwị-tékìdıb ^a		"rope-puller"

Exceptionally, consonant assimilation of *md does not appear in the plural in

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pu'à-sāň'am<sup>ma</sup> pu'à-sāň'amıdıb<sup>a</sup> pu'à-sàň'am- "adulterer"
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Stems in *VVn*- undergo consonant assimilation in the pl: $*nb \rightarrow mm$:

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sāan<sup>a/</sup> sáam<sup>ma</sup> sāan- "guest, stranger"
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Stems in VVm- have sg -mm instead of -ma. The assimilation $*mb \to mm$ would cause SF sg and pl to coincide segmentally; plurals in $-s\varepsilon$ or $n\grave{a}m^a$ appear instead:

kpį̇̃'im ^m /	kp <u>ī</u> 'imís ^ɛ	kpį̇̃'im-	"dead person, corpse"
$zar{u}$ ' $em^{ ext{m}/}$	zū'amís ^ε	$zar{u}$ ' em -	"blind person"
tādım ^{m/}	$tar{a}d$ ımı $s^{arepsilon}$	tàdım-	"weak person"
	tàdım-nàm ^a		

WK accepted -ba pl forms as LFs but not SFs in the two words

kpēεňm ^m	kpēsňmma LF	only	
	kpèɛňm-nàm ^a	kpὲεňm-	"elder"
<i>b</i> į̄'əm ^m	<i>b</i> į̄'əmma LF	only	
	bị̀'əm-nàm ^a	bị̀'əm-	"enemy"

Stems in l n r following a short root vowel show sg LF $-ll\varepsilon$ $-nn\varepsilon$ $-r\varepsilon$, with the SFs reinterpreted as the outcome of adding $-r\varepsilon$ instead of -a. Sg LF-final $-\varepsilon$ is never seen with ba-plural words in cases where the stem final would not assimilate sg $-r\varepsilon$ 3.5.

The assimilation $*nb \rightarrow mm$ takes place in the plural:

Dàgbān ^{nε} ∕	Dàgbām ^{ma/}	Dàgbān-	"Dagomba person"
B i $n^{n\varepsilon}$	<i>B</i> ìm ^{ma}	Bì n -	"Moba person"
Kὺtān ^{nε/}	Kùtām ^{ma/}	Kùtān-	member of EW's clan
$M\bar{o}r^{arepsilon/}$	Mɔ́ɔm ^{ma} irreg	Mōr-	"Muslim"

Agent nouns from single-aspect verbs with stems in -ll or -r(r) not only show alternative $-\varepsilon$ LF sg forms but also have analogical plurals in -aa alongside -ba.

	йуа̀'an-dэ̀l ^{la}	йуа̀'an-dэ̀llıb ^a	ňyà'an-dòl-	"disciple" NT
	ňyā'an-dɔ́l ^{lε}	ňyā'an-dóllà	ňyā'an-dól-	id WK
	gbàn-zāňl ^{la/}	gbàn-zāňllíb ^a	gbàn-zāňl-	"book-carrier" KT WK
	bὺ-zāňl ^{la/}	bὺ-zāňllíb ^a	bὺ-zāňl-	"goat-carrier" WK
or	bὺ-zāňl ^{lε/}	bὺ-zāňllá		
	gbàn-mɔ̄r ^{a/}	gbàn-mɔ̄ríb ^a	gbàn-mɔ̄r-	"book-owner" DK
	gbàn-tār ^{a/}	gbàn-tāríb ^a	gbàn-tār-	id DK
	bὺ-mɔ̄ra/	bὺ-mɔ̄ríb ^a	bὺ-mɔ̄r-	"goat-owner" WK
or	bὺ-mɔ̄r ^{ε/}	bὺ-mōrá		

There is no single rule for the sg form with stems ending in vowels. Four nouns end in diphthongs in the sg:

dāu		dāp ^a	dàu-, dàp- <u>3.4</u>	"man"
tāuň [/]		tāňp ^{a/}	tāuň-, tāňp-	"sib of opposite sex"
sāeň	WK	sāaňb ^a	sàň-	"blacksmith"
sāeň ^a	DK			
sōeň	WK	sɔ̃ɔňbª	sòň-	"witch"
sōeň ^a	DK			

**CVg*-stems appear in

pu'āa ·	← *pu̯aga	pū'ab ^a	pu'à-	"woman, wife"
bā'a	← *baga	bā'ab ^a	bà'-	"traditional diviner"

Note the irregular long SF vowel of $b\bar{a}$ 'a. Sg final -v is dropped in the cb and pl in

pį̄tύ	<i>p</i> įtíb ^a	p <u>ī</u> t-	"younger sibling
			of same sex"

 $S\grave{a}am-p\bar{i}t^{a/}$ "father's younger brother" and $b\grave{i}-p\bar{i}t^{a/}$ "younger child" are regular. Some CVV stems introduce -d- in the sg and in the pl or cb:

wìıd ^a	wìıb ^a	wìıd-	"hunter"
sōň'ɔd ^{a/}	sōñ'ɔb ^{a/}	sōň'ɔd-	"someone better than"
pū-kpāad ^{a/}	pū-kpāadíb ^a	pū-kpá-	"farmer"

Other CVV stems have become $r\varepsilon|aa$ class, accounting for human-reference nouns in $r\varepsilon|aa$ like $p\dot{v}$ - $k\dot{z}$) \tilde{n} r^{ε} "widow", $d\dot{a}$ - $k\dot{z}$) \tilde{n} r^{ε} "bachelor", $b\bar{i}$ a r^{ε} "elder same-sex sib", $p\dot{z}$ a r^{ε} "cripple", \tilde{n} a r^{ε} r^{ε}

A subclass referring to older/important people has -ba for sg, with pl $nam^a 5.4$:

nà'ab ^a	nà'-nàm ^a	nà'-	"chief"
yáab ^a (*yaagba)	yāa-nám ^a	yāa-	"grandparent"
pùgvdıb ^a	pùgvd-nàm ^a	pùgvd-	"father's sister"
áňsìb ^a	āňs-nám ^a	āĭs-	"mother's brother"
sàam ^{ma} (*mb)	sàam-nàm ^a	sàam-	"father"
dị̀əm ^{ma} (*mb)	dì̞əm-nàm ^a	dì̞əm-	"man's parent-in-law"
dàyáam ^{ma} (*mb)	dàyāam-nám ^a	dàyāam-	"woman's parent-in-
			law"

5.3.2 $ga|s\varepsilon$

Straightforward examples include:

<i>būvg</i> ^a	$bar{v}vs^{arepsilon}$	bὺ-	"goat"
ňwādıg ^{a/}	ňwādιs ^{ε/}	ňwād-	"moon, month"
āaňdıg ^a	$ar{a}$ a $ar{n}$ dı $s^{arepsilon}$	àaňd-	"Vitex doniana"
bù-dìbıg ^a	$b\grave{v}$ - $d\grave{\iota}b\imath s^arepsilon$	bù-dìb-	"male kid"
kpjibıg ^a	kpį̇ibιs ^ε	kpìib-	"orphan"
yàmmıg ^a	yàmmıs ^ɛ	yàm-	"slave"
kɔ̃lıg ^a	kɔ̃lιs ^ε	kòl-	"river"
kpùkpàrıg ^a	kpùkpàrıs ^ɛ	kpùkpàr-	"palm tree"
pūsıg ^{a/}	pūsιs ^{ε/}	pūs-	"tamarind"
z̄ɔɔga	$zar{z}z^{\epsilon}$		"run, race"

Root-stems in $Caa\ Cio\ Cuo\ delete$ the *g of the sg suffix - $ga\ 3.7$:

bāa	bāasε	bà-	"dog"
sīa	$sar{\imath} heta s^arepsilon$	s <u>i</u> à-	"waist"
sàbùa	$s\grave{a}b\grave{u}es^{arepsilon}$	sàbuà-	"lover, girlfriend"

Nasal iaň uaň here alternates with εεň ɔɔň:

zìň'a	zèň'es ^e	zịàň'- or zèň'-	"red" (adjective)
nū'-į́ň'a	$nar{u}$ '- $\hat{arepsilon}ar{n}$ ' $arepsilon s$	nū'-έň'-	"fingernail"
nūa [/]	n̄ɔɔs ^{ε/}	nō-	"hen"

Stems in *CVg- display consonant assimilation in the sg via * $gg \rightarrow kk$:

```
g i k^a g i g i s^{\epsilon} g i g- "dumb person"
```

*Cag- *Ciag- *Ciag- delete *g when there is no assimilation 3.7:

```
z\grave{a}k^a z\grave{a}'as^\epsilon z\grave{a}' "compound" p\mu\bar{a}k^a p\bar{v}'as^\epsilon "genale" (adjective)
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Stems in -m- and -n- show * $mg \rightarrow \eta\eta$ and * $ng \rightarrow \eta\eta$ in the sg, with cbs remodelled on the sg. In the pl * $ns \rightarrow \tilde{s}$ 3.5, but *ms never assimilates in 2-mora stems, and need not do in longer stems. No 3- or 4-mora n-stems occur in this class.

$tar{arepsilon}\eta^{ m a}$	tēɛňs ^ɛ	tὲŋ-	"land"
pàŋ ^a	pàaňs ^ε	pàŋ-	"power"
bὺŋ ^a	$b\grave{v}m\imath s^{arepsilon}$	bὺŋ-	"donkey"
nāŋ ^a	nāmιs ^ε	nàŋ-	"scorpion"
sú'θη ^a	sū'θmίs ^ε	$sar{u}$ ' $ heta\eta$ -	"rabbit"
nį́iŋ ^a	nį́is ^ε	ท <u>เ</u> ิ้เŋ-	"bird"
	n <u>ī</u> imís ^ε		
kùlıŋ ^a	kùlıs ^ɛ	kùlıŋ-	"door"
	kùlımıs ^ε		
kū'alíŋ ^a	kū'alís ^ε	kū'alíŋ-	sleeveless traditional
	$kar{v}$ 'alím $is^{arepsilon}$		smock
mēεdιŋ ^a	mēεdιs ^ε	mὲεdιŋ-	"building tool"
	mēεdιmιs ^ε		
pį̃əsíŋ ^a	p <u>ī</u> əsís ^ε	p <u>ī</u> əsíŋ-	"sponge for washing"
	p <u>ī</u> əsímìs ^ε		

Various irregularities are seen in

b <u>ī</u> ig ^a	b <u>ī</u> is ^ε	bį̄- or bį̀-	"child"
bèrıŋ ^a	bèrıgıs ^ɛ		a plant used for fibre
tàmpūa	tàmpɔ̄ɔs ^ɛ	tàmpò-	"housefly" DK (no \check{n})
būtıŋ ^a	<i>būt</i> τι <i>s</i> ^ε <u>2.3</u>	bùtɪŋ-	"cup"
sāŋá	<i>sānsá</i> /ns/	sān-	"time"

These human-reference nouns have alternative plurals with the suffix -ba:

dàsāŋ ^a	dàsām ^{ma}	dàsàŋ-	"young man"
	or <i>dàsāaňs</i> ε		
<i>Yàaŋ</i> a	Yàam ^{ma}	Yàaŋ-	"Yanga, Yansi person"
	or Yàamıs ^ɛ /Yàañ	s^{ϵ}	
Sà'dàbùa	Sà'dàbùeb ^a		clan name
	or <i>Sà'dàbùθs</i> ε		

Several $s\varepsilon$ -plural stems with rounded root vowels or epenthetic vowels rounded after m have sg gs for the expected ga. WK avoids this with human-reference nouns.

kūug ^{a/} /kūug ^{ɔ/}	kūus ^{ε/}	kū-	"mouse"
$s\dot{v}$ ' $vg^{\mathrm{a}}/s\dot{v}$ ' vg^{o}	$s\dot{v}'vs^{\epsilon}$	$s\dot{v}$ '-	"knife"
nû'ug ^o	nû'us ^ε	$nar{u}$ '-	"hand"
zùnzòŋª/zùnzòŋº	zὺnzὸɔňsε	z <i>ນ</i> ກzວ່ŋ-	"blind person"
$t\grave{arepsilon}\eta ext{-}z\grave{arphi}\eta^{\circ}$	t ὲŋ- z ὺυἤ $s^{arepsilon}$		"foreign land"
but	pịàň'-zùna		"foreign language"
yύ'υη ^ο	yū'υmίs ^ε	yō'υŋ-	"night"
zùuňg ^o	z ùuň s^{ϵ} or z ùuň d^{ϵ}	zùň-	"vulture"
yàmmug ^a WK	yàmmıs ^ε	yàm-	"slave"
or <i>yàmmug</i> o			

Compare Mampruli *nuuwa* pl *nuusi* "hand", *suuwa* pl *suusi* "knife", *kuuwa* pl *kuusi* "mouse", *zuuwa* pl *zuusi* "vulture" (but *yuŋŋu* pl *yunsi* "night.")

Some original $g_{\mathcal{O}}|d\varepsilon$ nouns have substituted pl $-s\varepsilon$ for $-d\varepsilon$ instead of -aa 5.3.3:

	à-dàalúŋ ^ɔ	à-dàalís ^ɛ WK	à-dàalúŋ-	"stork"
		à-dàalímìs ^ɛ		
	sį́'uŋ ^o	s į imí $s^{arepsilon}$	sī̞'uŋ-	a kind of big dish
cf	dìιsύŋ ^ο	dìısís ^ɛ	dìເຣນ໌ŋ-	"spoon"
		dìısímà		

Two words of this type drop -s- from the stem in the plural:

wīlເsઇŋ ^ɔ	wīlımís ^ɛ	wīlısၒŋ-	a kind of snail
yālısúŋ ^ɔ	yālımís ^ε	yālısύŋ-	"quail"

$5.3.3 g_2 | d\varepsilon$

All stems in m n after a short vowel, and all gerunds, use pl aa instead of $d\varepsilon$. Before the sg -go -ko $-\eta o$ stem-final vowels are rounded, changing epenthetic vowels to v and creating rounding diphthongs from root vowels 3.6.

dàvg ^o	$d\grave{a}ad^{arepsilon}$	dà-	"piece of wood"
vāʊňgɔ/	vāaňd ^{ε/}	vāň-	"leaf"
fēň'og ^{ɔ/}	f̄ε̄nັ'εd ^{ε/}	fēň'-	"ulcer"
dàb <u>ī</u> og ^o	dàb <u>ī</u> əd ^ɛ	dàbịà-	"coward"
v <u>ī</u> ug ^{o/}	ν <u>ī</u> id ^{ε/}	v <u>ī</u> -	"owl"
mɔ̄ɔgɔ	$mar{z}$ o $d^arepsilon$	mὸ-	"grass, bush"
dùndùug ^o	dùndùud ^ɛ	dùndù-	"cobra"
	z ù $ed^{arepsilon}$		"friendship"
wābvg ^{ɔ/}	wābιd ^{ε/}	wāb-	"elephant"
zūebúg ^o	$zar{u}\Theta b$ í $d^arepsilon$	zūeb-	"(human head) hair"
bālērvg ^{o/}	bālērıd ^{ε/}	bālér-	"ugly person"
	or <i>bālērιs</i> ε/		
bēsυg ^ο	$bar{arepsilon}s$ ı $d^arepsilon$	bès-	kind of pot

Some stems ending in root vowels have plurals of the form CVt^{ε} 3.4:

 $d \dot{\partial} g^{\circ}$ $d \dot{\partial} d^{\varepsilon}$ or $d \dot{\partial} t^{\varepsilon}$ d $\dot{\partial}$ - "hut, room; clan"

So too $p\bar{\sigma} g^{\circ/}$ "farm, field", $f\bar{u}ug^{\circ/}$ "clothing, shirt." The sg has a short vowel in

 $z \bar{u} g^{\circ /}$ $z \bar{u} t^{\epsilon /}$ $z \bar{u}$ - or $z \bar{u} g$ - "head"

*Cag- *Ciag- *Cuag- stems 3.7 show sg - k° , and ua becomes o before - k° 3.6:

lāuk ^o	lā¹ad [€]		là'-	"(item of) goods"
b <u>i</u> āuňk ^o	bi̯āň'ad ^ɛ	WK	b <u>i</u> àň'-	"shoulder"
	b <u>i</u> āň'ada	SB		
lòk ^o	lὺ'ad ^ε		lu'à-	"quiver (for arrows)"

Stems in *CVd* show -t- in the pl 3.5 via *dd $\rightarrow tt$:

 $\dot{u}dvg^{\circ}$ $\dot{u}t^{\varepsilon}$ $\dot{u}d$ - "(piece of) chaff"

Stems in CVg develop kk in the singular via $*gg \rightarrow kk$:

 $d\bar{v}k^{\circ l}$ $d\bar{v}gvd^{\epsilon l}$ $d\bar{v}g$ - "cooking pot" $d\bar{v}gvb$ $d\acute{v}t^{\epsilon}$ "cooking pots" SB

Stems in *l* develop the cluster *nn* in the pl via *ld \rightarrow *nn*:

 $z\bar{\jmath}l\upsilon g^{\jmath\prime}$ $z\bar{\jmath}n^{n\varepsilon\prime}$ $z\bar{\jmath}l$ "fool" si $l\upsilon g^{\jmath}$ si $n^{n\varepsilon}$ or si $l\iota s^{\varepsilon}$ sil "hawk"

The only m n stems making plurals with $-d\varepsilon$ are CVVC root-stems:

làng \acute{a} u η° làng $\~{a}$ am \acute{a} làng $\~{a}$ v η - "crab" or làng \acute{a} am $^{\mathrm{m}\epsilon}$

So too $m\`{a}ng\'{a}v\eta^{\circ}$ "crab", the plural-only $s\bar{u}\check{n}$ - $p\hat{\varepsilon}\varepsilon n^{n\varepsilon}$ "anger" and perhaps the placename $T\grave{\varepsilon}mp\'{a}an^{n\varepsilon}$ "Tempane", if the second element is from $p\bar{a}al\acute{t}g^a$ "new."

All stems in n m following a short vowel use the plural suffix aa instead of $d\varepsilon$. They show * $mg \rightarrow \eta\eta$ and * $ng \rightarrow \eta\eta$ in the sg, with cbs remodelled on the sg.

gbàuŋɔ gbàna gbàn- or gbàun-"letter, book" zīnzāuŋɔ/ "bat" zīnzāná zīnzáuŋàŭruŋº àŭrıma àŭruŋ-"boat" mālvŋ^o mālıma màlvŋ-"sacrifice"

The expected μ -glide is absent in the sg and cb of

 $n i n - g b i \eta^{5/}$ $n i n - g b i \eta^{6}$ $n i n - g b i \eta^{6}$ "body"

This may represent the influence of the alternate sg form $n_i^n - gb_i^n n^{n\epsilon}$.

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 $r\varepsilon$ 8.1.1. Only stems in -s- and -sim- have plurals, always with -aa:

bū'esύg ^ο	bū'esá	$bar{u}$ ' Θs -	"question"
zàaňsúŋº	zàaňsímà	zàaňsúŋ-	"dream"

Gerunds of 3-mora n-stem verbs never assimilate $*ng \to \eta\eta$, and gerunds of 3-mora m-stems only assimilate $*mg \to \eta\eta$ optionally: thus $d\wr g\iota n\upsilon g^{\circ}$ "lying down", $s\grave{u}nn\upsilon g^{\circ}$ "bowing the head", $z\grave{i}\check{n}'in\upsilon g^{\circ}$ "sitting down", $t\acute{o}\jmath\eta^{\circ}$ or $t\~{o}\jmath\upsilon u\acute{g}^{\circ}$ "departing", $s\grave{a}\check{n}'\upsilon\eta^{\circ}$ or $s\grave{a}\check{n}'am\upsilon g^{\circ}$ "destroying", $k\grave{a}r\upsilon\eta^{\circ}$ or $k\grave{a}r\iota m\upsilon g^{\circ}$ "reading."

The place name $D \grave{\varepsilon} n \upsilon g^{\circ}$ "Denugu" (?? $D \grave{\varepsilon} n n \upsilon g^{\circ}$) also fails to assimilate *ng.

5.3.4 $r\varepsilon |aa|$

Straightforward examples include:

kūgvr ^{ε/}	kūgá	kūg-	"stone"
dìgı $r^{arepsilon}$	dìga	dìg-	"dwarf"
bàlàŋır ^ɛ	bàlàŋa	bàlàŋ-	"hat"
yūgvdır arepsilon	yūgvda	yùgvd-	"hedgehog"
pu'à-sādır ^{ɛ/}	pu'à-sādá	pu'à-sād-	"young woman"
nóbìr ^ɛ	nōbá	nōb-	"leg"
l ī l b l r arepsilon	lī ıba	lìıb-	"twin"
sāngúnnìr ^ε	sāngúnnà	sāngún-	"millipede"
bì̞'isır ^ɛ	b <u>ì</u> 'isa	b <u>ì</u> 'is-	"woman's breast"
sūmmιr ^ε	sūmma	sùm-	"groundnut"

CVV- and CV'V-stems (for the allomorphs before pl -aa see 3.4):

$bar{!} eg r^{arepsilon/}$	b <u>i</u> ēyá	b <u>i</u> ā-	"elder same-sex sib"
$zar{u} heta r^arepsilon$	z <u>u</u> ēya	zuà-	"hill"
nɔ̄ɔr ^{ε/}	пōyá	nō-	"mouth"
$zar{v}vr^{arepsilon}$	zūya	zù-	"tail"
$tar{\imath}tar{a}$ ' $ar^{arepsilon}$	tītāda	tītá'-	"big" (adjective)
йу $ar{arepsilon}$ ' $arepsilon r^{arepsilon/}$	ňуēdá	йу $ar{arepsilon}$ '-	"next-younger sibling"
pòň'ɔr ^ɛ	рòňda	pòň'-	"cripple"
$yar{v}$ ' $vr^{arepsilon/}$	yūdá	yō'-	"name"
$yar{u}$ ' $er^{arepsilon}$	у <u>џ</u> āda	уѝ'өr- <u>5.2</u>	"penis"

Stems in *Cag-*Ciag-*Cuag-3.7 may have forms made by analogy with original CV'V-stems, instead of or alongside forms with vowel fusion:

bà'ar [€]	bà'a or bàda	bà'-	"idol" (Farefare <i>bàgrὲ</i>)
ňyā'ar ^ε	йуā'a	йуа̀'-	"root" ($\leftarrow * \eta \varepsilon g$ -)
sià'ar ^ɛ	sià'a	sià'-	"forest"

bi̯āň'ar ^{ε/}	bi̯áň'a	b <u>i</u> āň'-	"wet mud, riverbed"
mὺ'ar ^ε	mu̯'àa	mu̯'à-	"reservoir, dam"
	or mὺ'ada		
zànkù'ar ^ɛ	zànku'àa	zànkụ'à-	"jackal"
	or zànkù'ada		
kὺndὺ'ar ^ε	kờndụ'àa	kùndu'à-	"barren woman"
	or kừndừ'ada		

So too, even in a case where the glottalisation is not derived from *g:

 $k\dot{l}-d\dot{a}'ar^{\varepsilon}$ $k\dot{l}-d\dot{a}'ada$ WK "bought-in millet"

Stems in deleted *g after a long vowel include fusion verb gerunds 7.1 like $gb\check{a}\check{n}'ar^{\epsilon}$ ($gb\bar{a}\check{n}'e'$ "grab"), $d\acute{i}'e'$ "get"), $d\acute{u}e'$ "rise") and also

 $v u \theta r^{\epsilon}$ v u d a $v u \theta -$ "fruit of red kapok"

Some root-stems show CV with a short vowel before $r\varepsilon$, with cb CVr- 5.2:

 $ab\bar{\epsilon}r^{\epsilon}$ $ab\bar{\epsilon}v\acute{a}$ $ab\bar{\epsilon}r$ "thigh"

Similarly $k \grave{v} k \bar{b} r^{\varepsilon l}$ "voice" $kp\grave{a} k \bar{v} r^{\varepsilon l}$ "tortoise" $g\bar{a} \breve{n} r^{\varepsilon l}$ "ebony fruit" $g\bar{v} mp\bar{v} z\bar{\varepsilon} r^{\varepsilon l}$ "duck" $\breve{n} y \grave{o} - v\bar{v} r^{\varepsilon l}$ "life".

2-mora stem verbs make gerunds in $-r\varepsilon$ instead of $-b\mathfrak{D}$ after a noun cb: $n\bar{\mathfrak{D}}-l\hat{\mathfrak{D}}\mathfrak{D}r^\varepsilon$ "fasting" ("mouth-tying"), $f\bar{u}-y\hat{\varepsilon}\varepsilon r^\varepsilon$ "shirt-wearing"; vowel shortening appears in $n\bar{a}'-l\hat{\mathfrak{D}}r^\varepsilon$ "area in compound for tying up cows" and $wid-l\bar{\mathfrak{D}}r^\varepsilon$ "area for tying up horses."

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 3.3.

kùkpàr ^ɛ	kùkpàra	kùkpàr-	"palm fruit"
kpān ^{nε}	kpāna	kpàn-	"spear"
má'an ^{nε}	mā'aná	mā'an-	"okra"
pį̄bιn ^{nε}	p <u>ī</u> bına	pị̀bın-	"covering"
dūm ^{nε}	dūma	dùm-	"knee"
z̄ɔm ^{nε}	zōɔma	zòɔm-	"fugitive"
yὺυm ^{nε}	уѝта	<i>y</i> ὺυm-	"year" <u>3.4</u>
gbīgım ^{nε}	gbīgıma	gbìgım-	"lion"
$g \acute{arepsilon} l^{\mathrm{l} arepsilon}$	gēlá	gēl-	"egg"
íιl ^{lε}	īılá	<i>เ</i> ีเ <i>l</i> -	"horn"

With unusual sandhi in the sg, and presumably analogical levelling

ňwān^{nε} SB ňwāna NT ňwàn-/ňwàm- "calabash"

ňwām^{mε} WK ňwāma SB WK NT

An exceptional suppletive plural, segmentally and tonally, is seen in

 $d\bar{a}ar^{\varepsilon}$ $d\bar{a}b\acute{a}$ "day"

These two words probably have 1-mora stems:

[Mampruli zari] $z\bar{a}^{\prime}$ $z\bar{a}$ "millet" $y\bar{i}r^{\epsilon\prime}$ $y\bar{a}^{\prime}$ $y\bar{i}$ "house"

Language names 26.4 have the suffix $-l\varepsilon$ after stems ending in a root vowel:

Language Speakers

Kūsâal[€] Kusaal Kūsâasε Kusaasi 3 lcćMMooré Mossi Zàngbèel^e Hausa Zàngbèed^e Hausa Nàsāal^ɛ Nàsàa-nàma Europeans English/French

Stems in -r- show the distinctive assimilation $*rl \rightarrow tt \ 3.5$, but other stems ending in a consonant show forms indistinguishable those with the flexion $r\varepsilon$:

 $Y\bar{a}t^{\varepsilon/}$ Yārıs^ε/ Yarsi Yarsi $B\bar{a}t^{\epsilon/}$ Bārιs^ε/ Bisa Bisa $Nàbur^{\epsilon}$ Nabit. *Nàbidib*^a Nabdema Tùennε $Tùennır^{\epsilon}$ Toende Kusaal Toende area Dàgbān^{nε/} Dàgbām^{ma/} Dagbani Dagomba $Bin^{n\epsilon}$ Bìm^{ma} Moba Moba *Yàan*^{nɛ} Yàaňs[€] Yansi Yansi Gūrín^{ne} Farefare $G\bar{v}ris^{\epsilon}$ Farefare Tàlun^{ne} Tàlıs[€] Tallensi Talni **Bùl**le Buli $Bùlis^{\epsilon}$ Bulsa Àgàl^{lɛ} Àgòlle Agolle Kusaal Agolle area

Unexpected epenthesis occurs in:

 $K\grave{a}mb\grave{v}n\imath^{\epsilon}$ Twi $K\grave{a}mb\grave{v}m\imath^{\epsilon}$ Ashanti $\check{N}w\bar{a}mp\bar{u}r\imath^{\epsilon}$ Mampruli $\check{N}w\bar{a}mp\bar{u}r\imath^{\epsilon}$ Mamprussi

5.3.5 $f_2|_{U}$

mòlıf ^o	mòlı	mòl-	"gazelle"
b <u>ī</u> ilíf ^o	b <u>ī</u> ilí	b <u>ī</u> il-	"seed"
ňy <u>ī</u> ríf ^o	ňy <u>ī</u> rí	йу <u>ī</u> r-	"egusi"
zūríf ^o	zūrí	zūr-	"dawadawa seed"
būn-bύυdìf ^o			"plant"
[Mooré muiifu]	mùi̯	mùi-	"rice"

The plural - $\iota\iota$ causes umlaut of the stem vowels $aa\ i\theta\ \epsilon\epsilon$ to ii.

náaf ^o (*naagfv)	n <u>ī</u> igí	nā'- <u>3.4</u>	"cow"
wáaf³ (*waagfv)	w <u>ī</u> igí	wā'-	"snake"
[Mampruli <i>kaafu</i>]	$k\bar{i}'$	kį- or kā-	"cereal, millet"

Stems in -*n*- show consonant assimilation in the sg with * $nf \rightarrow \tilde{i}f = 3.5$:

nį̄fɔ/	n <u>ī</u> ní	nīn- or nīf-	"eye"
píɪňf ^ɔ	pīıní	pīın-	"genet"
kį́iňf ^o	k <u>ī</u> iní		"millet seed"
zύ'υňf ^o	<i>z</i> ū'ບní		"dawadawa seed"
mį́if ^o	m <u>ī</u> iní		"okra seed"

Sg mif° is remodelled after the umlauted pl: cf ma° "okra." In two words stem -d- is lost in the sg:

wì̞əf ^ɔ	w <u>i</u> dı	wìd-	"horse"
lā'af ^o	l <u>ī</u> gıdı	là'- or lịg-	"cowrie" pl "money"

Some words only have $f_0|u$ class suffixes in one number:

zį́iŋ ^a	zīmí	zīm-	"fish"
wālıg ^a	wālıs ^ɛ or wālí sic	wàl-	a kind of gazelle
sībıg ^{a/}	sī̞bí	sīb-	a kind of termite
s īiň $f^{ m o/}$ or s īiň $g^{ m a/}$	sį̃iňs ^{ε/}	sį̃ň-	"bee"
$sar u$ ň $f^{\scriptscriptstyle { m D}/}$ or $sar u$ uň $r^{\scriptscriptstyle { m E}/}$	sūňyá	sūň-	"heart"
kpá'υŋ ^ɔ	kp <u>ī</u> 'iní	kpā'- irreg	"guinea fowl"

 $P\bar{i}ini$ "gift" reflects a class obsolete in Western Oti-Volta, with aa umlauted to ii by the flexion u: cf Moba $p\bar{a}\bar{a}\dot{b}$ "gift", pl $p\bar{a}\bar{a}n\hat{u}$. It is used as sg, with cb $p\hat{i}in$ -.

5.3.6 ba

Only three bo class nouns have been found which are not gerunds:

$s\bar{a}$ ' ab ^o	sà'-	"millet porridge, TZ"
tāňp ^o	tàňp-	"war" <u>3.4</u>
kī'ıb ^{o/}		"soap"

All regular gerunds from 2-mora-stem dual-aspect verbs belong here <u>8.1.1</u>: stems in b show -p- via * $bb \rightarrow pp$: $s\bar{o}p^{\circ/}$ from $s\bar{o}b^{\epsilon}$ "write", $l\bar{o}p^{\circ/}$ from $l\bar{o}b^{\epsilon}$ "throw stones at", and stems in m show * $mb \rightarrow mm$: $k\bar{\iota}m^{m\circ}$ from $k\dot{\iota}m^m$ "tend a flock/herd", $w\bar{v}m^{m\circ}$ from $w\dot{v}m^m$ "hear." Stems in n do not assimilate, however: $b\bar{u}n\iota b^\circ$ from $b\dot{u}n^\epsilon$ "reap."

 $Y\bar{i}s^{\varepsilon}$ "make go/come out" has the expected gerund $y\bar{i}sib^{\circ}$; the alternate form $y\bar{i}is^{\varepsilon}$ has $y\bar{i}is^{\delta}$, the only 3-mora stem in the $b\circ$ class.

5.3.7 mm

Most words in this class are mass nouns. Straightforward forms include:

dāam ^{m/}	dā-	"millet beer, pito"
mèlıgım ^m		"dew"
kūdım ^m		"olden days"
dū'uním ^m	dū'un-	"urine"
dàalım ^m		"masculinity"
yàarım ^m	yàar-	"salt"
zāaňsím ^m	zāaňs-	"soup"

M-stems can be identified from cbs in m, pls in -ma or $-mis^{\epsilon}$, or non-initial H tonemes in Pattern L 3.8.1.

νōm ^{m/}		ν ū m-	"life"
kūm ^m		kùm-	"death"
zōm ^{m/}		zōm-	"flour"
bùgóm ^m		bùgóm- or bùgōm-	· "fire"
yā'am ^{m/}		yā'am-	"gall; gall bladder"
pūum ^{m/}		pūum-	"flowers, flora"
bị̀'isím ^m			"milk"
dàalí m ^m	dàalímìs ^ɛ	dàalím-	"male sex organs"
p <u>ī</u> im ^{m/}	p <u>ī</u> má	p <u>ī</u> m-	"arrow" <u>3.4</u>

 $P\bar{\imath}im^{\mathrm{m}/}$ "arrow" is a remnant of an old "long, thin things" $\flat|\varepsilon$ class, preserved in e.g. the Gurma languages and Nawdm: cf Nawdm fiimi "arrow", plural fiimi.

5.4 Nàm plurals

 $N\grave{a}m^a$ is not a suffix, but a NP head, with a predependent noun appearing as cb for count nouns $(kp\bar{\epsilon}\epsilon\check{n}m^m \text{ pl }kp\grave{\epsilon}\epsilon\check{n}m^-n\grave{a}m^a \text{ "elder"})$ and as sg or pl for mass nouns $(s\bar{a}^iab\ n\acute{a}m^a\text{ "portions of porridge"},\ b\grave{u}g\acute{o}m\ n\acute{a}m^a\text{ "fires, lights."})$

 $N\grave{a}m^a$ is used with loanwords, pronouns <u>12.4</u>, quantifiers <u>12.5</u>, plurals with singular meaning and mass nouns with count meaning <u>12.2</u>, and with forms with the personifier particle <u>12.6</u>. It is also used to avoid ambiguous regular plurals, with nouns using -ba as sg <u>5.3.1</u>, and to pluralise the bare-root sg forms of

mà	mà nám ^a	mà-	"mother"
	(tone sic, as if	uncompounded)	
bā' [/]	bā'-nám ^a	bā'-	"father"
zuà	zuà-nàm ^a	zuà-	"friend"

5.5 Loanwords

Loanwords 11.1 adopt noun classes by analogy or make $n \grave{a} m^a$ plurals:

ga sε: àre	razàk ^a	àrazà'as ^ɛ	àrazà'-	"riches"
mà	àli̯āk ^{a/}	màlj਼ā'as ^{ε/}	màljā'-	"angel" DK
gɔ dε: gā	idvg ^{o/}	$gar{a}t^{arepsilon/}$	gād-	"bed"
lòr	mbà'ɔgº	lòmbò'ɔd ^ɛ	lòmbò'-	"garden"
rε aa: lớr	rE	lớyà or lớəm ^{ma}	lór-	"car, lorry" (cf $M\bar{o}r^{\varepsilon}$)
àlá	ó p ìr ^ε	àlớpìya		"aeroplane" SB
wā	ādır ^{ɛ/}	wādá	wād-	pl "customs, law"
gā	idυ	gādv-nám ^a	gādv-	"bed" WK
kè	ekè	kèεkè-nàm ^a	kèekè-	"bicycle"
dā	iká	dāká-nàm ^a	dāká-	"box"
tέε	εbὺl ^ε	tέεbὺl-nàm ^a	tέεbὺl-	"table"
Nà	àsāara	Nàsàa(r)-nàm ^a	Nàsàa(r)-	"European" <u>26.4</u>

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 4.4.3:

```
dΰ'atà nâ'ab"a doctor's chief"dΰ'atà-nà'ab"a doctor-chief, doctor who is a chief"
```

Some all-M loanwords change final M to H in the cb on the analogy of Kusaal nouns with M toneme noun prefixes 3.8.1: $d\bar{u}n_1ya$ "world", $d\bar{u}n_1ya$ -kà $\eta\bar{a}$ "this world."

6 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-pị̀əlıgª	bὺ-pị̀əlιs ^ε	bù-pị̀əl-	$(ga s\varepsilon)$	"white goat"
bὺ-pị̀əl ^{lε}	bù-pị̀əla	bù-pị̀əl-	$(r\varepsilon aa)$	id

A few traces of agreement remain, accounting for all cases with mm 12.8.1. There is also some preference for $ga|s\varepsilon$ suffixes for human reference: $n\bar{\imath}n$ -sábilìs $^{\varepsilon}$ "Africans", where $n\bar{\imath}n$ -sábilà is accepted by informants but is much less common, and $Z\mu\dot{a}$ - $w\dot{\imath}is^{\varepsilon}$ "Red Zoose" (clan), where the adjective does not normally use pl $s\varepsilon$. The suffixes a|ba and fo|u appear only in set expressions; bo never occurs at all.

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 ga|se and go|de classes:

	zìň'a zèň'og°	zèň'es ^e zèň'ed ^e or zèňda	zὲň'-	"red"
	b <u>ī</u> 'a	$bar{\imath}$ 'ə $s^arepsilon$	b <u>i</u> à'-	"bad"
	bē'og ^o	$bar{arepsilon}'arepsilon d^arepsilon$	bὲ'-	
also	$bar{arepsilon}'arepsilon d^arepsilon$ sg	<i>bὲ'εd-nàm</i> ª pl		

Other adjectives are either ga- or go-type, along with $r\varepsilon|aa$ class suffixes; this probably reflects simplification of the old agreement system prior to its complete abandonment. Adjectives of the ga type include:

wàbıg ^a	wàbıs ^ɛ	wàb-	"lame"
wàhir ^E	wàha		

vènnıg ^a	vènnıs ^ε	vèn-	"beautiful"
<i>vènnır</i> ^ɛ rare	vènna		
vèňllıg ^a	vèňllıs ^ɛ		"beautiful"
	vèňlla		
sābīlíg ^a	sābılís ^ε	sābīl-	"black"
•		Subti-	bidek
sābíl ^{lɛ}	sābılá		

Similar are $w\bar{\varepsilon}nn\imath r^{\varepsilon}$ "resembling" $p\bar{a}alig^a$ "new" $z\acute{a}al^{l\varepsilon}$ "empty" $b\grave{a}a\breve{n}l\imath g^a$ "slim" $p\grave{\imath}ol\imath g^a$ "white."

Sg $r\varepsilon$ is not used with ga-type stems in m n:

$$dar{arepsilon} arepsilon^{
m a}$$
 $dar{arepsilon} arepsilon^{arepsilon}$ $dar{arepsilon} arepsilon^{arepsilon}$ "first" $dar{arepsilon} arepsilon arepsilon$ $dar{arepsilon} arepsilon$ $dar{arepsilon} arepsilon$

Pl $s\varepsilon$ is not used with 2-mora stems in m n, or with any stems in s d:

gįŋa	g <u>ī</u> ma	g <u>ì</u> ŋ-	"short"
būgvsíg ^a būgvsír ^ɛ	būgvsá	būgvs-	"soft"
pòodīg ^a pòodīr ^ɛ	pòɔda	pòɔd-	"few, small"

Similarly $m\bar{a}$ ' $asir^{\varepsilon}$ "cold, wet" $m\bar{a}lisir^{\varepsilon}$ "sweet" $t\bar{\varepsilon}bisir^{\varepsilon}$ "heavy" $l\bar{a}bisir^{\varepsilon}$ "wide." Adjectives of the go-type only show pl $d\varepsilon$ in a few 2-mora stems ending in vowels or plosives:

nèog ^o	nèɛd ^ɛ	nὲ-	"empty"
nèer ^e	nèya		
)	,	
wìug ^o	wļid ^ɛ	w <u>i</u> -	"red"
w <u>ì</u> ir ^ɛ	w <u>ì</u> ya		
wōk ^{o/}	wā¹ad ^{€/}	wā'- or wōk-	"long, tall"
=18/			3,
<i>wā'ar</i> ε∕ rare	wá'a		

kūdug ^o	$kar{v}t^{arepsilon}$ rare	kùd-	"old"
kūdır ^ɛ	kūda		
bèdvg ^o		bèd-	"great"
<i>bèdır</i> ^ε rare	bèda		
$t\bar{\imath}t\bar{a}'vg^{\circ}$ rare	tītāda	tītá'-	"big"
tītā'ar ^ɛ			

Adjectives of the $g_{\mathcal{D}}$ -type with stems in $l \ m \ n \ r \ s$ do not use sg $r_{\mathcal{E}}$, and accordingly end up with sg $g_{\mathcal{D}}$ pl aa only:

$s\grave{v}\eta^{\circ}$	sùma	sùŋ-	"good"
kį́sùg ^o	k <u>ī</u> sá	k <u>ī</u> s-	"hateful, taboo"
dà-zēmmúg ^o	dà-zēmmá	dà-zēm-	"equal piece of wood"
tūvlúg ^o	tūυlá	$tar{v}v$ l-	"hot"
lāllúg ^o	lāllá	lāl-	"distant"
mị̀'isvg°	m <u>ì</u> 'isa	mì̞'is-	"sour"
wàṇŋ ^ɔ	wàna	wàuŋ-	"wasted, thin"
kpį̇˙oŋɔ	kp <u>ī</u> 'əma	kpį̀'oŋ-	"hard, strong"
zùlvŋ ^ɔ	zùlıma	zùlvŋ-	"deep"
y <u>ī</u> -póňrùg ^o	yī̞-pớňrà		"nearby house"

Similarly $y \grave{a} l \upsilon \eta^{\circ}$ "wide" $\check{n} y \bar{a} l \upsilon \eta^{\circ}$ "wonderful" $y \bar{e} l - n \acute{a} r \upsilon \eta^{\circ}$ "necessary thing." Deverbal adjectives 9.2.1.2 of the **resultative** type derived with *- $l \iota m$ - belong here. KT (but not WK) also has forms without -m- in both sg and pl:

kpį̀ilύη ^ο	kpļilímà	kpįilúŋ-	"dead"	WK
n <u>ī</u> n-kpį́ilùg ^o	n <u>ī</u> n-kpíilìma		"dead person"	KT
gēεňlύη ^ο	gēɛňlímà	gēεňΙύη-	"tired"	WK
n <u>ī</u> n-gέεňlùg ^o	n <u>ī</u> n-gέεňlìma		"tired person"	KT
pὲ'εlύŋ ^ɔ	pè'ɛlímà	pὲ'εlύŋ-	"full" W	K KT
	dūg-pέ'εlà		"full pots"	KT

Deverbal adjectives of the **habitual** type are derived with d, but the d is often assimilated or dropped, so not all habitual adjectives are d-stems. They are ga-type for WK, but ga-type for KT. In either case, the pl suffix is always aa, as expected:

kūvdír ^ε	kūvdá	kūυd-	"murderous;
kōυdíg ^a WK			liable to be killed"
kῦυdύg ^ο KT			

$tar{v}mm$ ı $r^arepsilon$	tūmma WK	tùm-	"working, helpful"
	tūmna KT		
s įnní $r^{arepsilon}$ rare	s <u>ī</u> nná	s <u>ī</u> n-	"silent"
s <u>ī</u> nníg ^a			
m̄ɔrε∕	mōrá	mōr-	"having"
kὺg-dēl ^{lε/}	kùg-dēllá		"chair for leaning on"

Stems in $g k \eta$ do not use the sg suffixes ga go:

būn-túlıgìr ^ε	būn-túlıgà		"heating thing"
ňwị-tékìr ^ε	ňw <u></u> ī-tékà	ňwị̄-ték-	"pulling-rope"
$bar{v}$ n- $s\dot{v}$ ŋ $r^arepsilon$	būn-súŋà		"helpful thing"

Adjectives derived from 4-mora stem verbs in -m in KT's speech take ga or go sg and aa pl; they may drop the -m- in the plural:

n <u>ī</u> n-pύ'alìŋ ^a	n <u>ī</u> n-pú'alìma	"harmful person"
n <u>ī</u> n-záaňsùŋɔ	n <u>ī</u> n-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:

νōr ^{ε/}	νōyá	νōr-	"alive"
dāvg ^o	$dar{a}ad^{arepsilon}$	dà-	"male"
tōɔgɔ	$tar{c}c$	tò-	"bitter"
puāk ^a	$par{v}$ ' $as^arepsilon$	pu'à-	"female" (human)
йуа́'аŋ ^а	ňyá'as ^ε	йуā'aŋ-	"female" (animal)
	or <i>ňyā'am</i> ίs ^ε		
ňyὲεsίη ^a	ňyὲεnsίs ^ε	ňyὲεsίŋ-	"self-confident"

and similarly $\nu\grave{\epsilon}\check{n}ll\acute{t}\eta^a$ "beautiful" $m\bar{a}l\imath s\acute{t}\eta^a$ "pleasant" $l\bar{a}ll\acute{t}\eta^a$ "distant."

```
bar{\imath}l^{\mathrm{a}} bar{\imath}b\imath s^{\varepsilon} b\dot{\imath}l- or b\dot{\imath}- "little"
```

The sg flexion -la is found more widely in other Western Oti-Volta languages, where it has a diminutive sense: thus Farefare $ni\hat{l}a$ "chick", piila "lamb", budibla "boy", pugla "girl", kiila "young guinea fowl"; Mooré biribla "boy", bipugla "girl", bulla "kid." The plural stem bib- is reduplicated.

7 Verb flexion

Though written solid with the verb in traditional orthography, discontinuous-past n^{ϵ} 16.3.2 and the 2pl subject ^{ya} 18.3 are not flexions but bound liaison words.

7.1 Dual-aspect

Some 90% of verbs are dynamic $\underline{16.2}$ **dual-aspect** verbs, using the stem form for perfective aspect and adding -da for imperfective. Synchronically, -da 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 -ma marks imperative mood whenever the verb carries the independency-marking tone overlay $\underline{16.6.2}$.

Perfective, imperfective and -ma imperative are cited in order. Straightforward examples include:

$kar{v}$	kūυd ^{a/}	kùvm ^a	"kill"
kpèň'	kpὲň'εd ^a	kpὲň'εm ^a	"enter"
k <u>i</u> à	k <u></u> jəd ^a	kì,əm ^a	"cut"
k <u>u</u> ā	kū⊖d ^{a/}	kùøm ^a	"hoe"
gòň	gòɔňd ^a	gòɔňm ^a	"hunt"
$dar{v}g^{arepsilon}$	dūgvd ^{a/}	dùgvm ^a	"cook"
yùug ^ɛ	yùugıd ^a	yùugım ^a	"delay, get late"
yād≀g ^{ε/}	yādıgíd ^a	yàdıgım ^a	"scatter"
pįāň' ^a	pi̯āň'ad ^{a/}	pi̯àň'am ^a	"speak; praise"
d <u>u</u> 'à ^a	dὺ'ad ^a	dὺ'am ^a	"bear, beget"
nōk ^{ε/}	nōkíd ^a	nòkım ^a	"take"
$gar{a}\eta^{arepsilon/}$	gāŋíd ^a	gàŋım ^a	"choose"
kpàr ^ε	kpàrıd ^a	kpàrım ^a	"lock"
$sar{u}gvr^{arepsilon/}$	sūgvríd ^a	sùgvrım ^a	"forgive"
$b\grave{a}s^{arepsilon}$	bàsıd ^a	bàsım ^a	"go/send away"
sį̃gιs ^{ε/}	s <u>ī</u> gısíd ^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- 3.4:

dì	d ì $t^{ m a}$	dìm ^a	"eat"	
ทังยิ	ňνēt ^{a/}	ňνὲma	"see"	

and likewise $l \hat{l} / l \hat{u}$ "fall", $d \bar{v}$ "go up", $y \bar{l}$ "go/come out", $z \hat{c}$ "run, fear."

Stems in -d- show -t- in the ipfv via * $dd \rightarrow tt$:

 $b\dot{v}d^{\epsilon}$ $b\dot{v}t^{a}$ $b\dot{v}d\iota m^{a}$ "plant" $g\dot{a}ad^{\epsilon}$ $g\dot{a}t^{a}$ 2.2 $g\dot{a}ad\iota m^{a}$ "pass, surpass"

Stems in *l* generate a cluster in the ipfv via * $ld \rightarrow nn \ 3.5$:

 $v\bar{v}l^{\epsilon}$ $v\bar{v}n^{\mathrm{na/}}$ $v\dot{v}lim^{\mathrm{a}}$ "swallow" $m\dot{a}al^{\epsilon}$ $m\dot{a}an^{\mathrm{na}}$ $m\dot{a}alim^{\mathrm{a}}$ "make; sacrifice" $d\bar{i}gil^{\epsilon/}$ $d\bar{i}gin^{\mathrm{na}}$ $d\dot{i}gilm^{\mathrm{a}}$ "lay down"

Only 2-mora *b*-stems assimilate * $bm \rightarrow mm$:

lὲbε lèbida *lèm*^{ma} "return" sɔ̄bɪda/ sàm^{ma} "write" $s\bar{b}^{\varepsilon}$ lìəbε lìəbıda lìəbıma "become" $\bar{\varepsilon}\varepsilon nb^{\varepsilon/}$ Ēεňbída ὲεἤbιma "lay a foundation"

Only 2-mora *n*-stems show *nd $\rightarrow nn$; only $k\bar{\epsilon}\eta^{\epsilon}$ (below) shows *nm $\rightarrow mm$:

bùnε *bùn*^{na} *bùnım*^a "reap" mōn^{na/} m̄ɔ̄nε mònım^a "make porridge" gà'on^ε gà'ɔnıma "extend neck" gò'ənıd^a dìgınıma $digin^{\epsilon}$ dìginida "lie down"

The nn-stem sun^{ε} does not assimilate at all:

 $sùn^{n\epsilon}$ $sùnnid^a$ $sùnnim^a$ "bow head"

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 3.5.

sìilım ^m	sìilım ^{ma}	sìilım ^{ma}	"quote proverbs"
lāŋím ^m	lāŋím ^{ma}	làŋım ^{ma}	"wander searching"
kàrım ^m	kàrım ^m /kàrımıd ^a	kàrım ^{ma}	"read"
tōɔm™/	tɔ́ɔm ^{ma} /tɔ̄ɔmída	tàɔm ^{ma}	"depart"
tùm ^m	tùm ^{ma}	tùm ^{ma}	"work"

Like $t\grave{v}m^m$ are $w\grave{v}m^m$ "hear", $k\grave{v}m^m$ "tend a flock or herd", $d\grave{v}m^m$ "bite."

Stems in *-mm-* only assimilate in the imperative:

tàm^m tàmmıd^a tàm^{ma} "forget"

Like $t\grave{a}m^{\mathrm{m}}$ are $z\grave{a}m^{\mathrm{m}}$ "cheat, betray", $d\grave{a}m^{\mathrm{m}}$ "shake", $l\grave{\varepsilon}m^{\mathrm{m}}$ "sip, taste"; the cognate Mooré verbs have -mb-: $z\~{a}mbe$ "cheat", $r\~{a}mbe$ "stir", $l\grave{\varepsilon}mbe$ "taste".

Fusion verbs show deleted *g after aa iə uə $aa\check{n}$ $\varepsilon\varepsilon\check{n}$ $oo\check{n}$ 3.7. *G-deletion appears only in the perfective and gerund; elsewhere *g is absent, not deleted (for the tonal implications see 3.8.2.) For the perfective forms before liaison see see 4.2.

fāeň [/]	fāaňd ^{a/}	fàaňm ^a	"save"
$d\bar{\it i}$ ' $e^{\it l}$	dį̄'əda∕	dì̞'əm ^a	"get, receive"
dūe [/]	dū⊖d ^a /	dùøm ^a	"rise, raise"
pūň'e [/]	pūň'ed ^{a/}	рѝй'өт ^а	"rot" WK

Irregular dual-aspect verbs are few. Only two are irregular in the actual flexional suffixes taken:

$kar{arepsilon}$	kēt ^{a/}	kèl ^a	"let, allow"
kēň	$kar{arepsilon}n^{\mathrm{a}/}$	kèm ^a	"come"

All others show a derivational suffix in the perfective which is dropped in the imperfective. This suggests a survival of older patterns: outside the Western group, Oti-Volta languages often drop perfective suffixes when forming imperfectives. Nawdm has a regular conjugation which drops pfv g in the ipfv, e.g jehlg pfv "poser verticalement", jehla ipfv.

w <u>ì</u> k ^ɛ	w <u>ì</u> id ^a <u>3.4</u>	w <u>ì</u> kım ^a	"fetch water"
įāňk ^{ε/}	i̯āňˈad ^{a/}	<u>j</u> àňkım ^a	"leap, fly"
g <u>ī</u> lıg ^{ε/}	g <u>ī</u> n ^{na/}	gìlıgım ^a	"go around"
kēŋ ^{ε/}	kēn ^{na/}	kèm ^a	"go"
yèl ^ε	yèt ^a	yèlım ^a	"say"
$gar{\jmath}s^{arepsilon}$	gɔ̄sıd ^{a/}	gòsım ^a	"look"
	or <i>gɔ̄t</i> a/	gòm ^a	
t i $s^{arepsilon}$	tìsıd ^a	tìsım ^a	"give"
	or <i>t</i> ìt ^a		

A perfective ti may appear before bound object pronouns, e.g. ti f "give you."

7.2 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** 16.2; 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:

```
m\bar{l} "know" z\bar{l} "not know" b\hat{\varepsilon} "be somewhere, exist" k\bar{a}'\bar{\varrho} "not be" (\leftarrow *kagle) t\bar{u}\bar{n}'e "be able" 19.1 n\hat{\rho}^{\varepsilon} "love"
```

Uniquely among single-aspect verbs, $n \partial \eta^{\epsilon}$ has a ma-imperative $n \partial \eta \iota m^{a}$, used when the verb word carries the tone overlay of independency marking. Unlike perfectives, these forms are never followed by particle $y\bar{a}$ 16.6.2. The Pattern A verbs $b\dot{\epsilon}$ and $n\partial\eta^{\epsilon}$ have M tone before liaison-word pronouns and are followed by M spreading even when not subject to the tone overlay of independency marking 4.4.3.

```
\dot{M} n \acute{o} \eta. "I love him." (e.g. in reply to a question) not *\dot{M} n \acute{o} \eta y \ddot{a} specifically stated to be impossible by WK
```

Mit ka Zugsob tumtum a one non zaba.

```
Mìt kà Z\bar{u}g-sób tóm-tōm á ónì nòŋ zábāa=ø. NEG.LET.IMP and head-NULL.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 nóη ̄ f. "And she loves you."
```

The agent noun $n \partial \eta i d^a$ has Pattern L instead of the expected A:

```
Ò nòŋıd kā'e. "There's nobody who loves him." WK
```

The majority of single-aspect verbs have the suffix *-ya. Nawdm has many imperfective-only verbs of parallel structure, like jehira ipfv "etire debout" = Kusaal zi'ei'ei', where Nawdm r and Kusaal y both represent Proto-Oti-Volta *r. With only one aspect, these verbs have not undergone the extensive levelling which has made dual-aspect -da 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 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 $l\ r\ 3.5$.

Dynamic verbs with unassimilated *y* mostly express **stances**:

į̄gι ^{ya/}	"be kneeling"	dīgı ^{ya/}	"be lying down"
νābι ^{ya/}	"be prone"	làbı ^{ya}	"crouch in hiding"
tàbı ^{ya}	"be stuck to"	z ị' e^{ya}	"be standing still"
zìň'i ^{ya}	"be sitting"	tī̞'i ^{ya} /	"be leaning (object)"
<i>ą</i> 5¹e ^{ya} / WK	"have neck extended"	wà'e ^{ya}	"travel to"

Statives include transitive and intransitive types:

```
\grave{a} \slashed{e} \check{n}^a "be something/somehow" s \bar{v} \slashed{e} \slashed
```

Stance verbs with unassimilated y have derived inchoative and causative dual-aspect verbs in n and l 9.1.1. 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 -da 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
                                         "She doesn't sit down." KT
       Ò pū zíň'inìdā.
but
       Ò vàbi nē.
                                         "He's lying prone."
       Ò pō vābidá.
                                         "He doesn't lie prone." WK
but
       Ò pō vábınìdā.
                                         "He doesn't lie prone." KT
       Ò dì qu nē.
                                         "She's lying down."
       Ò pū dīgidá.
                                         "She doesn't lie down" WK
                                         "It's standing up."
       Lì zị'ə n\bar{\varepsilon}.
       Lì pū zí 'ədā.
                                         "It (a defective tripod) doesn't stand up." WK
                                         "It's leaning against something."
       Lì tì'i n\bar{\epsilon}.
       Lì tì'id.
                                         "It can be leant against something." WK
       Lì pū tī'iyá.
                                         "It's not leaning against something."
                                         "It's not for leaning against something." WK
       Lì pū tī'idá.
```

Dynamic single-aspect verbs in $nn \ mm \ ll \ r(r)$ include stance verbs and others:

sį̄n ^{na/}	"be silent"	dēl ^{la} ∕	"be leaning (person)"
gùl ^{la}	"be hanging"	<i>gōl</i> la∕ KT	"have neck extended
<i>dōl</i> la∕	"accompany"	zāňl ^{la/}	"carry in one's hands"
gūr ^{a/}	"guard"	tèňr ^a	"remember"
sùr ^a	"have head bowed"	<i>q5r</i> a∕ DK	"have neck extended"

They make imperfective gerunds; in these and in agent nouns, deverbal adjectives and instrument nouns, the stem is in $nn \ mm \ ll \ r(r)$ 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:

$nar{arepsilon}n^{ ext{na/}}$	"envy"	vèn ^{na}	"be beautiful"
$war{arepsilon}^{ m na/}$	"resemble"	kpį̇̃'əm ^{ma/}	"be strong"
kpēεňm ^{ma/}	"be older than"	zùlım ^{ma}	"be deep"
sùm ^{ma}	"be good"	gīm ^{ma/}	"be short"
yàlım ^{ma}	"be wide"	$zar{arepsilon}^{ m ma/}$	"be equal to"
tàdım ^{ma}	"be weak"	wā'am ^{ma/}	"be long, tall"
vèňl ^{la}	"be beautiful"	<i>lāl</i> ^{la/}	"be far from"
$tar{v}l^{\mathrm{la}/}$	"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 3.5.

A number of stative verbs end in -sa:

mị̀'is ^a	"be sour"	$bar{v}gvs^{\mathrm{a}/}$	"be soft"
mā'as ^{a/}	"be cool"	tēbιs ^{a∕}	"be heavy"
mālıs ^{a/}	"be sweet"	lāb≀s ^{a/}	"be wide"
ňγὲεs ^a	"be self-confident"	kīs ^{a/}	"hate"

The s of these forms is a derivational suffix producing stative forms.

There is one intransitive stative verb in -da: pòoda "be few, small."

Some dual-aspect-verb imperfective forms have become independent stative verbs, e.g. $b \grave{>} o d^a$ "want, like" ($b \grave{>}$ "seek"), $z \grave{>} t^a$ "fear" ($z \grave{>}$ "run.")

8 Stem conversion

8.1 Nouns from verbs

8.1.1 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. For gerund Tone Patterns see 3.8.4.

Gerunds may be used as abstract count nouns describing particular instances of the activity of the verb, and may then have plurals 12.2.

Dual-aspect verbs form gerunds by adding the following class suffixes to the stem. 3-mora stems ending in underlying *g replace the -g suffix with $-r\varepsilon$.

```
2-mora stems
                                                                -bo but -re as final part of a compound
3-mora stems in *q
[surface -a^{\varepsilon} - k^{\varepsilon} - n^{\varepsilon} - ae - ie - ue]
                                                                -re
all others
                                                                 -go
                                                                k\bar{\nu}\nu b^{5/}
kΰ
                      "kill"
                                                                dūqub<sup>5/</sup>
d\bar{v}a^{\varepsilon}
                     "cook"
                                                                d\bar{v}'ab^{\circ}
du'àa
                      "bear, beget"
kàd<sup>ε</sup>
                      "drive away"
                                                                kādıb<sup>o</sup>
                      "cover"
                                                                pįlıbo
pil^{\epsilon}
                     "lock"
                                                                kpārīb<sup>o</sup>
kpar^{\epsilon}
b\grave{a}s^{\epsilon}
                                                                bāsıb<sup>o</sup>
                      "abandon, go away"
                     "write"
s\bar{b}^{\varepsilon}
                                                                s\bar{p}^{0/2}
lɔ̄bε
                      "throw stones at"
                                                                lōp<sup>5</sup>/
kìm<sup>m</sup>
                      "tend a flock/herd"
                                                                kīm<sup>mo</sup>
wimm
                     "hear"
                                                                 w\bar{b}m^{mo}
```

2-mora *n*-stems do not assimilate * $nb \rightarrow mm$: bun^{ϵ} "reap", gerund $bun\iota b^{\circ}$.

```
γùugε
                        "delay"
                                                                         yùugvr^{\varepsilon}
nōk<sup>ε/</sup>
                        "take"
                                                                         nōkírε
                        "doing"
                                                                         ninir^{\epsilon}
nin^{\epsilon}
                        "grab"
abāň'e/
                                                                         abáň'ar<sup>€</sup>
d\bar{\imath}'e'
                                                                         di' \partial r^{\varepsilon}
                        "get"
dūe/
                        "rise"
                                                                         dúer<sup>ε</sup>
```

```
aàad€
                   "(sur)pass"
                                                          gàadvg<sup>o</sup>
lìəbε
                   "become"
                                                          lìəbvg<sup>o</sup>
diail^{\epsilon}
                   "lav down"
                                                          dīailúa
vāarε/
                   "scatter"
                                                          γāarúg<sup>o</sup>
sīais<sup>ε/</sup>
                   "lower"
                                                          sīgisúg<sup>o</sup>
dàm<sup>m</sup>
                   "shake"
                                                          d\grave{a}mm\upsilon q^{3} (and thus with all mm-stems)
```

3-mora *n*-stems never assimilate * $nq \rightarrow \eta \eta$:

```
digin^{\epsilon}"lie down"diginvg^{\circ}zįň'in^{\epsilon}"sit down"zįň'in^{\epsilon}
```

3-mora *m*-stems assimilate * $mg \rightarrow \eta \eta$ optionally:

4-mora stems in -sim -lim follow the rule and use -go (always assimilating), but stems in *-gim drop the -m- and use - $r\varepsilon$:

```
silim^{m} "cite proverbs" sili\delta \eta^{o} zàa\check{n}sim^{m} "dream" zàa\check{n}sim^{o} "wà\eta_{i}m^{m} "waste away" wà\eta_{i}r^{\varepsilon} lā\etaim^{m} "wander" lā\etair^{\varepsilon} zàkim^{m} "itch" zàkir^{\varepsilon}
```

2-mora stems regularly use $-r\varepsilon$ instead of -bo in compounds:

```
p \mu' \dot{a} - d \bar{\imath} \iota r^{\epsilon} "marriage" n \bar{\imath} n - k \hat{\upsilon} \upsilon r^{\epsilon} "murder" d \bar{a} - n \hat{\iota} u r^{\epsilon} "beer-drinking" m \dot{\jmath} - p \bar{\imath} l^{l \epsilon} "grass roof" f \bar{\iota} - \nu \hat{\epsilon} \epsilon r^{\epsilon} "shirt-wearing" WK
```

Irregular gerunds are rare with stems of three or four morae. A few are formally plural $\underline{12.2}$, and $y\bar{\imath}is^{\varepsilon/}$ "make go/come out" has $y\bar{\imath}isib^{\circ}$. Most irregular 2-mora stem verbs have regular gerunds, e.g. tis^{ε} "give" $\to t\bar{\imath}sib^{\circ}$, $k\bar{\varepsilon}$ "let" $\to k\bar{\varepsilon}\varepsilon b^{\circ/}$, $give^{\varepsilon}$ "suspend" $\to g\bar{\nu}lib^{\circ}$. However, almost 20% of 2-mora-stem verbs in KED use suffixes other than bo; many of these have stems ending in m or b. Most irregular gerunds are tonally regular, but forms with -go from Pattern A verbs are Pattern L unless variants with ga or $s\varepsilon$ show that the word is $ga|s\varepsilon$ with LF remodelling $\underline{5.3.2}$.

```
"fall"
                                                                                                                                                                                                                                                                                                                                           līiga
lì
zī
                                                                                                                "carry on head"
                                                                                                                                                                                                                                                                                                                                           zīid<sup>ε/</sup>
                                                                                                               "fall ill"
bèň'
                                                                                                                                                                                                                                                                                                                                           b\bar{\varepsilon}\breve{n}'\varepsilon s^{\varepsilon}
                                                                                                                                                                                                                                                                                                                                           kēn<sup>nε/</sup>
kēň
                                                                                                                "come"
                                                                                                               "run"
zà
                                                                                                                                                                                                                                                                                                                                           zūa also zɔɔgɔ
                                                                                                                                                                                                                                                                                                                                           vūua<sup>o/</sup>
νū
                                                                                                                "make noise"
                                                                                                                "speak"
                                                                                                                                                                                                                                                                                                                                           piàuňk<sup>o</sup>
piāň'a
b\dot{v}d^{\epsilon}
                                                                                                                "plant"
                                                                                                                                                                                                                                                                                                                                           būdīga also būdugo
                                                                                                                "say, tell"
                                                                                                                                                                                                                                                                                                                                           yèlug<sup>o</sup> (cf Mooré yèele)
νὲl<sup>ε</sup>
                                                                                                                                                                                                                                                                                                                                           k\bar{u}l_1g^{a/} also k\bar{u}l_2u^{a/}
k\bar{u}l^{\epsilon}
                                                                                                                "go home"
                                                                                                                "shout"
                                                                                                                                                                                                                                                                                                                                           tàňsvg<sup>o</sup>
tàňs<sup>ε</sup>
s\bar{\mathfrak{z}}\check{\mathsf{n}}s^{\epsilon}
                                                                                                                "converse"
                                                                                                                                                                                                                                                                                                                                           sóňsì ga
                                                                                                                "look"
                                                                                                                                                                                                                                                                                                                                            gásì qa
ąōsε
sàs<sup>ε</sup>
                                                                                                                "pray, beg"
                                                                                                                                                                                                                                                                                                                                           sɔ̄sıga
k\bar{i}r^{\epsilon}
                                                                                                               "hurry"
                                                                                                                                                                                                                                                                                                                                           kìkíròg<sup>o</sup> or kīrıb<sup>o/</sup>
l\grave{\varepsilon}b^{\varepsilon}
                                                                                                                "return"
                                                                                                                                                                                                                                                                                                                                           lēbιga
t\grave{\varepsilon}b^{\varepsilon}
                                                                                                                "carry in both hands"
                                                                                                                                                                                                                                                                                                                                           tēbīga
kàňb<sup>ε</sup>
                                                                                                                "scorch"
                                                                                                                                                                                                                                                                                                                                           kāňbır<sup>ε</sup>
òňbε
                                                                                                                "chew"
                                                                                                                                                                                                                                                                                                                                           \bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar{\mathfrak{I}}\bar
                                                                                                               "buck"
l\bar{u}b^{\epsilon}
                                                                                                                                                                                                                                                                                                                                           lūbιr<sup>ε/</sup>
zàbε
                                                                                                                "fight"
                                                                                                                                                                                                                                                                                                                                           zàbir<sup>E</sup>
t\grave{\epsilon}\check{n}b^{\epsilon}
                                                                                                                "tremble"
                                                                                                                                                                                                                                                                                                                                           tèňbuq<sup>o</sup>
tùm<sup>m</sup>
                                                                                                                "work"
                                                                                                                                                                                                                                                                                                                                           tūvma
tùm<sup>m</sup>
                                                                                                                "send"
                                                                                                                                                                                                                                                                                                                                           tit\bar{\nu}mis^{\epsilon}
                                                                                                                                                                                                                                                                                                                                            w\bar{\nu}m^{\rm mo} or w\dot{\nu}mm\nu g^{\rm o} 9.2.1.4
wùm<sup>m</sup>
                                                                                                                "hear"
```

Dynamic single-aspect verbs in -ya where the y is not assimilated form perfective gerunds from the root using various noun classes:

zìň'i ^{ya}	"be sitting"	z <u>ī</u> ň'ig	a also	"place", regu	ılar <i>ga sɛ</i> class
zì'e ^{ya}	"be standing"	z <u>ī</u> 'a	KED	$z\bar{\imath}^{\scriptscriptstyle{\dag}}\partial g^{\scriptscriptstyle{a}}$ (very	irreg <u>3.7</u>) DK KT
dīgι ^{ya/}	"be lying"	dīka∕	KT	d ī g ı $r^{arepsilon/}$	WK
<u></u> įgι ^{ya/}	"be kneeling"	į̃k ^a ∕	KT	į̄gιr ^{ε/}	WK
νābι ^{ya/}	"be lying prone"	vāp ^{ɔ/}	KT	vābιr ^{ε/}	WK
tī̞'i ^{ya/}	"be leaning"	$t\bar{i}'ib^{\circ/}$	(of an	object)	

 $G\dot{v}l^{\mathrm{la}}$ "be hanging" uses $g\bar{v}l\iota b^{\mathrm{o}}$, from the cognate dual-aspect verb $g\dot{v}l^{\varepsilon}$, and the stative $p\dot{o}\check{n}r^{\mathrm{a}}$ "be near" has $p\bar{o}\check{n}r\iota b^{\mathrm{o}}$, probably from an otherwise unused dual-aspect * $p\dot{o}\check{n}d^{\varepsilon}$ with r for d by analogy. Stative $k\bar{l}s^{\mathrm{a}}$ "hate" has the gerund $k\acute{l}s\dot{v}g^{\mathrm{o}}$.

Other single-aspect verbs have imperfective gerunds 9.2.1.4.

8.1.2 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.

$ar{arepsilon}arepsilon ar{arepsilon}arepsilon ara ar{arepsilon} ar{arepsilon} ar{arepsilon} ar{arepsilon}$	"(physical) foundation"	$ar{arepsilon}arepsilon ar{arepsilon}arepsilon ar{arepsilon}arepsilon ar{arepsilon}arepsilon$	"laying a foundation"
$dar{v}k^{\circ/}$	"cooking pot"	dūgvb ^{o/}	"cooking"
dà'a	"market"	dā'ab ^o	"buying"
kūk ^a	"chair"	kūgvb ^o	"resting on something"
zūg-kūgvr ^ɛ	"pillow"		
suāk ^{a/}	"hiding place"	$sar{v}$ ' $ab^{\circ/}$	"hiding"
$sar{\mathfrak{z}}b\imath r^{arepsilon/}$	"piece of writing"	$sar{o}p^{\circ/}$	"writing, orthography"
$kar{u}t^{arepsilon}$	"iron, nail"	kūdvb ^o	"working iron"
kùesım ^m	"merchandise"	kùesvg ^o	"selling"
pèbısım ^m	"wind"	pèbısvg ^o	"blowing of the wind; wind"

 $V\bar{a}bir^{\epsilon/l}l\bar{a}bir^{\epsilon/l}d\bar{i}gir^{\epsilon/l}$, used by WK as gerunds, are used by KT as concrete nouns meaning "place for lying prone" etc, contrasting with the gerunds $v\bar{a}p^{5/l}$ etc. From $p\hat{l}bil^{\epsilon}$ "cover", $z\hat{a}nbil^{\epsilon}$ "tattoo", $m\hat{a}al^{\epsilon}$ "sacrifice" are derived

pį̄bιn ^{nε}	p <u>ī</u> bına	pìbın-	"covering"
zāňbιn ^{nε}	zāňbına	zàňbın-	"tattoo" (NT "sign")
māan ^{nε}	māana	màan-	"sacrifice"

The -n- in these words is simplified from *nn 3.5. Toende and Mooré have Pattern L instead of A: $z\tilde{a}bin$, $m\dot{a}an$. The *nn may represent *ld, with *d in instrument-noun sense: cf $t\bar{u}edir^{\varepsilon}$ "mortar", from $t\underline{u}\dot{a}$ "grind in a mortar."

It is exceptional for regularly formed gerunds to acquire concrete meaning, but a clearcut example is $d\bar{\imath}\iota b^{\circ}$ "food."

8.2 Nominals from nominals

The partial association of noun class and meaning <u>5.1</u> can be exploited to change the meaning of a stem. Examples include the names of ethnic groups, which belong to the a|ba or $ga|s\varepsilon$ classes, their languages, which belong to the $-l\varepsilon$ subclass of $r\varepsilon|aa$ <u>5.3.4</u> and the associated place, which has the suffix -go <u>26.4</u>. Another case of sg -go deriving an associated place name is $w\varepsilon d^a$ "hunter", $w\varepsilon og^o$ "deep bush."

Names of trees are almost all $ga|s\varepsilon$ class, and their fruits $r\varepsilon|aa$ or $g_{2}|d\varepsilon$ 26.5. Note also $s\bar{i}i\bar{n}f^{3}$ "bee", $s\bar{i}i\bar{n}d^{\varepsilon}$ "honey."

The strong association of the mm class with abstracts can be used to convert adjective stems to abstract nouns. These nouns somewhat resemble gerunds, and can

be preceded by combining forms as generic arguments $\underline{12.7.1}$, but they cannot be used in the future construction with $b \grave{o} d^a$ "want" $\underline{16.3.3}$, and unlike imperfective gerunds, which show the expected gerund Tone Patterns $\underline{3.8.4}$, they show the same tone pattern as the adjective. These forms sometimes also appear as manner adverbs.

Examples formed from adjective stems with *mm*:

```
νōm<sup>m/</sup>
                     "life"
                                                                                               "goodness"
                                                               sòm<sup>m</sup>
                                                                                               "beauty"
pòodimm
                     "scarcity"
                                                               vènnım<sup>m</sup>
vèňllım<sup>m</sup>
                                                               būqusím<sup>m</sup>
                                                                                               "softness"
                     "beauty"
                                                               mā'asím<sup>m</sup>
tēbisím<sup>m</sup>
                     "weight"
                                                                                               "coolness, damp"
                                                               zāalím<sup>m</sup>
bāaňlím<sup>m</sup>
                     "quietly"
                                                                                               "emptily"
mālisím<sup>m</sup>
                                                               lābisím<sup>m</sup>
                                                                                               "width"
                     "sweetness"
pìəlım<sup>m</sup>
                     "brightness"
                                                               tītā'am<sup>m</sup>
                                                                                               "multitude"
                     "old times"
k\bar{\nu}d\iota m^{\mathrm{m}}
                                                               pāalím<sup>m</sup>
                                                                                               "recently"
nèem<sup>m</sup>
                     "for free" (n \grave{\varepsilon} \varepsilon r^{\varepsilon} "empty")
```

From $\check{n}y\check{\epsilon}\varepsilon si\eta^a$ "self-confident" is derived $\check{n}y\check{\epsilon}\varepsilon sim^m$ "self-confidence." The suffix $-g_2$ makes abstract nouns when the sg adjective form also has $-g_2$:

```
l\bar{a}ll\dot{b}g^{\circ} "distance" z\bar{\epsilon}mm\dot{b}g^{\circ} "equality" kp\bar{l}^{\circ}o\eta^{\circ} "hardness, strength" y\dot{a}l\upsilon\eta^{\circ} "width" m\dot{l}^{\circ}is\upsilon g^{\circ} "sourness" t\bar{b}\circ g^{\circ} "bitterness" z\dot{u}l\upsilon\eta^{\circ} "depth" t\bar{\upsilon}\upsilon l\dot{\upsilon}g^{\circ} or t\bar{\upsilon}ll\dot{l}m^{\rm m} "heat"
```

Some stems referring to people form abstract nouns with -mm or -go:

```
gbáňyà'a
                   "lazy person"
                                                         gbáňyà'am<sup>m</sup>
                                                                                      "laziness"
                   "liar"
                                                         dàmà'am<sup>m</sup>
dàmà'a
                                                                                      "lying"
sāan<sup>a/</sup>
                   "guest"
                                                         sávŋ<sup>o</sup>
                                                                                      "hospitality"
kpē̃̃̃̃<sub>E</sub>ňm<sup>m</sup>
                   "elder"
                                                         kpēoňŋ<sup>o</sup>
                                                                                      "eldership"
                                                                                      "witchcraft"
s̄ōeňa
                   "witch"
                                                         s\bar{p}ng^{o}
```

Cf also zùed^ε "friendship" from zuà "friend."

Several adjective stems form manner-adverbs with apocope-blocked -ga 3.2:

```
s \grave{v} \eta \bar{a}^l "well; very much" m \bar{a}^l a s i g \bar{a}^l "coolly" t \bar{v} v l i g \bar{a}^l "hotly" g \bar{i} \eta a "shortly" b \bar{v} g v s i g \bar{a}^l "softly" s \grave{a} a l i \eta \bar{a}^l "smoothly" n v \grave{\epsilon} s s i \eta \bar{a}^l "self-confidently"
```

Cf also *ȳiigá* "firstly" <u>12.5.1</u>.

9 Derivation by suffixes

In <u>3.3</u> all roots are stated to be CV(V)(C), implying that any stem consonant not immediately following the root vowel is not part of the root, and neither is any consonant following a *long* root vowel unless the root shows $CVC \sim CVVC$ allomorphy.

All such stem consonants will be called "derivational suffixes." Very productive suffixing processes derive agent nouns, adjectives and instrument nouns from verbs, and several less systematic processes derive nominals from other nominals. Stem comparison can identify many suffixes deriving verbs from roots, though correlations of suffix and meaning are only partial. For Tone Patterns in derivation see 3.8.4.

Derivational suffixes are $g \ s \ n \ l \ d \ m$, along with b and r in just a handful of words; n may represent historical * $ld \ 3.5$. $G \ s \ n \ b \ r$ never follow another suffix, and l follows another suffix only as part of the combination lm. D is very productive in the formation of deverbal nominals; it often deletes a preceding suffix or is itself deleted.

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.

9.1 Verbs

All verb derivation is by suffixes, probably always added to roots. Clear meanings are often seen, but there is no straightforward match with form.

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.

9.1.1 From verbs

-n- derives dual-aspect **assume-stance** verbs from stance verbs, which also have corresponding derivatives in -l for "make assume the stance"; all the -n verbs are Pattern A regardless, but the -l verbs have the same Pattern as the base stance verb.

Nawdm has exactly parallel formations, e.g. *jehra* ipfv "être debout", *jehnt* pfv "se mettre debout", *jehlg* pfv, *jehla* ipfv "poser verticalement".

Some stance verbs correspond instead to a simplex dual-aspect verb for "assume the stance", and $d\bar{\epsilon}l^{\rm la/}$ "be leaning" (of a person)has the idiosyncratic assume-stance derivative $d\hat{\epsilon}l\iota m^{\rm m}$. Some -n and -l derivatives lack a corresponding stance verb: thus "be perching" is expressed with the resultative perfective of $z\dot{u}e$:

Niŋ $l\bar{a}$ $z\dot{u}\theta$ $n\bar{\epsilon}$. "The bird is perching." KT Bird:sg art perch Foc.

Stance v	verb	Assume-stance	Make-assume-stance
dīgı ^{ya/}	"be lying"	dìgın ^ε	dīgıl ^{ɛ/}
νābι ^{ya/}	"be lying prone"	vàbın ^ε	vāb≀l ^{ε/}
<u>ī</u> gι ^{ya/}	"be kneeling"	ịgιn ^ε	<u></u> įgιlε∕
làbı ^{ya}	"be crouching hidden	n" <i>làbιn</i> ε	làbıl ^ɛ
zìň'i ^{ya}	"be sitting"	zìň'in ^ɛ	zìň'il ^ɛ
zì'e ^{ya}	"be standing"	zì'ən ^ɛ	zìˈəlɛ
tī̞'i ^{ya/}	"be leaning" (of thing	g) tị̀'in ^ɛ	tį̄'il ^{ε/}
$gar{ extit{5}}$ ' $e^{ ext{ya}/}$	"be looking up" WK	gà'ən ^ɛ	
sùr ^a	"have bowed head"	sùn ^{ne}	sùn ^{ne} sic
-	"cover oneself"	l <u>ì</u> gın ^ε	l <u>ì</u> gıl ^ε
-	"perch" (of bird)	zùen ^ɛ	zùel ^ɛ
-	"perch" (of bird)	yà'an ^ɛ	yà'al ^ɛ
gùl ^{la}	"be suspended"	$g\grave{v}l^{arepsilon}$	$g\grave{v}l^arepsilon$
tàbı ^{ya}	"be stuck to"	$t\grave{a}b^{arepsilon}$	tàbıl ^ɛ

-1- derives causatives from nominals and from verbs expressing states or positions:

	ňyá'aŋ ^a	"behind"	ňyā'al ^{ɛ/}	"leave behind"
	gēog°	"space between legs"	gēεl ^{ε/}	"put between legs" Tones sic
	l <u>ī</u> k ^a	"darkness"	l <u>ì</u> gıl ^ɛ	"cover up"
	bāň'	"ride"	bāĭ'al ^{ε/}	"put on a horse/bicycle etc"
	gū'	"guard"	$gar{u}$ 'u $l^{arepsilon/}$	"set someone on guard"
	yὲ	"dress oneself"	yèɛl ^ɛ	"dress another person"
	mā'e [/]	"get cool"	mā'al ^{ε/}	"make cool"
	pūň'e [/]	"rot"	pōĭ'ɔl ^{ε/}	"cause to rot"
	nìe	"appear"	nèɛl ^ɛ	"reveal"
	mā'e [/]	"get cool, wet"	mā'al ^{ε/}	"make cool, wet"
	$war{v}'vg^{arepsilon/}$	"get wet"	$war{v}'vl^{arepsilon/}$	"make wet"
?also	zàb ^ε	"fight"	zàbıl ^ɛ	"cause to fight"
	d <u>u</u> 'à ^a	"bear, beget"	$d\dot{v}$ ' al^{ϵ}	"make interest (of a loan)"

-s- derives causatives from dynamic verbs for the most part:

kpèň'	"enter"	$kp\grave{\varepsilon}\breve{n}'\varepsilon s^{\varepsilon}$ "make enter"
nịe	"appear"	nὲεs ^ε "reveal"
у <u>ī</u>	"go/come out"	$y\overline{i}is^{arepsilon/}$ or $y\overline{i}s^{arepsilon}$ "make go/come out"
dì	"eat"	$d i \iota s^{arepsilon}$ "feed"
nū	"drink"	$n\bar{u}lis^{arepsilon/}$ "make drink"; also $n\bar{u}lig^{arepsilon}$
$sar{i}g^{arepsilon}$	"go down"	sį̃gιs ^{ε/} "lower"

lèb ^ε	"return"	lèbıs ^ɛ	"make return; answer"
mu̞'àª	"suck" (of a baby)	mὺ'as ^ε	"give to suck"
[Mooré <i>tá</i>	"arrive"]	$tar{a}$ ' $as^{arepsilon/}$	"help to travel, walk"
zēm ^{ma∕}	"be equal"	$zar{arepsilon}m\iota s^{arepsilon/}$	"make equal"
kpį̀ig ^ε	"go out (fire)"	kpį̀is ^ε	"quench"

-s- may have a pluractional sense:

kò	"break"	kὸ'ɔs ^ε	"break several times"
tòň	"shoot"	tòň'ɔs ^ε	"hunt"
pį̀əb ^ε	"blow (flute etc)"	p $\grave{arepsilon}b\imath s^{arepsilon}$	"blow (wind)"
làbı ^{ya}	"crouch in hiding"	làbıs ^ɛ	"walk stealthily"
$var{v}ar{e}^{\mathrm{a}/}$	"be alive"	$ uar{v}$ ' $ u s^{arepsilon/}$	"breathe, rest"
įāňk ^{ε/}	"fly, jump"	įāň'as ^{ε/}	"leap, jump repeatedly"
$y\bar{a}$ ' e^{\prime}	"open mouth"	yā¹as ^{ε/}	"open repeatedly" WK
$dar{\imath}$ ' e'	"receive"	$dar{\imath}$ 'ə $s^{arepsilon/}$	"receive (many things)"
gū'	"guard"	$gar{u}$ 'us $^{arepsilon/}$	"watch out; guard (many)"

-g- attached to dynamic roots implies reversal:

	yὲ	"dress oneself"	yὲεg ^ε	"undress oneself"
	pìd ^ɛ	"put (hat etc) on"	p <u>ì</u> dıg ^ε	"take (hat etc) off"
	p į $l^{arepsilon}$	"cover"	pjlıg ^ε	"uncover"
	15	"tie up"	lɔ̄dιg ^{ε/}	"untie"
	уò	"close"	<i>y</i> ὸ'၁ <i>g</i> ε	"open"
	$\grave{arepsilon} ec{n} d^arepsilon$	"block up"	ὲňdιg ^ε	"unblock"
	yà'al ^ɛ	"hang up"	yàk ^ɛ	"unhang"
	pà'al ^ε	"put on top"	pàk ^ε	"take off top"
	pjbıl ^ɛ	"cover up"	pìbıg ^ε	"uncover"
	tàbı ^{ya}	"be stuck to"	tàbıg ^ε	"unstick, get unstuck"
	là'as ^ε	"gather together"	lāk ^{ε/}	"open" (eye, book); tone sic
		cf	lákè	(Mooré) "un-stick together"
?also	lj̀əb ^ɛ	"become"	lèbıg ^ε	"turn over"
	fāň	"rob, snatch"	fāeň [/]	"save" ?? for "snatch back"

Reversive -g- is peculiar to the Western group within Oti-Volta; elsewhere alveolar suffixes appear: Moba $l\bar{o}\bar{o}\acute{n}$ "close" $l\bar{o}\bar{o}\acute{d}$ "open", Byali $by\acute{a}$ "close" $by\bar{e}r\acute{o}$ "open", Nawdm riw pfv "close" rawdg pfv rawda ipfv "open." Proto-Bantu had -vl- and -vk-; an alveolar variant may have been lost in Western Oti-Volta because of the adoption of -da as the regular dynamic imperfective flexion.

-g- also forms a few causatives:

d5l¹a∕	"accompany"	dɔ̄lιg ^{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 ^ε	"swing" transitive
kò	"break" intransitive	kà'၁g ^ε	"break" ambitransitive
nū	"drink"	nūlιg ^{ε/}	"make drink"; also $n\bar{u}lis^{\epsilon/}$

-g- occurs with no clear meaning in

sōň	"rub"	sūeň [∕]	"anoint"
nōbε	"get fat"	nɔ̄bιg ^{ε/}	"grow" (child, plant)
nā	"join"	nāe ^l	"finish"; compare
			Hausa <i>gamàa</i> "join, finish"

-**d**- appears with a pluractional sense in $k\bar{\delta}dig^{\epsilon/}$ "slaughter one animal", $k\bar{\delta}t^{\epsilon/}$ "slaughter several animals." This is perhaps historically connected with the *d of the ipfv suffix *-da, by way of the distinctively habitual sense seen in stance verbs 7.2.

-m- derives some preverbs 16.8:

	lèb ^ε	"return"	lèm	"again"
cf	là'as ^ɛ	"gather together"	là'am	"together"
	$d\grave{\varepsilon}$ η arepsilon	"go first"	dèŋım	"first"
cf	malig	(Toende) "do again"	màlıgım	"again"

It has no obvious meaning in $k \grave{\delta} \check{n} s \iota m^m$ "cough" = $k \grave{\delta} \check{n} s^{\epsilon} id$.

-r- appears in

kāab ^{ε/}	"offer, invite"	kābır ^{ε∕}	"ask for admission"
		cf <i>káb</i> ıs	Toende <i>id</i>
[no simplex]	sūgvr ^{ε/}	"forbear, be patient with"

Both words appear frequently in pan-regional set formulae $\underline{25}$ and may well be loanwords. They may be back-formations from the nouns $k\bar{a}biri$ and $s\bar{u}gvri$, where ri/rv possibly originated in the equivalent of $r\varepsilon|aa$ class singular flexions $\underline{5.1}$.

9.1.2 From nominals

9.1.2.1 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 -ya, 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 3.8.4. Primary nominals thus show a characteristic Tone Pattern correspondence with the verbs: Pattern L nominals correspond to Pattern A verbs but Pattern H and Pattern A both correspond to Pattern H verbs. Historically, the all-M pattern of verbs corresponding to Pattern A nominals was also Pattern A, and this is still reflected in the tonemes of e.g. $kp\bar{l}=m^{ma}$ "be strong" $kp\bar{l}=m^{ma}$ "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 A verbs.

L	vènnıg ^a	"beautiful"	vèn ^{na}	"be beautiful"
	vèňllıg ^a	"beautiful"	vèňl ^{la}	"be beautiful"
	zùlvŋº	"deep"	zùlım ^{ma}	"be deep"
	pàɔdıgª	"small"	pòɔd ^a	"be few, small"
	mị̀'isvg ^o	"sour"	mị̀'is ^a	"be sour"
	$s\grave{v}\eta^{\mathrm{o}}$	"good"	sùm ^{ma}	"be good"
	yàlvŋ ^ɔ	"wide"	yàlım ^{ma}	"be wide"
Н	būgvsír ^ε	"soft"	būgvs ^{a/}	"be soft"
	$var{v}r^{arepsilon/}$	"alive"	$var{ u} e^{\mathrm{a}/}$	"be alive"
	mā'asír ^ε	"cool"	mā'as ^{a/}	"be cool"
	$tar{arepsilon}bıs$ í $r^{arepsilon}$	"heavy"	tēbīs ^{a/}	"be heavy"
	mālısír ^ε	"sweet"	mālıs ^{a/}	"be sweet"
	lābısír ^ε	"wide"	lābıs ^{a/}	"be wide"
	zēmmúg ^o	"equal"	zēm ^{ma/}	"be equal to"
	lāllúg ^o	"far"	lāl ^{la/}	"be far from"
A	$tar{z}$ o g°	"bitter"	tṓe ^a ∕	"be bitter"
	<i>g</i> ịŋa	"short"	gīm ^{ma/}	"be short"
	kpį̇˙oŋɔ	"strong"	kpį̇̃'əm ^{ma/}	"be strong"
	$kpar{arepsilon}arepsilon m^{\mathrm{m}}$	"elder"	kpēεňm ^{ma/}	"be older than"
	wēnnır ^ɛ	"resembling"	$war{arepsilon}^{\mathrm{na}/}$	"resemble"

More complex stem changes occur in

$tar{v}vl\acute{v}g^{\circ}$	"hot"	$tar{v}l^{\mathrm{la}/}$	"be hot"
ňyὲεsίŋª	"self-confident"	ňyὲεs ^a	"be self-confident"
wōk ^{ɔ/}	"long, tall"	wā'am ^{a/}	"be long, tall"

9.1.2.2 Dual aspect

-g- attached to nominal/adjectival roots has the meaning "make/become ...":

$\check{n}y\bar{\mathfrak{I}}'\mathfrak{I}s^{\varepsilon/}$	"smoke"	йу $ar{u}$ ' $e^{/}$	"set alight"
ňw <u>ī</u> ig ^{a/}	"rope"	ňw <u>ī</u> ig ^{ε/}	"make a rope"
tādım ^{m/}	"weak person"	tàdıg ^ε	"become weak"
kpì਼'a	"neighbour"	kpì̞'e	"approach"
$zar u \Theta r^{arepsilon}$	"hill"	zùe	"get higher, more"
\grave{A} - $Tar{u}l^{\mathrm{l}arepsilon}$	"Breech-Delivered" 26.2	tùlıg ^ε	"invert"
mā'asίr ^ε	"cool, wet"	mā'e ^l	"get cool, wet"
būgvsír ^ε	"soft"	$bar{v}k^{arepsilon/}$	"soften"
$tar{arepsilon}bısir^arepsilon$	"heavy"	tēbιg ^{ε/}	"get/make heavy"
$gar{!}\eta^{\mathrm{a}}$	"short"	$g otin v^{\epsilon}$	"scrimp"
kpį̇˙oŋɔ	"strong"	$kp\grave{\varepsilon}'\eta^{arepsilon}$	"strengthen"
$var{v}r^{arepsilon/}$	"alive"	$v\bar{v}'vg^{\varepsilon/}$	"make/come alive"
pàɔdıgª	"few"	pà'ɔg ^ε	"diminish, belittle"
pìʻəlıg ^a	"white"	pèlıg ^ε	"whiten"
sābılíg ^a	"black"	sɔ̄bıg ^{ε/}	"blacken"
n <u>ī</u> n-múa	"concentration"	mù'e	"redden, become intense"
kūdvg°	"old"	kùdıg ^ε	"shrivel up, dry out, age"
$s\grave{v} \eta^{\circ}$	"good"	$s\grave{v} \eta^arepsilon$	"help"
tūvlúg ^o	"hot"	tūlιg ^{ε/}	"heat up"
mį̀'isvg°	"sour"	mị̀'ig ^ε	"turn sour"
zùlvŋº	"deep"	zùlıg ^e	"deepen"
lāllúg ^o	"far"	lālıg ^{ε/}	"get to be far, make far"
màuk ^o	"crumpled up"	màk ^ε	"crumple up"
$dar{arepsilon}arepsilon\eta^{ m a}$	"first"	$d\grave{\varepsilon} η^{\varepsilon}$	"precede"
nèer ^e	"clear, empty"	nịe	"appear"
sōň'e ^{ya/}	"be better than"	sūň'e [/]	"become better than" WK

With the addition of -m as a second derivational suffix:

wàuŋº	"wasted"	wàŋım ^m	"waste away"

-lim- derives verbs from noun roots, meaning "act as ..." or "make/become ...":

```
pu'āa
                   "woman"
                                                          pù'alım<sup>m</sup>
                                                                             "cook"
p\grave{o}\check{n}'or^{\epsilon}
                   "cripple"
                                                          pàň'ɔlım<sup>m</sup>
                                                                             "cripple, get crippled"
                   "dumb"
aìka
                                                          aì aılım<sup>m</sup>
                                                                             "become dumb"
wàbır<sup>ε</sup>
                   "lame"
                                                          wàbilim<sup>m</sup>
                                                                             "make, go lame"
a\bar{v}'vs^{\epsilon}
                   "semi-ripe things"
                                                          aὺ'υlιm<sup>m</sup>
                                                                             "become semi-ripe"
būgvd<sup>a</sup>
                                                          bùgulım<sup>m</sup>
                                                                             "cast lots"
                   "client of diviner"
                                                     cf b\dot{v}k^{\varepsilon}
                                                                             "cast lots"
```

Miscellaneous denominal dual-aspect verbs formed with *s m b* are seen in

	zuà	"friend"	zùes ^e	"befriend"
	nēεr ^{ε/}	"millstone"	nēεm ^{m/}	"grind with a millstone"
	yā'ad ^ɛ	"clay"	yà'ab ^ε	"mould clay"
cf	yàge	(Mooré) "make pottery"		

9.2 Nominals

9.2.1 From verbs

The derivational processes described below are very productive; agent noun formation in particular is almost flexional in its regularity and generality. Deverbal noun and adjective formation shows more analogical levelling than derivational processes elsewhere, in keeping with the strong tendency to regularity and transparency in verb morphology. For the Tone Patterns see <u>3.8.4</u>.

9.2.1.1 Agent nouns

Agent nouns can be freely made from almost all verbs which can be used in direct commands. Informants readily supply isolated forms, but in practice they usually occur as second elements of compounds. All are a|ba class, but those derived from ll- or r(r)-stem single-aspect verbs also show $r\varepsilon|aa$ forms $\underline{5.3.1}$. Despite their regularity of formation, agent nouns often develop specialised meanings. As with English derivatives in "-er", "agent nouns" may be created from verbs whose subject is not in fact an agent, including even stative verbs if usable in direct commands.

The formant of agent nouns and habitual adjectives is -d, probably historically related to the -d- of the imperfective flexion -da, though it has different tonal effects. Derivational -d shows much less regularity in its mode of attachment than ipfv -da; agent nouns are more regular than habitual adjectives. There is a tendency to limit stem length, causing deletion of either -d itself or the suffix preceding it. Absence or presence of -d affects the Tone Pattern 3.8.4.

Most dual-aspect verbs have an agent noun with sg segmentally identical to the ipfv. If there are alternate forms, the less "regular" form appears as the agent noun.

mὲ	"build"	mēεd ^a	"builder"
dì	"eat"	$dar{\imath}t^{\mathrm{a}}$	"eater"
$gar{\jmath}s^{arepsilon}$	"look"	gōt ^{a/}	"seer, prophet"
$dar{v}g^{arepsilon}$	"cook"	dūgυda∕	"cook"
d <u>u</u> 'à ^a	"bear, beget"	$dar{v}$ ' ad^{a}	"elder relation"
kàd ^ɛ	"drive away"	sarį́yà-kāt ^a	"judge"
$sar{o}b^arepsilon$	"write"	sɔ̄bɪda/	"writer"
bùn ^ɛ	"reap"	būn ^{na}	"reaper"
tùm ^m	"work"	tùm-tūm ^{na}	"worker"
kpàr ^ε	"lock"	kpārıd ^a	"lock-er"
gbį̄sε	"sleep"	gb <u>ī</u> sıd ^{a/}	"sleeper"
s <u>i</u> àk ^ε	"believe"	s <u>i</u> ākıd ^a	"believer"
įāňk ^{ε/}	"jump, fly"	i̯āň'ad ^{a/}	"flier"
$s\grave{v}\eta^arepsilon$	"help"	รบิทูเd ^a	"helper"
kēŋ ^{ε/}	"go"	kēn ^{na∕}	"traveller"
gàad ^ɛ	"pass"	tùøn-gāt ^a	"leader"
màal ^ɛ	"sacrifice"	màal-māan ^{na}	"sacrificer"
pà'al ^ɛ	"teach"	pā'an ^{na}	"teacher"
$sar ug v r^{arepsilon/}$	"forbear"	sūgvríd ^a	"forgiver"
yū'υm ^{m/}	"sing"	yōvm-yû'vm ^{na}	"singer"
		pl yōvm-yô'vmnìb ^a	
sàň'am ^m	"spoil"	pu̞'à-sāň'am ^{na}	"adulterer"
		pl puˈà-sāňˈamɪdɪba	

Pattern H fusion verbs, which delete the H toneme of the stem in the imperfective <u>3.8.2</u>, show the same form for the agent noun:

nāe ^l	"finish"	nāad ^{a/}	"someone who doesn't
			give up easily" WK
ňwà'e	"cut wood"	ňwā'ad ^a	"woodcutter"
gbāň'e [/]	"catch"	zī़m-gbâň'adª	"fisherman"
fāeň [/]	"save"	fāaňd ^{a/}	"saviour" WK <u>11</u>
$dar{\imath}$ ' e^{\prime}	"receive"	$dar{\imath}$ 'ə $d^{\mathrm{a}/}$	"receiver"

3-mora stems in -s consistently drop the -d in the sg and cb:

s <u>ī</u> gıs ^{ε/}	"lower"	s <u>ī</u> gıs ^{a/}	"lowerer"
		pl <i>sīgısídìb</i> a	
kùes ^ɛ	"sell"	kùes ^a	"seller"
		pl <i>kūesıdıb</i> a	
$p\dot{v}'vs^{\epsilon}$	"worship"	pὺ'υs ^a	"worshipper"
		pl <i>pū</i> 'vsıdıb ^a	
$t\grave{v}$ ' $as^{arepsilon}$	"talk"	tù'as-tù'as ^a	"talker"
		pl tù'as-tū'asıdıb ^a	
$dar{\imath}$ 'ə $s^{arepsilon/}$	"receive"	nō-dî̞'əsa	"chief's spokesman"
		pl <i>nō-díִ'əsìdıb</i> a	("linguist")

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"
t ì $s^arepsilon$	"give"	tìs ^a	"giver"
$s\grave{o}s^{arepsilon}$	"beg"	sàs ^a	"beggar"

Stems in -mm- form reduplicated agent nouns with $n \grave{a} m^a$ plurals:

dàm^m "shake" dàm-dàm^{ma} "shaker"

The nn-stem $sun^{n\epsilon}$ "bow the head" has an agent noun stem in -nn-, but the tonemes show retention of the -d- formant:

sùn ^{ne}	"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 - η -:

yādıg ^{ɛ/}	"scatter"	yāt ^{a/}	(a participant in a
			housebuilding ritual)

Various irregular formations in my materials include:

$tar{arepsilon}k^{arepsilon/}$	"pull"	ňwị-ték ^a	"rope-puller"
		pl <i>ňwị-tékìdıb</i> a	
nὸŋε	"love"	nòŋıd ^a	"lover"; tones irreg
tị̀'əb ^ε	"heal"	<i>t</i> į̄¹∂ba	"healer"; tones irreg

For 4-mora stems: KT has no agent nouns; WK drops the stem-final m.

sịilım ^m	"cite proverbs"	<i>s</i> įin ^{na}	"speaker of proverbs"
		pl <i>s</i> įinnıb ^a	
pù'alım ^m	"harm"	$par{v}$ 'a $n^{ m na}$	"harmer"
zàaňsım ^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"	zīฺň'id ^a	"sitter"
zì'e ^{ya}	"be standing still"	zį̄'əda	"stander"
$mar{\imath}$ '	"know"	m <u>ī</u> 'id ^{a/}	"knower"
		gbàn-m <u>ī</u> 'id ^{a/}	"scribe" NT
zī'	"not know"	zī'ıd ^{a/}	"ignorant person"
$sar{v}$ ' $e^{\mathrm{ya}/}$	"own"	$sar{v}$ ' $vd^{\mathrm{a}/}$	"owner"
sōň'e ^{ya/}	"be better than"	sɔ̃n̆'ɔda/ pl sɔ̃n̆'ɔba/	['] <u>5.3.1</u>
dīgı ^{ya/}	"be lying down"	dīgıd ^{a/}	"lier-down"
<u></u> įgι ^{ya/}	"be kneeling"	į̃g≀d ^a ∕	"kneeler"
νābι ^{ya/}	"be lying prone"	vābıd ^{a/}	"lier prone"
làbı ^{ya}	"be crouching"	lābīd ^a	"croucher in hiding"
àeň ^a	"be something"	āaňd ^a	"someone who
			continually is
			something" sic WK

Stems in $nn \ ll \ r(r)$ drop -d throughout. Those in $ll \ r(r)$ may use $r\varepsilon | aa$ class suffixes, coinciding in form with habitual adjectives 5.3.1.

s <u>ī</u> n ^{na/}	"be silent"	n <u>ī</u> n-sí́n ^{na}	"silent person"
nēn ^{na/}	"envy"	nị̄n-nέn ^{na}	"envious person"
<i>d5l</i> la∕	"be with"	ňyà'an-dòl ^{la}	"disciple" (irreg. tone)
		or <i>ňyà'an-dòl^{lɛ}</i>	
zāňl ^{la/}	"be holding"	nō-záňl ^{la}	"holder of hens"
		or <i>nō-záňl^{lɛ}</i>	
$dar{arepsilon}l^{\mathrm{la}/}$	"be leaning"	n̄ịn-dέl ^{la}	"person prone to lean"
m5ra∕	"have"	$b\grave{v}$ - $mar{z}r^{\mathrm{a}/2}$	"owner of goats"
		or $b\dot{v}$ - $m\bar{z}r^{arepsilon/}$	
tār ^{a/}	"have"	$b\grave{v}$ - $tar{a}r^{\mathrm{a}/}$	"owner of goats"
		or <i>bὺ-tār^{ε/}</i>	

The simplification to single s r leads to analogical formations with -d- in

k <u>ī</u> s ^{a/}	"hate"	kī̞sa/ or ki̞sıda/	"hater"
tèňr ^a	"remember"	tēňrıd ^a	"rememberer"
gūr ^{a/}	"be on guard"	gūrıd ^{a/}	"guard"
		zà'-nō-gúr ^a	"gatekeeper"

9.2.1.2 Adjectives

Habitual deverbal adjectives in principle have the same stem as the agent noun, but 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. A past passive sense is unusual, though examples occur: $s\bar{u}m$ - $d\acute{v}gvd\grave{a}$ "cooked groundnuts" WK, $zii\eta dvgida = z\bar{i}i\eta$ - $d\acute{v}gvd\grave{a}$ "cooked fish" (Lk 24:42), beside the more usual sense in ni'im $dvgida = n\bar{i}m$ - $d\acute{v}gvd\grave{a}$ "meat for cooking" (1 Samuel 2:15.)

Without a preceding cb, these adjective forms have the same meaning as agent nouns: $k\bar{\nu}\nu dir^{\epsilon}$ pl $k\bar{\nu}\nu d\dot{a}$ "killer" = $k\bar{\nu}\nu d^{a/}$ pl $k\bar{\nu}\nu dib^{a}$. After a cb the meanings differ: $p\mu'\dot{a}-k\bar{\nu}\nu d^{a/}$ "woman-killer, killer of women" vs $p\mu'\dot{a}-k\bar{\nu}\nu dir^{\epsilon}$ "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	"hunt"	pu̯'à-gɔ̄ɔňdır ^ɛ	"prostitute"
là'	"laugh"	pu̯'à-lāˈadır ^ɛ	"woman prone to laughter/
			woman to be laughed at"
йуε̄	"see"	būn-ňyέtìr ^ε	"visible object"
k <u>u</u> ā	"hoe"	nā'-dá-kūødír ^ɛ	"ox for ploughing"
yὲ	"don clothes"	fū-yέεdìr ^ε	"shirt for wearing" WK
		fū-yέεdὺg ^ɔ	KT
$kar{v}$	"kill"	tì-kōvdím ^m	"poison" ("killing medicine")
du'à ^a	"bear/beget"	tèŋ-dō'adıg ^a	"native land"
$dar{v}g^{arepsilon}$	"cook"	sūm-dúgvdà	"cooked groundnuts" WK
$sar{i}g^arepsilon$	"descend"	yī̞-sí̞gɪdìr ^ɛ	"lodging-house"
su̞'āa	"hide"	yēl-sú'adìr ^ɛ	"confidential matter"
ò йb ε	"chew"	būn-óňbıdà	"solid food"
$b\grave{\mathrm{u}} n^{\mathrm{arepsilon}}$	"reap"	$bar{v}$ n- $b\acute{u}$ nn $\grave{\imath}$ r arepsilon	"thing for reaping"
từm ^m	"work"	$bar{v}$ n-t \acute{v} mm $\grave{r}^{arepsilon}$	"useful thing"
$ uar{ u}l^{arepsilon}$	"swallow"	tì-vōnním ^m	"oral medication"
gb <u>ī</u> s ^ε	"sleep"	pu̞'à-gbṭ̄sıdír ^ɛ	"woman always sleeping"

3-mora stems in *g drop -d unless *g is deleted in the imperfective:

gī̞lɪg ^{ɛ/}	"go around"	pu̯'à-ḡṭnníga	"prostitute"
sūeň [/]	"anoint"	kpā-sɔ́ɔňdìm ^m	"anointing oil"
$tar{v}l\iota g^{arepsilon/}$	"heat up"	$bar{v}$ n- $t\acute{v}$ lı g ì $r^arepsilon$	"heater, thing for heating"
pèlıg ^ε	"whiten"	būn-pέlıgìr ^ε	"whitening thing, whitener"
yād≀g ^{ε/}	"scatter"	bōn-yátìr ^ε	"scattering thing" (cf $y\bar{a}t^{a/}$)
<u>įā</u> ňk ^{ε/}	"fly, jump"	$bar{v}$ n-i̯áň' ad ì $r^arepsilon$	"flying creature"
pàk ^ε	"surprise"	yēl-pákìr ^ε	"disaster"
$tar{arepsilon}k^{arepsilon/}$	"pull"	ňw <u>ī</u> -tékìr ^e	"rope for pulling with"
kēŋ ^{ε/}	"go"	bὺŋ-kēnnír ^ε	"donkey that doesn't sit still"
$s\grave{v}\eta^arepsilon$	"help"	$bar{v}$ n-s \acute{v} ŋ $\grave{r}^{arepsilon}$	"helpful thing"
nὸŋε	"love"	bị̀-nòŋιr ^ε	"beloved child"

3-mora stems in -m retain the -d, forming the consonant cluster -mm-:

 $s \grave{a} \check{n}' a m^{\mathrm{m}}$ "destroy" $b \grave{v} - s \bar{a} \check{n}' a m m \imath r^{\varepsilon}$ "scapegoat" WK

3-mora stems in -s all drop the -d:

pèlis ^e	"sharpen"	būn-pέlısìr ^ε	"sharpening thing"
kùes ^ɛ	"sell"	būn-kúθsìr ^ε	"item for sale"

4-mora stems (all from KT) drop -d (whereas agent nouns drop stem-final -m):

sịilım ^m	"cite proverbs"	būn-sį́ilúŋɔ	"thing relating to proverbs"
pὺ'alım ^m	"harm"	n <u>ī</u> n-pύ'alìŋ ^a	"harmful person"
		pu̞'à-p论'alíŋa	"harmful woman"
zàaňsım ^m	"dream"	n <u>ī</u> n-záaňsùŋ ^ɔ	"dreamy person"
		pu'à-zàaňsúŋº	"dreamy woman"

Dynamic single-aspect verbs show the same stem as the agent noun:

dīgı ^{ya/}	"be lying"	bùŋ-dīgıdír ^ɛ	"donkey that lies down a lot"
νābι ^{ya/}	"be prone"	bùŋ-vābıdír ^ɛ	"donkey always lying prone"
zìň'i ^{ya}	"be sitting"	kūg-zį́ň'idìr ^ɛ	"stone for sitting on"
zāňl ^{la/}	"be holding"	nō-záňl ^{lε}	"hen for holding"
dēl ^{la} ∕	"be leaning"	n <u>ī</u> n-dέl ^{lε}	"person you can lean on" WK
		kὺg-dēl ^{lε/}	"chair for leaning on"
gùl ^{la}	"be hanging"	būn-gύl ^{lε}	"thing for suspending"

Resultative deverbal adjectives are only derived from verbs which can use the perfective form in a resultative sense $\underline{16.2.2}$; it is not clear how productive the formation is. Almost all such verbs are either intransitive or patientive ambitransitive $\underline{16.9.1}$, and the adjectives are not passive participles, but express resulting states. There are no resultative adjectives from stance-verb roots meaning e.g. "seated", "standing" or from passives, like "eaten." The formant -lim- either deletes a preceding derivational suffix or is added only to roots; for the flexion see $\underline{6}$.

kpį	"die"	kpį̀ilύη ^ο	"dead"
gēň	"get tired"	g $ar{arepsilon}$ ε $ar{ec{\eta}}$ ι $ar{ec{\eta}}$ ο	"tired"
$p\grave{arepsilon}^{artheta}artheta^{artheta}$	"fill"	pὲ'εlύŋ ^ɔ	"full"
kò	"break"	kàɔlúŋɔ	"broken"
yὲ	"wear"	yὲεlύŋ ^ɔ	"worn" (of a shirt)
уò	"close"	yὸɔlύŋ ^ɔ	"closed"
pù'alım ^m	"harm"	pὺ'alύŋ ^ɔ	"damaged"
àeň	"tear"	àaňlúŋº	"torn"

9.2.1.3 Instrument nouns

Instrument nouns can be created freely by adding -m to habitual-adjective stems in dt or s. All are $ga|s\varepsilon$. The meanings may overlap with those of agent nouns.

$kar{v}$	"kill"	kōυdíŋ ^a	"thing for killing with"
15	"tie"	sià-lōɔdíŋª	"belt" ("waist-tying thing")
$dar{v}g^{arepsilon}$	"cook"	d̄ῡgυdίŋ ^a	"cooking utensil"
$sar{\jmath}b^{arepsilon}$	"write"	sɔ̄bɪdíŋa	"writing implement"
kpàr ^ɛ	"lock"	kpārıdıŋ ^a	"thing for locking"
ňwà'e	"cut wood"	ňwā'adıŋª	"axe"
p <u>ī</u> e [/]	"wash self"	p <u>ī</u> ədíŋ ^a	"thing for washing oneself"
$s\grave{v}$	"bathe"	รบิบdเŋa	"sponge"
gōsε	"look"	nịn-gớtì ŋa	"mirror"; $n\bar{l}n-g\acute{\sigma}t\grave{l}s^{arepsilon}$ "glasses"
$b\grave{v}d^{arepsilon}$	"plant"	<i>būtιŋ</i> a <u>2.3</u>	"cup" (originally "seed cup")
pį̄əsε∕	"clean"	pį̄əsίŋa	"cleaning implement"
kùes ^e	"sell"	kūesıŋ ^a	"professional salesperson"
$d\bar{a}$ ' $e^{/}$	"push"	dā'adíŋ ^a	"pusher (person or thing)"
zìň'i ^{ya}	"be sitting"	zī̯ň'idɪŋa	"thing for sitting on"

9.2.1.4 Imperfective gerunds

Dynamic single-aspect verbs in -ya without assimilation of the y make perfective gerunds, as do a few others <u>8.1.1</u>. Other single-aspect verbs which make gerunds add -lum- after root vowels and -m- after $nn \ ll \ r(r)$; the forms are mm-class.

$s\bar{v}$ ' $e^{\mathrm{ya}/}$	"own"	sō'υlím ^m	cf so'olimkan Mt 12:25, 1996
$mar{\it i}$ '	"know"	m <u>ī</u> 'ilím ^m	
zī'	"not know"	zī'ılím ^m	
àeň ^a	"be something"	àaĭlím ^m	
$b\grave{arepsilon}$	"be somewhere"	bèlím ^m	sic
kā'e̯	"not be"	kā'alím ^m	
wēn ^{na/}	"resemble"	wēnním ^m	[tones show this is deverbal]
sį̄n ^{na/}	"be silent"	s <u>ī</u> nním ^m	
nēn ^{na} ∕	"envy"	nēnním ^m	
dɔ̃l ^{la/}	"accompany"	dɔ̃llím ^m	
zāňl ^{la/}	"hold in hand"	zāňllím ^m	
dēl¹a∕	"be leaning"	$d\bar{\varepsilon}ll\dot{v}g^{o}$ or $d\varepsilon$	ēllí m ^m
mɔ̄ra/	"have"	mɔ̄rím ^m	
tār ^{a/}	"have"	tārím ^m	
nār ^{a/}	"be necessary"	nārím ^m	
gūr ^{a/}	"guard"	gūrím ^m	

These forms obey the tonal rules for gerund formation 3.8.4. The non-initial H toneme in Pattern L confirms that they are m-stems 3.8.1.

Stative verbs derived from imperfectives of dual-aspect verbs $\underline{16.2.3}$ also form imperfective gerunds; the tonemes show that these are not m-stems:

```
b \dot{\sigma} d \iota m^{\mathrm{m}} "will" (Pattern L, unlike b \bar{\sigma} \sigma d \iota r^{\varepsilon} "desirable") g \dot{\sigma} d \iota m^{\mathrm{m}} "wandering" (g \dot{\sigma} \tilde{n} "hunt") z \dot{\sigma} \iota m^{\mathrm{m}} "fear" [\dot{M} z \dot{\sigma} \iota n \bar{\varepsilon} "I'm afraid."]
```

The gerund wvmmvg of $wvmm}$ "hear" (written wumug before 2016, but read with -mm- in the 1996 audio NT) perhaps represents *wvmdvgo. A number of deverbal abstract nouns from 3-mora verb stems in -s- are probably imperfective gerund forms with dropping of -d- as in agent nouns and deverbal adjectives.

$p\grave{v}'vs^{arepsilon}$	"greet, thank"	pὺ'ʊsιm ^m	"worship"
		or <i>pù'usug</i> o	
$kar{v}$	"kill"	n <u>ī</u> n-kúvsìm ^m	"murderousness"
yɔ̄lıs ^{ε/}	"untie"	yōlısím ^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\dot{a}- or -t\bar{a}- "companion in ..."
```

For dynamic single-aspect verbs with stems in -ll - nn - r(r), and all stative verbs with deverbal gerunds, the forms are identical to the usual imperfective gerunds:

m <u>į</u> '	"know"	m <u>ī</u> 'ilím-tāa	"partner in knowledge"
zī'	"not know"	zī'ılím-tāa	"partner in ignorance"
bὲ	"exist"	bèlím-tāa	"partner in existence" WK
d5l¹a∕	"be with"	dōllím-tāa	"fellow-companion"

For the irregular stative verb $n \partial \eta^{\varepsilon}$ WK has two forms with different nuances:

```
n \grave{\partial} \eta^{\epsilon} "love" n \grave{\partial} \eta \imath l \acute{\iota} m - t \bar{a} a "fellow liker" or n \grave{\partial} \eta \imath d \acute{\iota} m - t \bar{a} a "fellow lover"
```

Dual-aspect verbs add -m- to the habitual adjective stem, but with gerund Tone Patterns:

mὲ	"build"	mèɛdím-tāa	"fellow-builder"
<i>d</i> ì	"eat"	dìtím-tāa	"messmate"
$par{v}$	"share"	pūvdím-tāa	"fellow-sharer"
kpèň'	"enter"	kpèň'ɛdím-tāa	"fellow-resident"
$z\grave{a}b^{arepsilon}$	"fight"	zàbıdím-tāa	"opponent"
$dar{v}g^{arepsilon}$	"cook"	dūgvdím-tāa	"fellow-cook"
fāň	"snatch"	fāaňdím-tāa	"fellow-robber"
tùm ^m	"work"	tùmmím-tāa	"co-worker"
$p\grave{v}'vs^{arepsilon}$	"worship"	pù'vsím-tāa	"fellow-worshipper"
d i $\iota s^{arepsilon}$	"feed"	dìısím-tāa	"fellow-feeder"
$s\grave{v} \eta^arepsilon$	"help"	sùŋím-tāa	"fellow-helper"
	0	r sùŋıdím-tāa	
s <u>i</u> àk ^ε	"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 9.1.1:

<u></u> įgι ^{ya/}	"be kneeling"		ī̞gɪlím-tāa	"fellow-kneeler"
		or	ī̞gɪdím-tāa	"fellow-kneeler" WK
zìň'i ^{ya}	"be sitting"		zìň'ilím-tāa	"fellow-sitter"
		or	zìň'idím-tāa	"fellow-sitter" WK
νābι ^{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"
zì¹e ^{ya}	"be stood"		zìฺ'əlím-tāa	"fellow-stander"
		or	zìˈədím-tāa	"fellow-stander" WK
dīgı ^{ya/}	"be lying"		dīgılím-tāa	"fellow-lier"
		or	dìgıním-tāa	"fellow-lier" WK

9.2.1.5 Others

-s- appears in a few concrete nouns derived from verbs:

dīg≀ ^{ya/}	"be lying down"	dīgısá	"lairs"
$dar{v}$	"go up"	$dar{v}$ vsá	"steps"

-m- derives nouns from verbal roots in

zò	"run"	z̄ɔm ^{mɛ}	"refugee"
kpį	"die"	kpį̇̃'im ^{m/}	"corpse"

-d- appears as an instrument noun formant instead of the usual -dim- in

```
t u \dot{a} "grind in a mortar" t \bar{u} \theta d \iota r^{\varepsilon} "mortar"
```

See also on $p\bar{\imath}b\imath n^{n\epsilon}$ "covering" etc, where the n may represent *ld 8.1.2. -b- derives nouns from verbal roots in

kpį	"die"	kpį̀ibıg ^a	"orphan"
dà'	"buy"	dà'abır ^ɛ	"slave"

 $L\bar{\imath}\imath b\imath r^{\varepsilon}$ "twin" may be a similar formation from Proto-Oti-Volta *ri "two" with an aberrant reflex of *r; cf Buli $y\bar{\imath}b\bar{\imath}k$ id.

9.2.2 From nominals

-s- and -l- form adjectives from adjectival roots:

mā'e [/]	"cool down"	mā'asír ^ε	"cold, wet"
$bar{v}k^{arepsilon/}$	"weaken"	būgvsír ^ε	"soft"
$tar{arepsilon}b\iota g^{arepsilon/}$	"get heavy"	tēbisír ^e	"heavy"
mị̀'ig ^ɛ	"get sour"	mị̀'isvg°	"sour"
$sar{\jmath}b^arepsilon$	"get dark"	sābīlíg ^a	"black"

-d- features in a number of nouns with no evident derivational meaning, such as $y\bar{u}gvdvr^{\varepsilon}$ "hedgehog", $l\bar{a}'af^{\circ}$ "cowrie" pl $l\bar{i}gvdv$ "money", $p\dot{v}gvdvb^{a}$ "father's sister." It can form abstract nouns from human-reference words (examples from KB, Naden):

```
p\underline{u}'à-s\bar{a}dur^{\varepsilon/} "young woman"
                                                                  "girlhood, virginity"
                                                 pu'asatim
b\bar{v}n-k\dot{v}d\dot{v}g^{\circ} "old man"
                                                 bunkuttim
                                                                  "old age"
                "fool"
                                                                  "folly"
gεdvg
                                                 ąεtim
pὺ-kàɔňr<sup>ε</sup>
                "widow"
                                                 pukontim
                                                                  "widowhood"
bā'-bîig<sup>a</sup>
                                                                  "brotherhood"
                "brother"
                                                 ba'abiidvg
```

-m- appears in both concrete nouns, mostly with human reference, and abstracts:

b <u>ī</u> 'a	"bad"	<i>b</i> į̄'əm ^m	"enemy"
tàd1g ^E	"become weak"	tādım ^{m/}	"weak person"
áňsìb ^a	"mother's brother"	āňsíŋ ^a	"sister's child"
yáab ^a	"grandparent"	yáaŋ ^a	"grandchild"
vúer ^ε	"red kapok fruit"	νúθη ^a	"red kapok"
b $_{}$ 'isı $r^{arepsilon}$	"breast"	bị̀'isím ^m	"milk"
nà'ab ^a	"chief"	nā'am ^m	"chiefship"
zɔ̄lvgɔ/	"fool"	zōlımís ^ɛ	"foolishness"

Abstract $-mis^{\varepsilon}$ forms seem always to have H toneme; cf $b\dot{u}d\imath mis^{\varepsilon}$ "confusion", where, however, the -m- is part of the verb stem $b\dot{u}d\imath m^{\mathrm{m}}$ "get confused"; cf also

```
t\bar{a}dim^{m/} "weak person" t\dot{a}dimis^{\epsilon} "weakness"
```

Added to existing adjectival stems, -m- produces no change of meaning:

ňyὲεs ^a	"be self-confident"	ňyὲεsίη ^a	"self-confident"
vèňllıg ^a	"beautiful"	vèňllíŋ ^a	"beautiful"
mālısíg ^a	"pleasant"	mālısíŋ ^a	"pleasant"

lāllúg ^o	"distant"	lāllí ŋa	"distant"
nār ^{a/}	"be necessary"	nàrvŋº	"necessary"
wōk ^{ɔ/}	"long, tall"	wā'am ^{a/}	"be long, tall"

-m- is seen in a good many unanalysable 3-mora nominal stems, such as the nouns $y\bar{v}g\acute{v}m^{n\epsilon}$ "camel" (ultimately from Berber), $gb\bar{\iota}g\imath m^{n\epsilon}$ "lion", $z\imath l\imath m^{m\epsilon}$ "tongue, $a\check{n}rv\eta^{\circ}$ "boat", and the adjectives $z\grave{u}lv\eta^{\circ}$ "deep", $\check{n}y\bar{a}l\acute{v}\eta^{\circ}$ "wonderful", $y\grave{a}lv\eta^{\circ}$ "wide."

-l- and -lim- derive abstract nouns from nouns and adjectives. The suffix -lim- is the only derivational suffix before which *CVVC* roots do not become *CVC*, and it can follow a preceding derivational suffix, creating five-mora stems. The stems of these abstract nouns are not themselves used as adjectives.

dāu	"man"	dàalım ^m	"masculinity"
pu̞'āa	"woman"	pù'alım ^m	"femininity"
b <u>ī</u> ig ^a	"child"	b <u>ì</u> ilím ^m	"childhood"
tītā'al ^{lɛ}	"proud person"	tītā'alım ^m	"pride"
$g ar{\imath} \eta^{ m a}$	"short"	g <u>ī</u> iňlím ^m	"shortness"
wōk [□] /	"long, tall"	wā'alím ^m	"tallness"
sāan ^{a/}	"guest, stranger"	sáannìm ^m	"strangerhood"
tīrâan ^a	"neighbour"	$t\bar{\imath}r\hat{a}ann\grave{\imath}m^{m}$	"neighbourliness"
$g ar{i} \eta^{ m a}$	"short"	g <u>ī</u> ŋılím ^m	"shortness"

10 Prefixes

10.1 Nouns and adjectives

Many nouns, and one or two adjectives, have an element preceding the root which is not the combining form of any noun. Such elements will be called **noun prefixes**. Noun prefixes usually have no identifiable meanings; however, they are common in particular semantic fields, such as small animals, reptiles and insects.

Most noun prefixes fall into just a few phonological types. Segmentally, they are mostly of the shape CV(n), where V shows only the three-way $a \iota v$ vowel distinction of affix vowels; the ι/v distinction itself and realisations as [i] or [u] are predictable 3.3. 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 3.8.1.

A few cbs have become separated from their original paradigms through phonological simplifications and/or semantic bleaching and are effectively now prefixes. Other prefixes are related to verbal negative particles.

The personifier particle <u>12.6</u> it is not a prefix but a right-bound particle.

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/v and ι replaces v before root $i/\iota/\varepsilon$. A few forms show Ca. No cases occur with voiced stops or voiced fricatives.

kùkɔ̃r ^ɛ /	"voice"	kùkòm ^{mɛ}	"leper"
kìkàŋ ^a	"fig tree"	kìk <u>ī</u> rıg ^{a/}	"tutelary spirit"
k[p]ùkpàrıg ^a	"palm tree"	kpīkp <u>ī</u> n ^{na/}	"merchant"
$t\bar{\imath}t\bar{a}$ ' $ar^{arepsilon}$	"big"	tàtàl ^{lɛ}	"palm of hand"
pīp <u>ī</u> rıg ^{a/}	"desert"	sìsịˈəm ^m	"wind"
lìlāalíŋ ^a	"swallow"	mìm <u>ī</u> ilím ^m	"sweetness"
mìm <u>ī</u> ilúg ^o	"sweetness"	kpàkūr ^{ε/}	"tortoise"
tìtūmıs ^ε	"sending"	fūfūm ^{mε}	"envy"; "stye"
zà-sìsɔ̄bır ^{ɛ/}	"evening" (zà- cb c	of <i>zàam</i> m "evening",	$s\bar{\mathfrak{z}}b^{\varepsilon}$ "get dark")

More complex is a similar type with a final nasal consonant; voiced stops and fricatives do occur with this type:

dùndùug ^o	"cobra"	dìndēog ^{o/}	"chameleon"
$b imb im^{m \epsilon}$	"altar"	bùmbàrıg ^a	"ant"
kìnkàŋ ^a	"fig"	tīntōňríg ^a	"mole"
zīnzāuŋɔ/	"bat"	sīnsáaň	a kind of tiny ant
nວ̄b-pύmpàu̯ŋ ^ɔ	"foot"		

```
g \grave{v} n g \bar{v} m^{m \epsilon} "kapok material" (g \grave{v} m^{m \epsilon} "kapok fruit") z \grave{v} n z \grave{o} \eta^a "blind" (z \bar{u}' \Theta m^{m /} "go/make blind") p \grave{v} m p \bar{o} z g^{\circ} "housefly" (t \grave{a} m p \bar{u} a i d)
```

An even more complex type follows the reduplicated *CV* with -sin or -lin:

```
kpìsınkpìl<sup>l</sup>E
                             "fist"
                                                          tàsıntàl<sup>le</sup>
                                                                                        "palm of hand"
sīlınsîuňg<sup>o</sup>
                                                          sīlınsîuq<sup>o</sup>
                                                                                        "ahost"
                             "spider"
zīlınzîog<sup>o</sup>
                             "unknown" cf zī' "not know"
vùlınvùuňl<sup>le</sup>
                             "mason wasp"
wàsınwàl<sup>lɛ</sup>
                             parasitic gall on trees ("mistletoe" in local English)
nēsınnēog<sup>5/</sup>
                             "envious person" cf n\bar{\varepsilon}n^{\rm na/} "envy" WK
                              others "centipede" = WK n\dot{a}'-n\bar{\varepsilon}sinn\bar{\varepsilon}og^{5/2}
```

Prefixes may also be of the form Ca(n), where C is d b n m l s or z.

```
dàyūug<sup>5/</sup>
                           "rat"
                                                      dàwān<sup>nɛ/</sup>
                                                                                  "pigeon"
dàtìuŋɔ
                           "right hand"
                                                      dàgàbıga
                                                                                  "left hand"
dànkòŋɔ
                           "measles"
                                                      dàwàliga
                                                                                  "humid season"
dàyáam<sup>ma</sup>
                           "woman's parent-in-law"
                           "enemy" cf nìn-tāa "co-wife", Ghanaian "rival"
dàtāa
                           "liar" cf mà' "lie"
dàmà'a
dàkīiga
                           "sibling-in-law via wife"
dādύk<sup>ο</sup>
                            a kind of large pot, cf d\bar{v}k^{\circ/} "pot"
                           "hat"
                                                      bàlàar<sup>€</sup>
bàlànır^{\epsilon}
                                                                                  "stick, staff"
bānāa
                            traditional smock
bālērug<sup>o/</sup>
                           "ugly" cf l\bar{\varepsilon}r^{\varepsilon} "get ugly"
bàyēog<sup>5/</sup>
                           "betrayer of secrets" cf y\bar{\varepsilon}\varepsilon s^{\varepsilon/} "betray a secret"
nānzū'usε/
                           "pepper"
                                                      màngávŋ<sup>o</sup>
                                                                                  "crab"
làngávŋ<sup>5</sup>
                           "crab"
sākárùg<sup>o</sup>
                           "fox"
                                                      sàbùa
                                                                                  "lover, girlfriend"
sāmán<sup>nε</sup>
                           "courtyard"
                                                      s\bar{a}ng\acute{v}nn\`{i}r^{\epsilon}
                                                                                  "millipede"
zànkù'ar<sup>E</sup>
                           "jackal"
                                                      Zàngbèog<sup>o</sup>
                                                                                  "Hausa person"
```

 $N\grave{a}y\bar{i}ig^a$ "thief" is written na'ayiig in NT/KB as if with the cb $n\bar{a}'$ - "cow", but it has L toneme initially and the vowel is definitely not glottalised (WK); nor is the sense limited to "cattle thief." It is an a|ba class g-stem: pl $n\grave{a}y\grave{i}ig$ - $n\grave{a}m^a$; cf $n\grave{a}y\bar{i}ig$ m^m "thievery." There is an analogical $ga|s\varepsilon$ pl $n\grave{a}y\bar{i}is^\varepsilon$. The Farefare cognate is $n\grave{a}y\grave{i}g\grave{a}$, pl nayigba or nayigsi; Dagbani has nayiya pl nayiysi and also tayiya.

Some prefixes are connected with the verb negative particles $p\bar{v}$ $k\dot{v}$:

```
k \dot{v} n d \dot{v}' a r^{\epsilon} "barren woman"; cf d u' \dot{a}^a "bear, beget" n \bar{l} n - p \bar{v} - n \bar{a} n^{na} "disrespectful person"; cf n \bar{a} n^{\epsilon} "love, respect" t \dot{v} b - p \bar{v} - w \dot{v} m n \dot{v} b^a "deaf people" (Rom 11:7) cf t \dot{v} b v r^{\epsilon} "ear", w \dot{v} m^m "hear."
```

However, most cases show no identifiable negative meaning:

```
k \dot{v} n d \dot{v} \eta^{a} "jackal" g \bar{v} m p \bar{v} z \bar{\epsilon} r^{\epsilon/} "duck" d \bar{a} m p \bar{v} s \bar{a} a r^{\epsilon} "stick" b \bar{a} n - k \dot{v} s \dot{\epsilon} l^{1\epsilon} "lizard"
```

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 <u>5.2</u>.

Nịn- "body" is accepted by WK as cb of $n\bar{i}\eta^a$ $n\bar{i}is^\epsilon$ [= Mooré $y\tilde{i}nga$] but the word is rare; it appears in nịn- $t\bar{a}a$ "co-wife" and nịn- $gb\bar{i}\eta^{o/}$ "human skin; body."

 $D\grave{a}$ - "man" has been replaced as regular cb by forms segmentally remodelled on sg and pl $d\grave{a}\mu$ -, $d\grave{a}p$ -, but $d\grave{a}$ - is seen in $d\grave{a}$ - $p\bar{a}al^{al}$ "son, boy" ($p\bar{a}al\acute{i}g$ "new") and $d\grave{a}$ - $k\grave{o}$ > $n\check{n}^{\epsilon}$ "son, bachelor" (cf \grave{a} rak \acute{o} $n\check{n}$ " "one.")

 $P\dot{v}$ - "woman" (cf $p\dot{u}$ ' \dot{a} " "woman" cb $p\dot{u}$ ' \dot{a} -) appears in $p\dot{v}$ - $k\dot{z}$ o \check{n} r^{ε} "widow"; cf Mooré $p\dot{v}gk$ \check{o} oré "widow" along with $p\dot{v}gs\acute{a}d\grave{a}$ "young woman" = Kusaal $p\dot{u}$ ' \dot{a} - $s\bar{a}$ $dir^{\varepsilon/}$.

 $P\bar{v}$ - "farm" (cf $p\bar{o} g^{o/}$ "field, farm", pl $p\bar{o} t^{\epsilon/}$, cb $p\bar{o}$ -, Mooré $p\acute{v}vg\grave{o}$ pl $p\acute{v}t\grave{o}$) appears in $p\bar{v}$ - $kp\bar{a}ad^{a/}$ "farmer" (= $kp\bar{a}ad^{a/}$ id); tonally, it behaves as a M prefix 3.8.1.

 $N\dot{a}$ '- "chief"(?) appears before a number of nouns signifying animals and insects: $n\dot{a}$ '- $z\dot{o}m^{m\epsilon}$ "locust", $n\dot{a}$ '- $d\dot{a}w\bar{a}n^{n\epsilon}$ "pigeon" (= $d\dot{a}w\bar{a}n^{n\epsilon}$) and WK's $n\dot{a}$ '- $n\bar{\epsilon}sinn\bar{\epsilon}og^{o/}$ "centipede" ($n\bar{\epsilon}sinn\bar{\epsilon}og^{o/}$ "envious person" WK; others: "centipede.")

The cb perhaps relates to traditional folklore; cf \grave{a} - $k\bar{\jmath}ra$ - $d\hat{\jmath}$ em^{ma} "praying mantis" ("hyena's parent-in-law") and animal and bird names which incorporate the personifier particle, like \grave{a} - $d\grave{a}$ al \acute{u} $\acute{\eta}$ ^o "stork", \grave{a} - $g\^{a}$ v \check{n} g^o "pied crow", \grave{a} - $m\acute{u}$ s^{ϵ} "cat."

10.2 Quantifiers and adverbs

Unlike noun prefixes, prefixes with quantifiers and adverbs have identifiable meanings. All such prefixed forms are liaison words 4.2.

All forms of the numbers 2 to 9 begin with a number prefix $\underline{12.5.1}$. The number prefixes are fossilised noun class agreement flexions. With the collapse of grammatical gender, the a|ba class agreement pronouns \grave{o} $b\grave{a}$ were generalised for animate gender and the $r\varepsilon|aa$ class singular pronoun $l\grave{i}$ was adopted for inanimate. In Dagbani, where there has been a similar change, the old plural pronoun ga is still found in older materials for inanimate plural (Olawsky 1999.) The aa- of numbers used as quantifiers like aa aa- is also seen in aa "how many?" contrasting with aa "thus", which has manner-adverb aa-.

The expected corresponding number prefix $b\grave{a}$ - is not now found after nouns with animate gender, but is still preserved after personal pronouns: $t\grave{\imath}$ $b\grave{a}t\acute{a}\check{n}$ "we three", $y\grave{a}$ $b\grave{a}y\acute{p}\grave{o}e$ "you seven", $b\grave{a}$ $b\grave{a}y\acute{t}$ "they two."

The form of the number words 2-9 used for counting represents the old mm class agreement, in the "abstract" sense of mm 5.1: thus ntan "three", ntan "four", ntan "five." Nawdm, which preserves class agreement for numbers (ntan bàtán "three people") uses the agreement prefix for its cognate m-class for counting: mtan "three" mna "four" mnu "five" etc (Fiedler 2012.)

The number prefix $b\dot{v}$ - appears in various adverbial number words; it probably represents either an old $b\bar{v}$ or mm class agreement.

àbùy <u>í</u> '	"twice"	àbùtáň'	"three times"
àbùnāasí	"four times"	bùp <u>ī</u> iga	"ten times"
nāarím bỳtáň'	"three times"		

Several manner-adverbs have a prefix \grave{a} - along with apocope-blocking <u>13.4</u>. It is followed by M spreading. It differs from the number prefix in that it does *not* cause a preceding LF-final vowel to appear as -a <u>4.2</u>.

àmēŋá	"truly"	àsīda	"truly"
ànínà	"promptly"		

The same prefix is also seen in a number of proadverbs and in the locative $\grave{a}g\acute{o}l^{l\epsilon}$ "upwards."

11 Unsegmentable complex stems

Numerous words in Kusaal (including the very name of the language, $K\bar{\upsilon}s\hat{a}al^{\epsilon}$) 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, like $gb\acute{a}ny\grave{a}'a$ "lazy person", cf Dagbani gbinyayli "laziness." 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, such as $K\bar{\upsilon}s\hat{a}as^{\epsilon}$ "Kusaasi", $N\bar{v}s\bar{u}mp\bar{u}rs^{\epsilon}$ "Mamprussi", $N\bar{v}s\bar{u}m^{ma}$ the name of WK's clan.

11.1 Loanwords

Nouns form by far the largest group of identifiable loanwords. They are often fitted into the noun class system by analogy $\underline{5.5}$. The initial \grave{a} - of loanwords like $\grave{a}raz\acute{a}n\grave{a}$ "heaven" and $\grave{a}raz\grave{a}k^a$ "riches" is usually treated tonally as fixed-L $\underline{4.4.3}$.

Most identifiable loanwords 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 $H\grave{a}us\grave{a}awaa$ 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 $[\widehat{d}_3]$, monophthongises diphthongs, and drops the distinction between glottalic consonants and their plain counterparts.

Nouns borrowed from Hausa often deviate from typical Kusaal noun structure. Examples include $d\bar{a}k\acute{a}$ "box", Hausa $\grave{a}dak\grave{a}a$ (ultimately from Portuguese arca); $g\bar{a}dv$ "bed", Hausa gadoo; $k\grave{\varepsilon}\epsilon k\grave{\varepsilon}$ "bicycle", Hausa $k\grave{e}ek\grave{e}$; $b\acute{a}kp\grave{a}e$ "week", from Hausa $bakw\grave{a}i$ "seven", also used for "week" in Gaanancii.

Identifiable verb loanwords are much less common. They are subject to the usual constraints on verb shapes 9.1, e.g. $d\grave{a}am^m$ "disturb, trouble", Hausa $d\grave{a}amaa$; $b\grave{v}g^\epsilon$ "get drunk", Hausa $b\grave{u}gu$, literally "get thoroughly beaten", a Hausa idiom.

Several function words are loans, probably from Hausa: $\dot{a}s\dot{\epsilon}\epsilon$ "except", Hausa $sai; k\bar{v}v$ "or", Hausa $koo; b\acute{a}a$ "not a...", Hausa $b\hat{a}a$.

Loanwords with Hausa counterparts did not necessarily originate in Hausa, itself a great borrower. Some appear in many languages of the region, e.g. $h\bar{a}li$ "until", Hausa har, Kikara Songhay $h\hat{a}li$, possibly from Arabic $\hbar atta$: (Heath 2005.) With $labi^{ya}$ "be crouching behind something", Hausa labe "crouch behind something to eavesdrop", Kikara Songhay labi "hide behind or under something", the match of form and meaning is striking; if $labi^{ya}$ is a loan, its single-aspect flexion and dual-aspect derivatives are probably due to the analogy of $v\bar{a}bi^{ya/}$ "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.

Arabic loans are frequent throughout the languages of the Sahel and Savanna; thus, among many others: Kusaal *láafiya*, Hausa *laafiyàa*, Mooré *làafi*, Kikara Songhay *ʔàlà:fíyà* "health", Arabic *ʔal-ʕa:fiya* "the wellness"; Kusaal *àrazàk*^a, Hausa *arzìkii*, Mooré *àrzɛ́ká* "riches", Kikara Songhay *ʔárzúkù* "good luck", Arabic *ʔar-rizq* "the livelihood" pl *ʔarza:q; àrazánà* "heaven, sky", Hausa *àljannàa*, Mooré *àrzãnà*, Kikara Songhay *ʔàljánnà* "heaven, paradise", Arabic *ʔal-ʒanna* "the garden, paradise"; Kusaal *yàddā* "assent", Hausa *yàrda* (verb) "consent", Kikara Songhay *yárrɛ̂* "consent", probably from the Arabic *yard²a:*, 3sg masculine ipfv of *rad²iya* "be satisfied"; Kusaal *Tàláatà*, Hausa *Tàlaatàa*, Arabic *ʔaθ-θala:θa:?* "Tuesday."

Arabic words have mostly entered Kusaal via Hausa, but some Kusaal forms more closely resemble **Mooré**. Many Mossi live in the Kusaasi area, and many Kusaasi 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 $m\grave{a}l\dot{a}k^{al}$ "angel" (malek in NT versions prior to 2016) is derived from the Arabic mal?ak; the vocalism suggests transmission via Mooré $m\grave{a}l\acute{e}k\grave{a}$. The forms clearly do not match Hausa $m\grave{a}laa'ik\grave{a}a$, which is from the Arabic plural mala:?ika. Similarly, $S\bar{v}t\acute{a}an\grave{a}$ "Satan" matches Mooré $Svt\~{a}ana$ rather than Hausa $sh\grave{a}id\^{a}n$, which is a learned borrowing of the Arabic $fayt^{f}a:n$.

Christian missionary work among the Kusaasi began in Haute Volta (now Burkina Faso) and used Mooré materials, leading to borrowing and calquing. $Winn\dot{a}'am^{m}$ (WK) $Win\dot{a}'am^{m}$ (Wina'am NT/KB) is "God" in Christian materials, though the Creator of traditional religion often appears simply as $Win^{n\varepsilon}$ in proverbs etc. $Winn\dot{a}'am$ looks like a compound of $win^{n\varepsilon}$ "god" and the stem of $n\dot{a}'ab^{a}$ "chief" or $n\bar{a}'am^{m}$ "chieftaincy", but the tones would then have been * $Win-n\dot{a}'am$, and the prevalence of $Win\dot{a}'am$ with single n confirms that the form is not a synchronic compound. Direct borrowing of Mooré $Win\dot{a}'am$ would not account for the glottalised a'a, and the immediate source is probably **Toende Kusaal**. Niggli has $Win\ddot{a}'am$, with a tonal fall like Agolle $Win\dot{a}'am$, and single n, reflecting the loss of consonant gemination in Toende everywhere except before LF affix vowels.

Faangid "saviour" (NT/KB) is read [fã:gjid] by my informants; preservation of g in this position 3.7 is exceptional, the only other cases in my data being faangir "salvation" and the gerund $z\bar{\imath}' \circ g^a$ of $z\bar{\imath}' e^{ya}$ "be standing" used by DK KT instead of $z\bar{\imath}' a$. The agent noun of $f\bar{a}e^{j}$ "save", $f\bar{a}a\bar{n}d^{aj}$, was avoided as identical to the agent noun of $f\bar{a}\bar{n}$ "rob, snatch", NT/KB faand "robber"; WK confirmed that $f\bar{a}a\bar{n}d^{aj}$ has both meanings in his idiolect. Faangid is probably another loan from Toende Kusaal, which often retains *g in this position: \tilde{O} bv paage "Il n'est pas arrivé." Niggli has both fãagit and fãat for "saviour", with fãat also glossed as "robber."

 $Wina'am\ faangid\ faangir$ appear in the actual speech of many Agolle Kusaasi, and are used in this grammar in transliterating Bible verses. Older NT versions also used the Toende forms $aaru\eta$ (Toende $\tilde{a}arv\eta$) for $andv\eta$ "boat", and malek (Toende malek, Mooré malek) for malek "angel", but KB has $anrv\eta$ and maliak throughout, matching the usage of my informants and of the audio 1996 version.

A clear **Mampruli** loanword is WK's $k\bar{\imath}ib\dot{\upsilon}$ cb $k\bar{\imath}ib$ - "soap", which he uses instead of Kusaal $k\bar{\imath}'\imath b^{\jmath\prime}$. The length and quality of the vowels identify the source as Mampruli kyiibu: contrast Farefare $k\hat{\imath}'ib\dot{\jmath}$, Dagbani chibo. Other words with singulars ending in - \imath or - υ also probably originated as loans from Mampruli or Mooré 5.1.

Loanwords of **Songhay** origin include $b\dot{v}rkin^a$ "honest person", Mooré $b\dot{u}rkin\acute{a}$ "free, noble", Dagbani bilchina "free, not slave", cf Kikara Songhay $b\dot{v}rkin$ "noble (caste)" and $b\dot{a}\mu\eta\nu$, used only in $kp\dot{e}n'$ $b\dot{a}\mu\eta\nu$ "get circumcised" ($kp\dot{e}n'$ "enter"), Mooré $k\ddot{e}$ $b\ddot{a}ong\acute{o}$ id, cf Kikara Songhay $b\dot{a}\eta g\dot{u}$ "pool, spring", \dot{a} $h\acute{u}r\acute{o}$ $b\dot{a}\eta g\dot{u}$ "he entered the pool", i.e. "he was circumcised."

Loans from **Twi/Fante** ("Akan"), the major lingua franca of southern Ghana, include $k\bar{\jmath}d\acute{\nu}$ "banana", Twi kwadu; $s\bar{a}af\iota$ (?tones) "lock, key", Twi $saf\~e$ "key" (from Portuguese chave); $b\bar{\nu}r\imath\gamma\acute{a}$ "Christmas", Twi bronya (itself of unclear origin.)

English loanwords sufficiently naturalised to be used by speakers unfamiliar with English have often undergone considerable changes: $\grave{a}l\acute{o}p\grave{i}r^{\epsilon}$ "aeroplane", perhaps a back-formation from [alɔpɪ[ɪn] taken as a locative $\grave{a}l\acute{o}p\grave{i}r\bar{\imath}$ - $n^{\epsilon l}$; $d\acute{v}$ 'at\grave{a} "doctor" (cf Dagbani $d\acute{o}yt\acute{\epsilon}$ id); $t\acute{o}kl\grave{a}e$ "torch" ("torchlight"); $l\acute{o}r^{\epsilon}$ "car, lorry" (often borrowed even in Francophone Africa: cf Mooré $l\acute{o}r\grave{e}$, Nawdm $l\grave{o}\acute{o}r$); pootim (Jeremiah 20:10) "complain about officially" ("report.")

English stress may be represented by a H toneme which remains fixed throughout the paradigm: $l\acute{o}y\grave{a}$ "cars", not $*l\~{o}y\acute{a}$.

Several words of English origin have probably been transmitted via Hausa: $k\acute{o}t\grave{v}$ "court", Hausa $koot\grave{u}$; $s\acute{o}g\dot{\iota}\grave{a}^a$ "soldier", Hausa $sooj\grave{a}$; $t\acute{\epsilon}\epsilon\grave{b}\grave{v}l^\epsilon$ "table", Hausa $teeb\grave{u}r$; $w\bar{a}d\acute{a}$ "law", Hausa $sood\grave{a}$, from English "order", with Kusaal sg $w\bar{a}d\imath r^{\epsilon l}$ cb $w\bar{a}d$ - created by back-formation.

A clear **French** loan in Agolle Kusaal is $l\grave{a}mp\bar{o}$ (i.e. $l'imp\hat{o}t$) "tax", as in $l\grave{a}mp\bar{o}-d\hat{l}'os^a$ "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 $k\grave{a}s\bar{\epsilon}t^{al}$ "witness, testimony", Mooré $k\grave{a}s\acute{e}t\grave{o}$ "testimony, proof", as in $k\grave{a}s\acute{e}t$ sé $br\grave{e}$ "receipt" ("evidence writing.") The ultimate origin is probably French cachet in the sense "seal (of authenticity)", with -t-perhaps introduced from the corresponding verb: il $cach\grave{e}te$ "he seals." Mooré and Farefare $k\grave{a}s\acute{e}t\grave{o}$ have only the abstract sense "testimony"; the adaptation as an a|ba class human-reference noun "witness" seems to be a Kusaal innovation enabled by the dropping of the final vowel.

There are naturally many more French loans in the Toende Kusaal of Burkina Faso (Niggli 2014.)

12 Noun phrases

12.1 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** $l\bar{a}^{/}$ occurs last in a NP. (For the sole exception, see <u>16.11</u>.)

Unbound dependent NPs may precede the head recursively. Some pronouns have specialised roles as NP heads; otherwise the meanings correspond to the wide range expressed in English by genitives or NP complements with "of", e.g.

```
dāμ lā bύtὶη "the man's cup" ("cup of the man") sālıma bύtὶη "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 21.2 are also NPs.

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:

```
b\bar{v}vg "goat" b\dot{v}-p\dot{\imath}\partial l\iota g "white goat" b\dot{v}-k\dot{a}\eta\bar{a} "this goat" b\dot{v}-p\dot{\imath}\partial l-k\dot{a}\eta\bar{a} "this white goat"
```

Compounds with non-referential cbs as dependents are also common:

```
n\dot{a}'ab\ l\bar{a}\ wid-z\bar{v}vr "the chief's horse-tail" vs n\dot{a}'ab\ l\bar{a}\ wief\ z\hat{v}vr "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>5.2</u>. Compounding is so productive that the cb is a regular part of noun and adjective flexion <u>5.1</u>.

For the tone sandhi rules which affect the component following the combining form see <u>4.4.3</u> <u>4.4.4</u>. They are not sensitive to whether the cb is head or dependent.

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:

 $[b\dot{v}-p\dot{i}\partial l-]k\dot{a}\eta\bar{a}$ "this [white goat]" $[n\bar{i}n-w\acute{o}k-]p\dot{i}\partial lig$ "white [tall person]"

[zà'-nō-]píəlìg "white gate" ("white [compound-mouth]")

A compound may appear as generic argument to a following deverbal noun:

 $[z\dot{a}'-n\bar{b}-]g\acute{u}r$ "gate-keeper"

 $[[z\dot{a}'-n\bar{c}-]g\acute{u}r-]k\grave{a}\eta\bar{a}$ "this [gate-keeper]"

Noun-adjective compounds can be used as bahuvrihi adjectives 12.8.1.1:

nīf-ňyáuk "one eye"

 $b\dot{v}$ -[$n\bar{i}f$ - $n\bar{i}y\dot{a}uk$] "[one-eyed] goat"

 $n\bar{o}b$ - $w\acute{o}k$ "long leg"

 $k\grave{v}g$ -[n5b- $w\acute{o}k]$ "[long-legged] stool"

Bahuvrihis can appear as complements of $\grave{a} e \check{n}^a$ "be something":

 $K\grave{v}g-k\grave{a}\eta\bar{a}$ \acute{a} $n\bar{\varepsilon}$ $n\bar{o}b-w\acute{o}k$. "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>12.7.2</u> bind tighter than the link between cb generic arguments and deverbal nouns:

ānzúrīfà nē sālīma lâ'ad "silver and gold goods"

[ānzúrɪfà lá'-]māan "silversmith" ("[silver goods]-maker")

[ānzúrīfà nē sālīma 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:

[sālīma bútin-]kànā "this [gold cup]"

[[$s\bar{a}lima\ l\acute{a}'$ -] $m\grave{a}an$ -] $k\grave{a}\eta\bar{a}$ "this [[gold-item]-maker]" \grave{o} [[$s\bar{a}lima\ l\acute{a}'$ -] $m\bar{a}an$] "her [[gold-item]-maker]"

sālīma [zá'-nɔ̄ɔr] "golden gate" ("golden [compound-mouth]")

zūgύ-n [níf-gbáuη] "upper eyelid" ("upper [eye-skin]")

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:

```
[f\bar{u}-z\check{\epsilon}\check{n}d\grave{a}] k\grave{u}es "seller of red (i.e. dyed) cloth" not *f\bar{u}-z\check{\epsilon}\check{n}'-k\grave{u}es
```

Coordination is characteristically a feature of NPs, but also found in AdvPs. The particles for "or" are $b\bar{\epsilon}\epsilon$ or $k\bar{\nu}\nu$. 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:

```
Bṛig lā kūv dāu lā kúv bà wūsa child:sg art or man:sg art or 3PL all "The man, or the child, or both" WK
```

The particle for "and" for NPs and AdvPs is $n\bar{\varepsilon}$. This $n\bar{\varepsilon}$ is fundamentally the same word as the preposition "with"; the linker adjuncts $b\bar{\varepsilon}\varepsilon$ and $k\bar{\upsilon}\upsilon$ can be used in a parallel way. $N\bar{\varepsilon}$ links nominal words and phrases, but no clauses other than (previously nominalised) $n\bar{c}$ -clauses. It is not possible to omit coordinating particles in a series of three or more items, or to use $n\bar{\varepsilon}$ to join two words with the same referent:

```
\dot{A}-W\bar{\imath}n n\acute{\epsilon} \dot{A}-B\bar{\upsilon}g\upsilon r n\acute{\epsilon} \dot{A}-N\dot{a}'ab "Awini, Abugri and Anaba" "a doctor and a chief" (necessarily two different people)
```

Coordinated heads may not share determiners:

```
m{m} ba'abiis n \in m{m} saamnama \begin{subarray}{l} \dot{m} & b ar{a}' - b \hat{p} is & n \hat{\epsilon} & \dot{m} & s \hat{a} a m - n \hat{a} m ar{a} = \emptyset \ \end{subarray} 1SG father-child:PL with 1SG father-PL=VOC "my siblings and [my] fathers!" (Acts 7:2) \begin{subarray}{l} \dot{p} \dot{u} \dot{a} & l ar{a} & l ar{a} & \text{"the woman and the man"} \ \end{subarray} woman:SG ART with man:SG ART
```

An exception is *ȳiigá* "firstly" used as a predependent for "first" <u>12.7.3</u>:

```
yiiga sangbaun ne tengbaun ne ateuk
ȳiigá sàŋ-gbàun nē téŋ-gbàun né àtìuk
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:

```
K\bar{v}s\hat{a}al\ s\acute{o}lim\grave{a} n\bar{\varepsilon} s\acute{i}l\acute{i}m\grave{a} "Kusaasi stories and proverbs" Kusaal story:PL with proverb:PL
```

```
K\bar{v}s\hat{a}as k\hat{u}\theta b n\bar{\varepsilon} y\bar{l}r "Kusaasi agriculture and housing" Kusaasi:PL hoeing with house:SG
```

```
s\bar{a}lıma\ b\acute{v}t\`{\imath}\iota s\ n\bar{\epsilon}\ d\acute{\imath}\iota s\acute{i}m\grave{a} "gold cups and spoons" gold cup:PL with spoon:PL ("all of them gold", KT)
```

However, KT WK both agreed that $s\bar{a}lima\ l\hat{a}'ad\ n\bar{\epsilon}\ b\bar{\nu}tiis$ must mean "gold goods and [not gold] cups", WK offering the correction

```
s\bar{a}lıma\ l\hat{a}'ad\ n\acute{\epsilon}\ \grave{o}\ bar{v}tus "gold goods and (gold) cups" WK gold item:PL with 3AN cup:PL
```

where \grave{o} refers to $s\bar{a}lima$. (See 12.3 on the unexpected gender of the pronoun.) The difference from $s\bar{a}lima$ $b\acute{v}t\grave{i}\iota s$ $n\bar{e}$ $d\acute{\iota}\iota s\acute{\iota}m\grave{a}$ (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 $s\bar{a}lima$ $b\acute{v}t\grave{\iota}\iota s$ $n\bar{e}$ $[s\bar{a}lima]$ $d\acute{\iota}\iota s\acute{\iota}m\grave{a}$ "gold cups and [gold] spoons" (I am grateful to Tony Naden for this suggestion.)

Coordinated heads may even occur before an adjective:

```
Ka m nyɛ saŋgbauŋ nɛ teŋgbaung paal.

Kà m̀ nyɛ̄ sáŋ-gbàuŋ- nɛ̄ 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:

```
*[b\bar{\epsilon}\etaid n\bar{\epsilon} k\bar{\imath}] k\hat{u}es not possible for "seller of b\bar{\epsilon}\etaid n\bar{\epsilon} k\bar{\imath}" (beanleaf-and-millet, a conceptual unity like "fish and chips", "lox and bagels.")
```

Dependent NPs or AdvPs can naturally include coordinated components:

```
o nya'andəlib pii nɛ yi "his twelve disciples" (Mt 26:20) ò nya'an-dəllıb pı̄i nɛ̄ yı́ "san after-follower:pl ten with two dv'atà nɛ̄ nâ'ab lā lɔ́yà "Doctor's and the chief's cars" doctor:sg with chief:sg art car:pl sālıma nɛ̄ ānzúrɪfà lâ'ad "gold and silver goods" gold with silver item:pl
```

The last two examples are ambiguous; they can also be construed as ellipsis of the first of two identical heads within a coordination of two dependent-head NPs:

```
d\acute{v}'atà (l\acute{o}y\grave{a}) n\~{\epsilon} n\^{a}'ab l\~{a} l\acute{o}y\grave{a} "[Doctor's cars] and [the chief's cars]" sālıma (l\^{a}'ad) n\~{\epsilon} ānzúrıfà l\^{a}'ad "[gold goods] and [silver goods]" vs [d\acute{v}'atà n\~{\epsilon} n\^{a}'ab l\~{a}] l\acute{o}y\grave{a} "the cars of [Doctor-and-the-chief]" [sālıma n\~{\epsilon} ānzúrıfà] l\^{a}'ad "[gold-and-silver] goods"
```

This is impossible if the ellipted element would have been a cb: an elliptical reading of $\bar{a}nz\dot{u}rif\dot{a}$ $n\bar{\epsilon}$ $s\bar{a}lima$ $l\acute{a}$ '- $m\bar{a}an$ "silver- and goldsmith" would have to mean "a smith made of silver and a smith made of gold."

NPs can also be combined by **apposition**. For apposition of locatives see $\underline{13.3}$; for relative clauses see $\underline{21.2}$.

NPs may precede personal names in apposition:

```
"King Agrippa." (Acts 25:13)

Li pu nar ye fu di fu ba'abiig po'a Herodiase.

Lì pō nār yé fò dí fò bā'-bṭig pu'á Herodiase=ø.

3IN 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-Sṭbigi n kābirīd.

... 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 \grave{a} - is not omitted in these cases shows that the relationship is not dependent-head <u>12.6</u>.

Personal pronouns in apposition use free forms <u>24.6</u>:

```
Man Paul [...] pv'vsidi\ ya. "I, Paul ... greet you." (2 Thess 3:17)

Mān Paul [...] pv'vsidi\ ya.

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>5.2</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 Nonapaal N5-ná-páal "New Testament" Siig\ Su\eta for Sisu\eta "Sì-sig\ N" "Holy Spirit"
```

In the audio version $Siig\ Su\eta$ is read $Siig\ sv\eta$ ($Siig\ sv\eta$ with M spreading) or $Si\ sv\eta$, not $*Siig\ sv\eta$; cf $lannig\ ka\eta \bar{a}$ "this squirrel", $dap\ bamm\bar{a}$ "these men."

12.2 Number

Number is a category only of nouns, pronouns and quantifiers. Agreement is confined to pronouns. However, in a compound of a noun with a following adjective or dependent pronoun, the *dependent* inflects to show the number of the head <u>12.8</u>.

Count nouns distinguish sg/pl, unlike **mass** nouns, which characteristically refer to liquids, substances or abstractions. Count nouns may be abstract:

$z\bar{z}zg^{\circ}$	$zar{z}zs^{arepsilon}$		"race"
bū'esύg ^ο	bū'esá	$bar{u}$ ' es -	"question"
zàaňsúŋº	zàaňsímà	zàaňsúŋ-	"dream"

The count/mass distinction affects the choice of quantifiers $\underline{12.5}$, the form of plurals with $n\grave{a}m^a$ $\underline{5.4}$, and the meaning of NPs as predependents $\underline{12.7.2}$.

Typical underived mass nouns belong to the $b\mathfrak{D}$ and mm noun classes, but gerunds of 3-mora-stem verbs regularly show sg $r\varepsilon$ or $g\mathfrak{D}$, and a number of words referring to uncountables or abstracts are formally plural, but construed as singular:

$b\bar{a}\check{n}'as^{\epsilon}$ $b\grave{a}\check{n}'$ - "dise	ease"
$\check{n}y\bar{o}$ ' $os^{\epsilon/}$ $\check{n}y\bar{o}$ '- "smo	oke"
tàdımís [€] "wea	akness"
$z\bar{\jmath}limis^{\epsilon}$ "fool	ishness"
$mar{arepsilon t^{arepsilon/}}$ $mar{arepsilon t}$ "pus	11
$k\bar{u}t^{\epsilon}$ $k\dot{u}t$ "iron	ı"

```
zùθdε
                                                                                    "friendship"
b\bar{v}vd^{\epsilon}
                                                                                    "innocence"
sīiňd<sup>€/</sup>
                                                                                    "honey"
nīn-pûud<sup>ε</sup>
                                                                                    "pus"
wāad<sup>ε/</sup>
                                                                                    "cold weather"
sūň-pêεn<sup>nε</sup>
                                                                                    "anger"
ku'à-nūud<sup>€/</sup>
                                                                                    "thirst"
                                                                                    "gold"
sālıma
                                                       sàlım-
sìda
                                                       sìd-
                                                                                    "truth"
```

 $K\bar{u}t^{\varepsilon}$ is also "nail"; the original sg $k\bar{u}dvg^{\circ}$ appears in the name $AK\bar{u}dvg^{\circ}$ 26.2. So too with a number of irregularly formed deverbal abstract nouns:

```
āεĕňm<sup>m/</sup>
     gēεňmísε
                        "madness"
                                                                                       "madden, go mad"
     bùdımís<sup>ɛ</sup>
                       "confusion"
                                                            bùd1m<sup>m</sup>
                                                                                       "confuse"
                                                            t\grave{\upsilon}m^{\mathrm{m}}
     tit\bar{\nu}mis^{\epsilon}
                        "sending"
                                                                                       "send"
     zīid<sup>E/</sup>
                                                                                       "carry on head"
                        "carrying on head"
                                                            zī
                       "noise"
     vūud<sup>ε/</sup>
                                                                                       "make a noise"
                                                            νū
     k\bar{\varepsilon}n^{n\varepsilon/}
                                                                                       "come"
                        "arrival"
                                                            kĒň
     piàn'ad<sup>E</sup>
                        "speech"
                                                            pįāň'a
                                                                                       "speak" (irreg. tones)
[sg pjàuňk<sup>o</sup>
                        "word"]
     dì'əma
                        "festival"
                                                            dì'əm<sup>m</sup>
                                                                                       "play, not be serious"
                        "work"
                                                            tòm<sup>m</sup>
                                                                                       "work"
     tūvma
[sq t̄υυm<sup>mε</sup>
                        "deed"]
     tēň'εsá
                        "thought"
                                                     cf
                                                            tēň'εsá yīnní
                                                                                       "one thought"
```

A single object may be referred to by a plural naming its components:

```
d\grave{a}-p\bar{v}vd\acute{a} d\grave{a}-p\bar{v}vd\acute{a} n\grave{a}m^a "cross" cf d\grave{a}-p\bar{v}vd\acute{a} "cross-piece"
```

A Kusaal plural may just happen to correspond to an English mass noun:

```
l\bar{a}\mu k^{\circ} l\bar{a}'ad^{\varepsilon} l\dot{a}' "piece of goods" l\bar{a}'af^{\circ} l\bar{i}gdi l\dot{a}' or l\dot{i}g "cowrie" pl "money"
```

Mass nouns can be used in count senses: *dāam nám* "beers." Some count nouns can have mass senses:

```
f\bar{u}ug~d\hat{o}og "tent" (cloth hut): f\bar{u}ug "item of clothing, shirt" d\hat{a}ad~b\acute{v}n-n\acute{a}m "wooden things": d\hat{a}ad "pieces of wood"
```

12.3 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

```
*\dot{O} à n\bar{\varepsilon} 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 wị əf yá' sị gí lì nĩ, lì zùlvŋ ná pāe ò sàlıbır.

And horse:sg if descend 3IN LOC, 3IN depth IRR reach 3AN bridle:sg.

"If a horse goes down in it, its depth will reach its bridle." (Rev 14:20)
```

In stories where animals speak, they are naturally assigned animate gender. When body parts are represented as speaking in this NT passage, they have animate gender:

Nəbir ya'a yɛlin ye, "Man ka' nu'ug la zug, m ka' niŋgbiŋ la nii," lin k υ nyaŋi k ε ka o ka' niŋgbiŋ la nii.

Nóbìr yá' yèlī-n yē, Mán kā' nû'ug lā zúg, m̀ kā' nín-qbīn lā Leg:sg if say-dp that 3an:nz neg.be hand:sg art upon, 1sg neg.be body-skin:sg art $l\bar{a}$ $nii=\emptyset$. $nii=\emptyset$, līn kύ ňyāηι ø kέ kà ò kā' nín-gbīŋ LOC=NEG, DEM.IN NEG.IRR prevail CAT cause and 3AN 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)

Trees, animate in the traditional world view, may have animate gender:

Tiig wela bigisid **on** a si'em.

```
Tùg wélà bịgısıd ón àň sị̄'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)

Babies may be counted as animate or inanimate gender:

```
\grave{O}/L\grave{\iota} \grave{a} n\bar{\varepsilon} b\acute{\iota}-l\bar{\iota}a. "He/she/it is a baby." 3AN/3IN COP FOC child-baby:SG.
```

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|ba noun class has exclusively human reference. Elsewhere, such distinctions are essentially lexical, as with $n\bar{l}n$ - "person" vs $b\bar{v}n$ - "thing" as dummy cbs with adjectives. The availability of human-reference nouns as adjectives 12.8.1.2 reflects the fact that nouns referring to people are descriptive, labels for roles, or unique identifiers.

The current gender system distinguishes animate/inanimate in the singular with no distinction in the plural. In older sources like the 1976 NT (as in older Dagbani) inanimate pronoun forms used as heads, like demonstrative $n\bar{\epsilon}^{\prime\prime}$, are used indifferently for sg or pl, occasionally with $n\dot{a}m^a$ plurals to avoid ambiguity. However, even the 1976 NT always uses the animate plurals $b\dot{a}mm\bar{a}^{\prime}$ $b\dot{a}n^{\epsilon}$ $s\bar{\imath}\circ ba$ 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:

```
B\grave{a} \grave{a} n\bar{\varepsilon} k\bar{u}g\acute{a}. "They are stones."
```

In unselfconscious utterances animate pronouns often appear for inanimate; speakers correct the gender to inanimate if their attention is drawn to it.

```
Nif-káŋā, ōn sâň'am nē.

Eye-DEMST.SG, 3AN.CNTR spoil FOC.

"This eye, it's spoilt." KT (Overheard)

\dot{M} p\bar{v} ny\bar{v}6-o=o.

"I can't find it [a stethoscope]" (Overheard)

1SG NEG.IND See-3AN.OB=NEG.

s\bar{a}lima\ l\hat{a}'ad n\acute{v} o b\bar{v}tus "gold stuff and (gold) cups" WK gold item:PL with 3AN cup:PL
```

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 aen "be something":

```
Li ane Zugsəb la. "It is the Lord." (Jn 21:7)
Lì à n\bar{\varepsilon} Zūg-sə́b l\bar{a}.
3IN COP FOC head-NULL.AN ART.
```

12.4 Pronouns

12.4.1 Personal

		Right-bound	Left-bound	Free	Subject+ <i>n</i>
Sg	1st	m̀	m ^a	mān SF mánè LF	mán
	2nd	fὺ	f ^o	fōn SF fónὲ LF	fún
	3rd an	<u>ο</u> [ʊ]	o [ʊ]	ōn ^ε	<i>ó</i> n
	3rd ina	n <i>l</i> ì or <i>d</i> ì	lı	$l\bar{\imath}n^{\varepsilon}$ or $d\bar{\imath}n^{\varepsilon}$	lín or dín
Pl	1st	tì	tı	tīnám ^a	tīnámì _ø
	2nd	уà	ya	yānám ^a	yānámì _ø
	3rd	bà	ba	$bar{a}n^{arepsilon}$	bán

"an" = animate, "inan" = inanimate.

 $M\bar{a}m$ also occurs for 1sg in any role. The bound forms are non-contrastive; they are all liaison words <u>4.2</u>. Left-bound pronouns are used for VP objects, right-bound for all other roles. Personal pronouns are never dependent: in e.g. \dot{m} $b\bar{i}ig$ "my child", \dot{m} is the head of its own NP, and it is this NP which is the predependent of $b\bar{i}ig$ "child", exactly like $n\dot{a}'ab$ $l\bar{a}$ "the chief" in $n\dot{a}'ab$ $l\bar{a}$ b $\hat{i}ig$ "the chief's child." There are no possessive pronouns.

The " $+\dot{n}$ " forms are used as subjects in \dot{n} -clauses <u>21</u>. The 2pl subject has a form ^{ya} used *after* imperatives <u>18.3</u> with the allomorph $-n\hat{\iota}$ - before liaison.

Free forms may be used for cbs before relative pronouns:

```
Fun kane buoli fu meŋ ... "You who call yourself ... (Rom 2:17) F\bar{v}n-kán\(\text{i}\) b\(\varphi\varphi\) f\(\varphi\) m\(\varphi\) ... 2SG-REL.SG call 2SG self ...
```

Toende Kusaal has \tilde{v} for \dot{o} (probably $\leftarrow *\eta mv$) and $tvn\ nam$ for $t\bar{t}n\acute{a}m\ y\bar{a}n\acute{a}m$. There are no inclusive/exclusive distinctions and no honorific uses of plural for singular or 3rd person for 2nd.

2sg is used in proverbs for a generic "one":

```
Bung ya'a bood ye o lubuf, fu po nyeti o tubaa.

Bùŋ yá' bòɔd yɛ́ ò lūbú f, fù pō nyetí 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

("Where there's a will, there's a way.")
```

3pl is used as a non-specific "they" for turning passive constructions actively:

```
Bà yòɔdī f súŋàa=ø?

3PL pay:IPFV 2SG.OB good:ADV=PQ?

"Are you well paid?" "Do they [never mentioned] pay you well?" SB
```

This construction has become grammaticalised so far that in n-catenation, the object can be construed as the grammatical subject 19.1, e.g.

```
Diib wvsa nari ba di. "All foods may be eaten." (Rom 14:20) Dīib wvsa nárì \emptyset bà dí. Food all must CAT 3PL eat.
```

There are formal means of distinguishing different third persons by the use of pronoun ellipsis <u>17.2.2</u> and logophoric use of the free pronouns <u>22.2</u>.

12.4.2 Demonstrative

	Animate sg	Inanimate	e sg	Plural
Long	òŋā′	lìnā [/]	far	bàmmā [/]
Short	òn ^ε	lìn [€]	far	bàn ^ε
Long		nē'ŋá	near	
Short		$nar{arepsilon}^{\scriptscriptstyle 1}$	near	nē'-nám ^a NΤ
Long	kàŋā [/]	kàŋā [/]		
Short	kàn ^ɛ	kàn ^ε		

Note the tone difference between $\partial n^{\epsilon} l \ln^{\epsilon} b \partial n^{\epsilon}$ and free 3rd person pronouns. "Short" demonstratives are used as the basis of relative pronouns <u>21.2.2</u>, for discourse deixis, and for interrogative "which?":

```
Fune an dau kan la! "You are that man!" (2 Samuel 12:7)

Fūnu Ø áň dáu-kàn lā! [i.e. in the story just related.]

2SG.CNTR CAT COP man-DEM.SG ART!

Lìne? "Which one?"
```

Nīf-kánè? "Which one?"
Nīn-kánè? "Which eye?"
Which person?"

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 $l\bar{a}^I$ and "this" by a following $\check{n}w\grave{a}$ (cf French $l\grave{a}$ and ci.) This use of $l\bar{a}^I$ as deictic is enabled by the fact that demonstratives automatically make the NP definite 12.8.5.

```
sān-káŋā"at this/that time"dàu-kàŋā sâam"this/that man's father"dàu-kàŋā lā sâam"that man's father"dàu-kàŋā ňwá sâam"this man's father"
```

 $\partial \eta \bar{a}^l \, l n \bar{a}^l \, n \bar{\epsilon}^i \eta \acute{a} \, n \bar{\epsilon}^{il}$ appear only as NP heads, and $\partial n^\epsilon \, l n^\epsilon$ cannot follow a cb; however, $b \dot{a} m m \bar{a}^l \, b \dot{a} n^\epsilon$ can be used either uncompounded or after a cb.

 $K\grave{a}n^{\epsilon}\,k\grave{a}\eta\bar{a}^{l}$ 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.) $K\grave{a}n^{\epsilon}$ may also follow a free personal pronoun, and $\grave{a}rak\acute{o}\breve{n}^{l}$ "one", but no other quantifiers. NT avoids $k\grave{a}\eta\bar{a}^{l}\,k\grave{a}n^{\epsilon}$ for animate gender.

12.4.3 Indefinite

Animate sg	Inanimate sg	Plural
$sar{z}'$	sį̇̃'əla	$sar{\imath}$ əba (unglottalised vowel)
s <u>ī</u> 'a	s <u>ī</u> 'a	

 $S\bar{\jmath}$ ' $s\bar{\imath}$ ' ∂l^a $s\bar{\imath}\partial ba$ may be used as heads or dependents, and may follow cbs: $s\bar{\imath}$ 'a can only follow cbs, as a dependent. For NT WK, but not KT, $s\bar{\imath}$ 'a is much commoner than $s\bar{\imath}$ ' ∂l^a used as a dependent. WK feels that for people $s\bar{\imath}$ 'a is pejorative; NT occasionally has $s\bar{\jmath}$ ' for inanimate: $t\hat{\epsilon}\eta$ - $s\bar{\jmath}$ ' "a certain land." For indefinite pronouns in relative clauses see 21.2.1.

The sense is "some, someone, something", "a certain", indefinite but *specific*:

```
yà bị-sō' "a certain child of yours" 2PL child-INDEAN
```

The meaning is often "another, a different" (cf Hausa wani, Jaggar p314.)

Mεεri onε an Magdalen nε Μεεri sɔ'

Meeri śnì àň Magdalen nē Meeri sō'

Mary REL.AN COP Magdalen with Mary INDF.AN

"Mary who was Magdalen and another Mary" (Mt 28:1)

Winnig mor o meŋ venlim, ka nwadig me mor venlim si'a.

Wìnnig mór ò mēŋ véňllìm kà ňwādig mé mōr véňllìm-sī'a.

Sun:sg have 3AN self beauty and moon:sg also have beauty-INDF.IN.

"The sun has its own beauty and the moon, another beauty." (1 Cor 15:41)

 \dot{M} ná $t\bar{\iota}$, f $ti-s\bar{\iota}$ 'a.

1SG IRR give 2SG.OB medicine-INDF.IN.

"I'll give you a different medicine." WK

Indefinite pronouns can be used to introduce new information:

 $D\grave{a}\underline{u}$ - $s\ddot{b}$ ' $d\bar{a}a\ b\acute{\epsilon}$... "There was a certain man ..."

Man-INDEAN TNS EXIST ...

but this is likely to mean "There was another man ..."; "Once there was a man ..." is usually $D\bar{a}u\ d\bar{a}a\ b\dot{\epsilon}\ ...$

 $S\bar{o}'/s\bar{i}'$ $\partial l m \hat{\epsilon} - k \hat{a} m a$ means "anyone, anything, everyone, everything":

O niŋid si'el mεkama sv'vŋa.

Ò nịŋıd sị̄'əl mé-kàma súŋā.

3AN do: IPFV INDF.IN 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.

 $K\dot{a}$ $s\bar{b}$ ' $k\bar{v}dv$ $k\dot{v}$ $l\bar{e}m$ $n\dot{v}\dot{e}\dot{e}$ $l\bar{v}$ $v\dot{a}$ ' $as\bar{a}=\dot{e}$.

And INDEAN ever NEG.IRR again see 3IN.OB again=NEG.

"Nobody will ever see it again." (Rev 18:21, 1996)

 $S\bar{\mathfrak{d}}$ ' $k\bar{\mathfrak{d}}$ ' $e=\emptyset$. "There's nobody there."

INDF.AN NEG.BE=NEG.

 \dot{M} $p\bar{v}$ $y\acute{\epsilon}l$ $s\bar{l}=0$. "I didn't say anything."

1SG NEG.IND say INDF.IN=NEG.

12.4.4 Interrogative

Animate Inanimate

 $an\hat{\sigma}' on^{\epsilon}$ "who?" $b\bar{\sigma}$ "what?"

Plurals with $n\grave{a}m^a$ may be used if a specifically plural answer is being sought. $B\bar{o}$ $k\acute{n}mm$ "what exactly?" with the ideophone $k\acute{n}mm$ is common in KB. The initial \grave{a} - of $\grave{a}n\hat{o}^{\dagger}on^{\epsilon}$ behaves like the manner-adverb prefix in liaison 4.2:

```
... ke\eta tisi ano'one? "to go to whom?" (1 Samuel 6:20) ... k\bar{\epsilon}\eta \emptyset tisi ano'one=\emptyset? ... go cat give who=cq?
```

 $B\bar{\mathfrak{I}}$ can be used after a cb as a dependent interrogative "what?":

```
n\bar{a}'-b\acute{o} "what cow?" WK DK (n\acute{a}af\ b\acute{o} can only mean "What, of a cow's?") b\grave{v}-b\bar{o} "what goat?" d\bar{a}-b\acute{o} "what beer?"
```

The compound $b\dot{\partial}$ - $b\bar{u}ud\iota$ "what kind of?" can also be used as a dependent:

```
n\bar{a}'-b\acute{o}-b\bar{u}ud\imath "what kind of cow?" d\bar{a}-b\acute{o}-b\bar{u}ud\imath "what kind of beer?" F\grave{v} \acute{a} n\bar{\varepsilon} b\acute{o}-b\grave{u}ud\imath=\varnothing? "What ethnic group do you belong to?" 2SG COP FOC what-sort=CQ?
```

Bò- can be used as a predependent, querying a description: "what sort of ...?"

```
Fù túm b\acute{o}-tùvma=\emptyset? "What kind of work do you do?" 2SG work:IPFV what-work=CQ?
```

Bo yir ka ya na me' n tis mane?

```
Bò-yịr kà yà ná mẽ n tís mánè=ø?
```

What-house:SG and 2PL IRR build CAT give 1SG.CNTR=CQ?

[&]quot;What kind of house will you build for me?" (Acts 7:49, 1996)

12.4.5 Reciprocal

 $T\bar{a}aba$ "one another" appears as $t\bar{a}ab$ clause-medially for some speakers. It can be used after a cb, meaning "fellow-": \dot{o} $t\dot{v}m$ - $t\bar{a}aba$ "his fellow-workers."

```
Sùŋɪmī ø tāaba. "Help one another."

Help:IMP 2PL.SUB each.other.

Tì yûug nē tāaba. "It's been a long time." KT

1PL delay with each.other.

Bà dòl nē tāaba. "They went together." (dɔ̄lla/ "accompany")

3PL follow with each.other.
```

12.4.6 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", $\dot{v}\dot{a}$ $m\bar{\epsilon}\eta$ "yourselves."

```
n\grave{a}'ab l\bar{a} m\acute{\epsilon}\eta "the chief himself" chief:sg art self

B\grave{a} ny\acute{\epsilon} b\grave{a} m\bar{\epsilon}\eta. "They've seen for themselves." 3PL see 3PL self.
```

"Self" forms must be used for complements referring to the clause subject:

```
\dot{M} n w \dot{\epsilon}' \epsilon_m m \bar{\epsilon} \eta. "I hit myself."

1SG hit 1SG self. not *\dot{M} n w \dot{\epsilon}' \epsilon m or *
```

Kusaal uses 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 piesidi bà nû'us wvv lin nār si'em lá kà dítā=ø. 3PL NEG.IND clean:IPFV 3PL hand:PL like 3IN:NZ be.right 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:

```
\dot{M} pi\theta \dot{m} m\bar{\epsilon}\eta n\hat{u}'us. "I washed my own hands." 1SG wash 1SG self hand:PL.
```

```
Fù mēŋ kūv bí-lìaa=ø? "Yourself or the baby?"

2SG self or child-baby:SG=CQ? ("Which of you needs the doctor?")
```

See also 12.8.3 on $am\bar{\epsilon}\eta\acute{a}$ "really, truly" as a modifier "genuine, real"; cf the adjective $m\bar{\epsilon}\eta\acute{i}r^{\epsilon}$ seen in $y\bar{\epsilon}l$ - $m\acute{\epsilon}\eta\acute{i}r^{\epsilon}$ "truth" ("genuine matter.")

12.4.7 Dummy head

 $S\bar{\it o}b^a$ is a dummy head for a preceding NP or AdvP dependent; it specifies number and gender but is otherwise semantically empty.

```
Animate sg s\bar{b}^{a} pl d im^{a}
Inanimate sg/pl d in^{n\epsilon}
```

NP predependent constructions have their usual meanings 12.7.2:

```
m\bar{a}n~dín^{n\epsilon} "my one, mine" 
 A-W\bar{i}n~dím "Awini's family" 
 F\bar{\upsilon}n~p\dot{i}a\check{n}'ad~n\bar{\epsilon}~t\bar{\imath}n\acute{a}m~d\acute{\imath}n. 
 2SG.CNTR speak:IPFV FOC 1PL.CNTR NULL.IN. 
 ("We can't speak your language but ...") "You're speaking ours."
```

```
pù-pịəlım sób<sup>a</sup>
pl pù-pịəlım dím<sup>a</sup> "holy person" (pù-pịəlım<sup>m</sup> "holiness")
dūnıya ní dìn<sup>nɛ</sup> "earthly one" (1 Cor 15:44)
Bòk dím "Bawku people"
ȳiigá sōb<sup>a</sup> "first (person)" beside ȳiig-sób<sup>a</sup> id
```

Cb predependents occur in set expressions:

```
"householder"
                                                                               (v\bar{i}r^{\varepsilon/} "house")
vī-sɔ́ba
                   pl v<u>į</u>-sób-nàm<sup>a</sup>
                                                 "members of the household"
y<u>ī</u>-dím<sup>a</sup>
nīf-sɔ́ba
                                                 "miser"
                                                                               (n\bar{i}f^{\text{o}/} "eve")
tàňp-sɔ̄ba
                                                 "warrior"
                                                                               (t\bar{a}np^{\circ} \text{ "war"})
                                                                               (z\bar{u}g^{\circ/} "head")
zūq-sóba
                   pl zūq-sób-nàm<sup>a</sup>
                                                 "boss" NT "Lord"
```

 $O(s\bar{b}^a/\bar{b}n s\bar{b}^a)$ mean "the person we were just talking about."

12.5 Quantifiers

Formally, quantifiers resemble noun sg or pl forms, frequently with apocopeblocking 3.2; most number words are also preceded by number prefixes.

Quantifiers are **count** or **mass** <u>12.2</u>, but the distinction is only of significance if the quantified noun is mass type, in which case a count quantifier is ungrammatical; with count nouns either type of quantifier is acceptable:

```
n\bar{l}dlb\ b\acute{e}dvgar{v} "a lot of people" n\bar{l}dlb\ b\acute{a}blgar{a} "many people" k\grave{u}'em b\acute{e}dvgar{v} "a lot of water" not *k\grave{u}'em b\acute{a}blgar{a} *"many water"
```

Mass quantifiers are

```
b\grave{\epsilon}d\upsilon g\bar{\upsilon}^{/} "a lot" p\bar{a}mm LF p\bar{a}mn\acute{\epsilon} "a lot" f\bar{i}i\check{n} "a little (liquid)" b\bar{i}!\partial i "a little" w\bar{\upsilon}\upsilon "all" w\bar{\upsilon}sa "all"
```

Beside number words, count quantifiers are

```
b\dot{a}big\bar{a}^{l} "many" k\dot{a}lig\bar{a}^{l} "few" f\bar{a}a\check{n} "every" z\bar{a}\check{n}^{l}a "every"
```

Kàm^a "every" occurs by itself as a quantifier and also before others:

```
s\bar{a}\eta\dot{a} k\dot{a}m = s\bar{a}\eta\dot{a} k\dot{a}m z\bar{a}\ddot{n}'a "all the time"
```

Quantifiers appear typically as determiners in NPs 12.8.2, but like pronouns they may also be heads of NPs; they can pluralise with $n \grave{a} m^a$:

```
P\bar{a}mm\ k\acute{\epsilon}\ n\bar{a}."Many came."B\grave{\epsilon}d\upsilon g\bar{\upsilon}\ k\acute{\epsilon}\ n\bar{a}."Many came."B\grave{\epsilon}d\upsilon g\bar{\upsilon}\ l\bar{a}\ k\acute{\epsilon}\ n\bar{a}."The crowd came"A)\acute{\gamma}'\ k\acute{\epsilon}\ n\bar{a}."Two came."A)\acute{\gamma}'\ l\bar{a}\ k\acute{\epsilon}\ n\bar{a}."The two came."m\grave{a}l\dot{a}k-n\acute{a}m\ t\acute{u}s\grave{a}\ p\bar{\imath}iga\ n\acute{a}m"tens of thousands of angels"
```

A quantifier head after a dependent NP is a **partitive** construction <u>12.7.2</u>. Quantifier heads may be followed by dependent pronouns; as quantifiers have no combining forms, there is no compounding:

Kà tì yé tì nye diib yaani moogin nwa diis nidib **bedego bama** nwa?

Kà tì yé tì nye dīib yáa ní mɔɔgv-n nwá

And ipl that ipl find food where loc grass:sg-loc this
ø dìis nṛdib bédvgū bámmā nwá=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 wvsa "all these people")

12.5.1 Numbers

The numbers in their core role as **quantifiers** take the forms

yīnní	10	p <u>ī</u> iga	100	kàbıgā
àyí¹	20	<i>pį̃sį́</i> [pisi]	200	<i>kòbıs</i> į́ [kɔbɪsi]
àtáň'	30	p <u>ī</u> s táň'	300	kòbıs táň'
ànāasí	40	p <u>ī</u> s nāasí	400	kòbıs nāasí
ànū	50	p <u>ī</u> s nū	500	kòbıs nū
àyúθbὺ	60	p <u>ī</u> s yúebù	600	kòbıs yúebù
àyớpòẹ	70	p <u>ī</u> s yópò <u>e</u>	700	kòbıs yópò <u>e</u>
àníi	80	p <u>ī</u> s n <u>í</u> i	800	kòbıs nį́i
àwāe̯	90	p <u>ī</u> s wā <u>e</u>	900	kòbıs wā <u>e</u>
	àyí' àtáň' ànāasí ànū àyúebù àyópòe àníi	àyị¹ 20 àtáň¹ 30 ànāasi 40 ànū 50 àyúθbò 60 àyópòe 70 ànṭi 80	àyí! 20 pṛṣí [pisi] àtáň! 30 pṛs táň! ànāasí 40 pṛs nāasí ànū 50 pṛs nū àyúebò 60 pṛs yúebò àyópòe 70 pṛs yópòe àníi 80 pṛs níi	àyị' 20 pṛṣý [pisi] 200 àtáň' 30 pṛṣ táň' 300 ànāasí 40 pṛṣ nāasí 400 ànū 50 pṛṣ nū 500 àyúebò 60 pṛṣ yúebò 600 àyópòe 70 pṛṣ yópòe 700 ànṭi 80 pṛṣ nṭi 800

The quantified noun is normally plural, except with $y\bar{\imath}nni$, but may be singular with units of measure: $y\bar{\jmath}lvg\dot{a}$ $\dot{a}t\dot{a}n'$ "\$600 [cedis]."

The forms for 1, 4, 6, 8, 10, and 100 show apocope-blocking; the forms for 20 and 200 are not apocope-blocked but are combinations with the stem of $\grave{a}y \acute{l}$.

Kòbigā irregularly has identical LF and SF.

"Thousand" is a regular $r\varepsilon|aa$ class noun, $t\bar{u}sir^{\varepsilon/}$: $t\bar{u}s\acute{a}$ $\grave{a}t\acute{a}\breve{n}'$ "3000." "Half" is $p\bar{v}-s\acute{v}k^a$ pl $p\bar{v}-s\acute{v}g\grave{v}s^\varepsilon$. Other numbers are formed with $n\bar{\varepsilon}$ "with, and":

kòbis táň' nē pīs yúebò nē nū "three hundred and sixty-five"

11 to 19 have the special contracted forms $p\bar{i}$ $n\bar{e}$ $y\bar{i}$ $nn\bar{i}$, $p\bar{i}$ $n\bar{e}$ yi', $p\bar{i}$ $n\bar{e}$ $t\acute{a}n'$... $p\bar{i}$ $n\bar{e}$ $v\bar{a}$ $v\bar{i}$ $v\bar$

The prefix \dot{a} - is omitted after $n\bar{\varepsilon}$ "with", and sometimes also after focus- $n\bar{\varepsilon}$!:

Lì à nē nāasí. / Lì à né ànāasí. "They're four."

The forms $\partial y i \eta \bar{a}^I \partial t \dot{a} \eta \bar{a}^I$ mean "two, three exactly." If I have four children

M mór bṣisá 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.

These forms can also be used after $n\bar{\varepsilon}$ "and", as in $p\bar{i}$ $n\bar{\varepsilon}$ $y\acute{i}\eta\bar{a}$ "twelve exactly." They are exceptional in not permitting focus with the particle $n\bar{\varepsilon}^{/}$ 24.1.2.

Yīnní can also be construed with a preceding noun cb:

 $k\bar{u}g$ -yínnì "one stone" (M dropping 4.4.4) cf $k\bar{u}gvr$ yīnní "one stone" (no M dropping)

Dà-pṣiga is "ten days"; *pṣiga* is not otherwise used after cbs.

After personal pronouns the number prefix is $b\dot{a}$ - instead of \dot{a} -: $t\dot{\iota}$ $b\dot{a}t\acute{a}\breve{n}'$ "we three", $y\dot{a}$ $b\dot{a}y\acute{p}\grave{o}e$ "you seven", $b\dot{a}$ $b\dot{a}y\acute{p}'$ "they two."

1 to 9 have different forms used in **counting**, lacking apocope-blocking and using the number prefix \dot{n} - instead of \dot{a} -:

1 yέση or àrakόň' 6 'nyûθb

2 $\dot{n}y_i^{\prime\prime}$ 7 $\dot{n}p\grave{g}$ [tone sic]

5 $nn\bar{u}$ continuing $p\bar{i}iga$, $p\bar{i}in\bar{\epsilon}$ vi' as with quantifiers

 $\dot{A}rak\acute{o}\breve{n}$ ' can also be used as a quantifier: $b\acute{v}vg$ $\grave{a}rak\acute{o}\breve{n}$ ' "one goat." The form $k\~{o}\breve{n}$ ' $ok\~{o}$ appears as a postposition: \grave{m} $k\~{o}\breve{n}$ ' $ok\~{o}$ "by myself." In performing arithmetic the quantifier forms are used:

 $\dot{A}yi'$ $n\acute{a}m\acute{a}$ $\dot{a}yi'$ \acute{a} $n\bar{\epsilon}$ $n\bar{a}asi$. NUM:two PL NUM:two COP FOC four. "Two twos are four."

The only **ordinal** adjective, as in $s\bar{b}$ - $d\hat{\epsilon}\epsilon\eta$ "first census" (Lk 2:2, 1976) is

 $d\bar{\epsilon}\epsilon\eta^{a}$ $d\bar{\epsilon}\epsilon\eta^{s}$ $d\dot{\epsilon}\epsilon\eta$ "first" or $d\bar{\epsilon}\epsilon\eta$ or $d\bar{\epsilon}\epsilon\eta$

[&]quot;First" can also be expressed by *yīigá* "firstly" as a predependent:

```
line da an yiiga dabisir
līnı ø dá àň yṣiigá dàbisir.
3IN.CNTR CAT TNS COP firstly day:SG.
"That was the first day." (Genesis 1:5)
```

Other ordinal expressions can be created using $p\grave{a}as^{\epsilon}$ or $p\grave{\epsilon}'\epsilon s^{\epsilon}$ "add up to":

```
dàu-kànı pè'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.IN 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:

```
\dot{a}y\dot{y}' d\bar{a}an l\bar{a} "the second one" b\bar{v}vg\dot{a} \dot{a}t\dot{a}an l\bar{a} "the third goat"
```

Yīṇgá dāan may be used for "first." In "Kusaal Solima ne Siilima" p35 ordinal forms used in counting "first, second, third ..." appear without apocope-blocking: atan'-daan ... ka anaas-daan ... ka nu-daan ... ka yuob-daan ... ka poi-daan ... ka nii-daan ... ka wai-daan ... ka piig-daan, but my informants use ordinary quantifier forms. Note the adjective

```
y\bar{\imath}mm\acute{\imath}r^{\varepsilon} y\bar{\imath}mm\acute{a} y\bar{\imath}m "single, alone"
```

as in bi-yīmmír "only child", wāb-yímmir "solitary elephant."

There are two words meaning "one of a pair": $nyauk^3$ pl $nyauk^3$ is only used for eyes, while $y\bar{\imath}u\eta^{3}$ pl $y\bar{\imath}nauk^3$ is used for other normally paired body parts: $n\bar{\jmath}b-yiu\eta$ "one leg", $n\bar{\imath}u^3-yiu\eta$ "one hand", $n\bar{\imath}u^3-yiu\eta$ "one eye", $u^3-yiu\eta$ "one ear."

Multiplicatives (answering àbùlá? "how many-fold?") are expressed

```
y\bar{\imath}mm\dot{\upsilon} "straight away, at once" 

\dot{a}b\dot{\upsilon}y\dot{\imath} "twice" 

\dot{a}b\dot{\upsilon}t\dot{a}\check{n} "three times" 

\dot{a}b\dot{\upsilon}n\bar{a}as\dot{\iota} "four times"
```

and so on, with apocope-blocking like quantifiers, up to bùpīiga "ten times."

This \dot{a} - is not the number prefix but the manner-adverb formant, and a LF-final vowel before it is -1; the attachment to 2-9 only is presumably analogical.

Answers to $n\bar{s}$ and "how many times?" have forms of the pattern

```
n\bar{\jmath} j\bar{\jmath} m\bar{\imath} "once" n\bar{\jmath} m\bar{\imath} "three times" or n\bar{\jmath} m\bar{\imath} "three times" NT
```

This $n\bar{o}$ is not "mouth" (= Mooré $n\acute{o}$ orè) but corresponds to Mooré $n\acute{o}$ oré "times", homophonous with Mooré $n\acute{o}$ oré "leg"; cf Toende Kusaal $n\bar{o}$ ' \bar{o} t = Agolle $n\acute{o}$ bùr "leg". Original o and o fell together when nasalised $\underline{2.2}$. For the semantics cf Hausa $s\grave{a}u$ $uk\grave{u}$ "three times" sau "foot(print)." Niggli's dictionary gives Toende $n\acute{o}$ ot (tone sic) in the sense "fois" and even has noba ayi beside no of ayi "ayi" ayi" a

Distributives ("two by two" etc) are reduplicated forms without apocopeblocking; there is no M dropping on the second part except with 10, 100, 1000:

1	yīn yīn	10	p <u>ī</u> i p <u>î</u> ig	100	kòbıg kóbìg
2	àyí' yí'	20	p <u>ī</u> sį p <u>ī</u> sį	200	kàbısį kábısį or kàbıs yį' yį'
3	àtáň' táň'	30	pī̞s táň' táň'	300	kòbıs táň' táň'
4	ànāas nāas	40	pīs nāas nāas		etc
5	ànū nū	50	p <u>ī</u> s nū nū	1000	tūsır túsìr
6	àyûeb yûeb	60	p <u>ī</u> s yûeb yûeb		
7	àyớpờ <u>e</u> pớ <u>e</u>	70	p <u>ī</u> s yópò <u>e</u> pó <u>e</u>		
8	ànịi nịi	80	p <u>ī</u> s n <u>í</u> i n <u>í</u> i		
9	àwāę wāę	90	p <u>ī</u> s wā <u>e</u> wā <u>e</u>		

Intermediate numbers are made by replacing the last part of the usual quantifier phrase with a distributive: $p\bar{l}s$ $n\bar{u}$ $n\bar{e}$ $n\bar{a}as$ "by fifty-fours."

The distributives can have a preceding NP as a dependent:

```
dābá àyɔ́pɔ̀e pɔ́e "weekly" ("by sevens of days")
```

12.5.2 Proquantifiers

Quantifiers have corresponding proforms; the \dot{a} - is the *number* prefix, and induces preceding LF-final -a not -1 4.2.

Demonstrative	Indefinite	Interrogative
àlá	sį̄'əm ^m	àlá
"so much/many"	"some amount"	"how much/many?"

12.6 Personifier particle

Indigenous Kusaasi personal names $\underline{26.2}$ are always preceded by the personifier particle, which appears as \mathring{A} - by default, but \mathring{N} - before adjective stems, where \mathring{N} - is a syllabic nasal assimilated to the point of articulation of a following consonant. The particle is a liaison word; the \mathring{A} - allomorph, like the manner-adverb prefix \mathring{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 $n\grave{a}m^a$; 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"

 từ Wīn
 "our Awini"

 M Wīn
 "my Awini"

 À-Wīn-káŋā
 "this Awini"

 À-Wīn nám
 "Awinis"

 N-Dāvg
 "Ndago"

 từ N-Dāvg
 "our Ndago"

Although the Kusaal Bible versions (unlike the Mooré Bible) use foreign names without the particle, \grave{A} - normally appears before them in speech:

 $m \rat{A-M\bar{u}usa}$ "Moses" $m \rat{A-Y\bar{\imath}isa}$ "Jesus" $m \rat{A-S\bar{\imath}im\hat{\jmath}on}$ "Simon"

NT has some personifications of abstractions: \grave{A} - $S\grave{a}\check{n}'\upsilon\eta$ "Destruction." In stories where animals are characters, animal names take \grave{A} -:

À-Bāa "Mr Dog"

Some animal and bird names incorporate the personifier particle as part of the common noun, with no implication of personification, e.g. \grave{a} -d \grave{a} al \acute{v} η° "stork", \grave{a} -g \hat{a} v \check{n} g $^{\circ}$ "pied crow", \grave{a} -k \bar{s} ra-d \hat{i} em $^{\text{ma}}$ "praying mantis", \grave{a} -m \acute{u} s $^{\varepsilon}$ "cat." Thus

à-dàalύŋ "a stork"ṁ/mān dáalύŋ "my stork"1sg/1sg.CNTR stork:sg

```
dāμ lā dáalúŋ "the man's stork" man:sg art stork:sg
Lì à nέ à-dàalúŋ. "It's a stork" sin cop foc pers-stork:sg.
M ňyέ à-dàalúŋ. "I've seen a stork." isg see pers-stork:sg.
```

The \grave{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 \grave{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 $y\~{e}\sim a$.

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 ..." This is particularly common in proverbs.

```
"Siloam" (Jn 9:7)
Atum so'
À-tùm
          s\bar{\mathfrak{I}}'
                                    ("Someone sent someone")
PERS-send INDEAN
Apυ-kpεn'-baŋυ dim
\hat{A}-par{v}
             kpέň' bàuηυ
PERS-NEG.IND enter circumcision NULL.PL
"the Uncircumcised" (Eph 2:11)
À-dāa yέl kā'
                        t\hat{\imath}_{1}mm=\emptyset.
PERS-TNS say NEG.HAVE medicine=NEG.
"Did-say has no remedy." (No use crying over spilt milk.)
\dot{A}-\breve{n}\gamma \bar{\varepsilon}
         nē
               nīf
                       sóň'o
                                       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.)
                                   "Crossed over and asked"
À-Kī̞dugu ø Bū'əs
PERS-cross CAT ask
                                    (name of the constellation Orion.)
                                   "Doesn't-fear-trouble", character in KSS p35.
Apozotyel
À-Pū-zɔ́t-vɛ̃l
PERS-NEG.IND-run:IPFV-thing:SG
```

À- as predependent of a clause subject means "someone whose ...":

```
Bà kèn nế À-nà kúu mì 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-nɔ̄ɔs bɛ́ yírē=ø.
```

PERS-chicken:PL EXIST house:SG=NEG.

"They go to Will-kill-my-chicken's house, but not to Got-chickens' house." ("The rich are not always hospitable.") [$N\bar{\jmath}$ $b\dot{\varepsilon}$. "There are chickens."]

Nominalisations with \dot{a} - can pluralise with $n\dot{a}m^a$:

```
À-zī' Ø kpị nàm kpịid 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.")
```

12.7 Dependents before 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'vsòg [fûug dôɔg]]
"tabernacle" (God's [worship [cloth hut]])
```

For the rules regarding M dropping after predependents see 4.4.4.

12.7.1 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:

```
d\bar{a}-n\hat{u}ur^{\varepsilon} "beer-drinking" g\bar{\varepsilon}l-k\hat{u}es^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:

```
"murderer"
                                               bb-kbpda/
                                                                        "goat-killer"
nīn-kûvda
ทวิ-kบ๊บdª
                        "hen-killer"
                                               pu'à-kūvda/
                                                                        "woman-killer"
                                                                        "horse-seller"
n̄ɔ-zán̄llε
                        "holder of hens"
                                                wìd-kùesa
bù-kùesa
                        "goat-seller"
                                               sàlım-kùesa
                                                                        "gold-seller"
                                               dà-kịəda
                                                                        "wood-cutter"
dā-nûuda
                        "beer-drinker"
                        "fisherman" ("fish-catcher")
zīm-gbâň'ada
nɔ̄-dîˈəsa
                        "chief's spokesman" ("command-receiver")
                        "builder" (t\bar{a}n^{n\epsilon} "earth")
tàn-mēɛda
làmpɔ̄-dî̞'əsā
                        "tax collector" (French l'impôt)
qbàn-mī'ida/
                        "scribe" NT ("book-knower")
pu'à-sāň'am<sup>ma</sup>
                        "adulterer" ("woman-spoiler")
zà'-nō-gúr<sup>a</sup>
                        "gate-keeper" (z\dot{a}'-n\bar{z}) "gate")
                        "herdsman" (k \grave{\partial} \tilde{n} b- cb of b \bar{v} n-k \acute{\partial} \tilde{n} b \grave{v} g<sup>3</sup> "animal")
kàňb-kīm<sup>na</sup>
bùl-sigud<sup>a/</sup>
                        "well-diver" (bùlīga "well")
tùen-gāt<sup>a</sup>
                        "leader" (Ò gàad tûen "He's gone ahead")
                        "disciple" (\check{n}y\acute{a}'a\eta^a "behind", d\bar{z}l^{la/} "accompany")
ňyà'an-dòl<sup>la</sup>
pu'à-lā'ada
                        "laugher at women" WK
                        (Ò là ad pū 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 $b\bar{a}\eta\iota d^a$ "wise man", $s\underline{i}\bar{a}k\iota d^a$ "believer", $s\bar{v}\eta\iota d^a$ "helper", $f\bar{a}a\check{n}d^{a\prime}$ "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:

```
m\grave{a}al\text{-}m\bar{a}an^{na}"sacrificer"z\bar{\imath}\text{-}z\hat{\imath}id^a"carrier-on-head"t\grave{v}\text{'}as\text{-}t\grave{v}\text{'}as^a"talker"z\grave{a}b\text{-}z\grave{a}b^a"warrior" (tone sic)z\grave{\flat}t\text{-}z\bar{\jmath}t^a"racer, athlete"t\grave{v}m\text{-}t\bar{v}m^{na}"worker"
```

Cbs occur before deverbal **instrument nouns** in object or adverb senses:

```
s \dot{a} = 1 \dot{b} = 2 \dot{a}  "belt" (waist-tying thing)

n \dot{a} = 1 \dot{b} = 2 \dot{a}  "mirror" (eye-looking thing)

n \dot{a} = 2 \dot{a} = 2 \dot{a}  "spectacles"
```

If the head is a **gerund**, a predependent cb may represent a subject or complement. Gerunds in -b $_2$ here replace the suffix with - $r\varepsilon$ 8.1.1.

If the underlying verb is transitive, a predependent cb cannot be a subject. It is most often an object:

```
fū-γε̂εrε
                           "shirt-wearing" (nonce-form created by WK)
pu'à-dī≀r<sup>ε</sup>
                           "marriage" (Ò dì pu'ā "He's married a wife")
n\bar{l}n-k\hat{v}vr^{\epsilon}
                           "murder"
dā-nûur<sup>€</sup>
                           "beer-drinking"
Sāmán-píər<sup>€</sup>
                           traditional New Year ("Courtyard Cleaning")
bùgύm-tɔ̄ɔňr<sup>ε</sup>
                           Fire Festival ("Fire Throwing")
n\bar{\jmath}-l\hat{\jmath}\circ r^{\epsilon}
                           "fasting" ("mouth-tying")
                           "oath" (pɔ̄ "swear")
n\bar{\jmath}-p\hat{\jmath}jr^{\epsilon}
nō-nâar<sup>ε</sup>
                           "covenant" (nā "join")
nīn-bâal-z̄ɔɔr<sup>ε</sup>
                           "pity" (Ò zòtō nīn-báalìg. "He has pity on him")
```

It may represent an AdvP:

```
m\dot{\partial}-p\bar{l}^{l\epsilon} "grass roof" ("covering with grass") 
 k\dot{u}m-v\bar{v}'vgir^{\epsilon} "resurrection" (\dot{O} v\dot{v}'vg k\bar{u}m-n. "He revived from death.")
```

Cbs as subjects are seen only with gerunds from intransitive or patientive ambitransitive verbs:

```
n\bar{b}-k\hat{c} "breaking a leg" (k\hat{c} is intransitive)
n\bar{u}'-m\acute{c}dir^{\epsilon} "swelling of the hand"

win-l\bar{i}ir^{\epsilon} "sunset" (Winnig\ l\acute{i}\ y\bar{a}. "The sun has set/fallen.")
s\bar{u}\check{n}-s\hat{a}\check{n}'\upsilon\eta^{\circ} "sorrow" (Ms\bar{u}\check{n}fs\hat{a}\check{n}'am\ n\bar{\epsilon}. "My heart is spoilt")
s\bar{u}\check{n}-p\hat{\epsilon}\epsilon n^{n\epsilon} "anger" (Ms\bar{u}\check{n}fp\acute{\epsilon}lig\ n\bar{\epsilon}. "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:

```
p\dot{v}-p\dot{l}\partial lm^{\mathrm{m}} "holiness" ("inside-whiteness")
s\bar{u}\bar{n}-kp\hat{l}\circ\eta^{\circ} "boldness" ("heart-strength")
s\bar{u}\bar{n}-m\acute{a}'as\grave{l}m^{\mathrm{m}} "joy" ("heart-coolness": \dot{M} s\bar{u}\bar{n}f m\acute{a}'e y\bar{a}. "I'm joyful.")
n\dot{l}n-t\bar{v}ll\acute{l}m^{\mathrm{m}} "fever" ("body-heat")
w\bar{l}n-t\hat{l}\partial g^{\circ} "ill fortune" ("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<sup>5/</sup>
                        "children's shirt" (i.e. suitable for children)
wid-z\bar{v}vr^{\varepsilon}
                       "horsetail"
wāb-mɔ́ɔgū-n<sup>ɛ/</sup>
                       "in elephant-bush, where there are elephants" WK
zà'-nɔ̄ɔrε/
                        "gate" ("compound-mouth")
mà-bīig<sup>a</sup>
                        "sibling" ("child by [same] mother")
bā'-bîiq<sup>a</sup>
                        "half-sibling" ("child by [same] father")
tèŋ-b<u>ī</u>iga
                        "native" ("child of a country")
nàsàa-sìlug<sup>o</sup>
                        "aeroplane" (European hawk) ILK
```

WK has $n\acute{a}af-b\grave{l}'is\acute{i}m^m$ "cow's milk", $b\bar{v}vg-b\acute{l}'is\acute{i}m^m$ "goat's milk", where the dependent has singular form and tone, but the tone sandhi is that of a compound.

12.7.2 Noun phrases

Complete NPs as predependents play a role 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 $\underline{3.1}$.

Definite predependents do not automatically make a NP head definite $\underline{12.8.5}$. For $m\bar{\epsilon}\eta^{a/}$ "self" and $s\bar{b}b^a$ as heads after predependents see $\underline{12.4.6}$ $\underline{12.4.7}$. If the head is a demonstrative, indefinite or interrogative pronoun or a quantifier, the construction with a predependent is **partitive**:

nī̞n-sí̞əbà	"certain people"	sī̞əba	dependent	
yà sō'	"some one among you"	$sar{z}$ '	head	
nīdıb lā síəbà	"certain of the people"	sį̇̃əba	head	
n <u>ī</u> dıb sí̞əbà	"certain ones among people"	sį̇̃əba	head	
n <u>ī</u> dıbá àyí'	"two people"	àyí¹	dependent	
n <u>ī</u> dıbá àyí' lā	"the two people"	àyí¹	dependent	
n <u>ī</u> dıb lá àyí'	"two of the people"	àyí¹	head	

The sense is also partitive if the head is a relative clause with an indefinite pronoun as relative:

```
Pa'alimi ti nidiba ayi' nwa fun gaŋ sɔ'
Pà'alimī tí nṇdibá àyị' ňwá fún gāŋ sō'
Teach:IMP 1PL.OB person:PL NUM:two this 2SG:NZ choose INDF.AN
"Tell us which of these two people you have chosen" (Acts 1:24)
```

A partitive sense is not possible with other head types: e.g. $n\bar{i}dib$ $l\bar{a}$ gigis 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:

```
n\bar{a}'am kúk"throne" ("chieftaincy chair")n\bar{a}'am sú'vlìm"kingdom" ("chieftaincy possession")p'vsvg dôog"temple" ("worship house")t\bar{v}ligír bún"heater" ("heating thing" = b\bar{v}n-tvíligìr^{\varepsilon})d\bar{v}gvb dút"cooking pots"l\bar{t}gidi túvmà"expensive work" (l\bar{t}gidi "money")
```

There are sometimes alternate forms with cbs:

```
"warrior"
                                                            (tāňp<sup>o</sup> "war")
      tàňp-sɔ̄b
      pù-pìəl-sɔ̄b
                                        "holy person"
                                                            (Rom 3:10, 1996)
                                        "holy person"
                                                            (Mt 10:41, 1996)
      pù-pìəlım sób
but
      pù-pìəl-tūvma
                                        "holy actions"
                                                            (Rom 6:13, 1996)
      pù-pìəlim túumà
                                        "holy actions"
                                                            (Mt 5:10, 1996)
but
```

Language names may appear as abstract nouns describing an ethnic group:

```
K\bar{\upsilon}s\hat{a}al\ y\acute{r}\ n\bar{\varepsilon}\ k\bar{\upsilon}eb "Kusaasi houses and agriculture" N\grave{a}s\bar{a}al\ b\acute{u}g\acute{v}m "electricity" ("European fire")
```

Concrete indefinite mass NPs as predependents express the material of which the head consists.

```
s\bar{a}lıma\ b\acute{o}t\grave{i}\eta "golden cup" 
s\bar{a}lıma\ n\bar{\epsilon}\ \bar{a}nz\acute{u}rıf\grave{a}\ l\^{a}'ad "gold and silver goods"
```

Count nouns may appear here in mass senses <u>12.2</u>:

```
f\bar{u}ug~d\hat{o}og "tent" (cloth hut)
d\grave{a}ad~b\acute{v}n-nám "wooden things" (d\grave{a}vg^{\circ} "piece of wood")
```

NP predependents of this type can be antecedents of anaphoric pronouns:

```
sālima lâ'ad né ò būtiis
                               "gold goods and [gold] cups" WK 12.1
```

This is never the case with dependent cbs, as in salim-kues "gold-seller", danûud "beer-drinker"; on non-referential NPs as antecedents in English see e.g. CGEL pp400ff, and p1458; the restriction of anaphora to the same clause implied on p400 is not valid in English in the case of *generic* non-referential NPs.

The cb first element of $ku'\dot{a}$ - $nw\bar{i}ig$ "current" ("aquatic rope") suggests that the construction with unbound concrete mass predependents is limited to the specific sense "made of ...", so that *kù'em ňwîig would be "rope made of water."

With count and/or definite heads, meanings include kin relations, body parts, and ownership:

```
"mv child"
m bīig
dāu lā bîig
                                  "the man's child"
dāu lā biər biig nâaf zòvr
                                  "the man's elder brother's child's cow's tail"
Kūsâas wádà
                                  "customs of the Kusaasi"
Nimb\varepsilon'og\ vir\ na\ san'am.
```

Nīn-bê'og nà sāň'am. γįr 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 wîəf zûvr
                                 "the chief's horse's tail" (the chief has a horse)
nà ab lā wíd-zūvr
                                 "the chief's horse-tail" (the chief may not own a
                                 complete horse at all)
```

 $D\bar{a}an^a$ "owner of ..." ($n\dot{a}m^a$ 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 $m\grave{a}i$, or Arabic δu :):

```
lớr dâan
                              "car owner"
                              "goat owner"
būvg dâan
kù'em dâan
                              "water owner"
                              "bearded man" Hausa mài geemùu
tìən dâan
                              "beer owner"
dāam dâan
pɔɔa lā dâan
                              "the owner of the field" (Mt 21:40)
```

Zu-wok daan po gangid bugum.

 $Z\dot{v}$ - $w\bar{s}k$ dâan $p\bar{v}$ $g\acute{a}\eta\dot{u}$ $b\acute{u}g\acute{v}mm=\emptyset$.

Tail-long:sg owner:sg neg.ind step.over:ipfv fire=neg.

Proverb: "One with a long tail doesn't step over a fire."

(If you have family commitments you shouldn't take risks.) KSS p38

pù-pìəlim dâan "holy person"

būgusígā dâan "softly-softly sort of person" WK

See $\underline{12.5.1}$ 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:

 $y\bar{i}$ -dâan "householder" = $y\bar{i}$ -sób (Hausa mài gidaa)

 $t\grave{\epsilon}\eta$ - $d\bar{a}an$ (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.

Dāu lā kúlòg dāa mālisí m.

Man:sg art go.home:ger tns be.sweet 1sg.ob.

"The man's return home pleased me."

Generic-object cbs, adjunct AdvPs and VP-final particles may appear:

ya antu'a morim koto ni ne taaba la

yà àntu'à-mōrím kótù ní nē tāaba lā

2PL case-have:GER court:SG LOC with each.other ART

"your going to law with each other in court" (1 Cor 6:7, 1976)

Ninsaal Biig la lebug la na

Nīn-sâal Bîig lā lébùg lā nā

Person-smooth:sg child:sg art return:ger art hither

"the return of the Son of Man" (Mt 24:27)

12.7.3 Adverbial phrases

Predependent AdvPs may not be proadverbs. Most are locative, or phrases with the postposition $y\bar{\epsilon}l\acute{a}$ "about", or depend on the specialised head $d\bar{a}an^a$ 12.7.2.

```
d\bar{u}niya ni nin-gb\bar{i}n"earthly body"k\bar{o}lvgv-n no-d\hat{a}vg"crayfish" ("in-the-river cock")B\partial k dim"Bawku people"d\dot{a}g\dot{o}big nif"left eye"z\bar{u}g\dot{v}-n nif-gb\dot{a}un"upper eyelid"t\bar{e}ni-n nif-gb\dot{a}un"lower eyelid"
```

```
Ba da mor moogin bunkonbid ne ba buudi, yin bunkonbid ne ba buudi ... Bà dà mòr mōogu-n bún-kóňbìd né bà būudi, yín bún-kóňbìd \mbox{3PL} TNS have bush:SG-LOC thing-hair:PL and \mbox{3PL} kind, house:SG:LOC thing-hair:PL \mbox{n\'e} bà būudi... and \mbox{3PL} kind ... "They took wild animals with their kind, tame animals with their kind ..." (Gen 7:14)
```

```
K\bar{\upsilon}s\hat{a}as\ k\hat{u}\theta b\ n\bar{\varepsilon}\ y\bar{\imath}r\ y\acute{\varepsilon}l\grave{a}\ gb\grave{a}\mu\eta "A book about Kusaasi houses and agriculture" d\grave{a}\mu - k\grave{a}\eta\bar{a}\ l\bar{a}\ y\acute{\varepsilon}l\grave{a}\ gb\grave{a}\mu\eta "a book about that man" WK
```

Yīigá "firstly" appears as a predependent meaning "first" 12.5.1.

12.8 Dependents after the head

Dependents follow a head noun in the order adjective(s), quantifier, dependent pronoun or AdvP, article or $\check{n}w\grave{a}$ "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, making the cb a standard part of noun and adjective paradigms. Cbs as heads are the most liable to segmental remodelling <u>5.2</u>.

Compounds with dependent pronouns naturally cannot be lexicalised, but compounds with adjectives can develop specialised lexical meanings.

Quantifiers do not have combining forms and cannot be followed by the dependent-only demonstrative forms $k \dot{a} n^{\epsilon} k \dot{a} \eta \bar{a}^{\prime}$.

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.

12.8.1 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 16.9.2. Generally, compounds with $n\bar{l}n$ - "person" or $b\bar{v}n$ - "thing" are used instead: $n\bar{l}n$ - $s\dot{v}n$ "good person", $b\bar{v}n$ - $v\dot{v}r^{\varepsilon}$ "living thing" etc. $B\bar{v}n^{n\varepsilon/}$ can make a regular $r\varepsilon|aa$ 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 2SG see:IPFV=CQ?
"How many things do you see?" SB
```

Būn also occurs with abstract and AdvP predependents:

```
t\bar{\upsilon}lig(r\,b\acute{\upsilon}n^{n\epsilon}) "heating thing, heater" = b\bar{\upsilon}n-t\acute{\upsilon}lig(r^{\epsilon}) kù'emī-n b\acute{\upsilon}n^{n\epsilon} "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. $b\bar{\nu}n$ - $k\dot{\nu}\nu d\hat{\iota}r^{\epsilon}$ "thing to do with killing" versus $k\bar{\nu}\nu d\hat{\iota}r^{\epsilon}$ "killer."

Note the idioms

```
b\bar{v}n-gin^a "short chap" (informal, humorous) b\bar{v}n-k\acute{v}d\grave{v}g^o "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:

$bar{v}vg^{\mathrm{a}}$	"goat"	$bar{v}vs^{arepsilon}$	"goats"
bù-pị̀əlıg ^a	"white goat"	$b\grave{v}$ -p $\grave{!}$ ə l ı $s^arepsilon$	"white goats"
$b\dot{v}$ - $s\dot{v}\eta^{\circ}$	"good goat"	bù-sùma	"good goats"
nūa [/]	"hen"	nōɔs ^{ε/}	"hens"
nō-pí̞əlìga	"white hen"	nō-pị́əlìs arepsilon	"white hens"
nວົ-sບ໌ŋ ^ວ	"good hen"	nō-sύmà	"good hens"

Another adjective or a dependent pronoun can follow a first adjective cb:

```
n\bar{l}_{1}n-w\acute{o}k-p\dot{l}_{2}\partial l_{3}a "white tall person" n\bar{l}_{2}-p\hat{l}_{3}\partial l_{4}a "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:

```
f\bar{u}-z\check{\epsilon}\check{n}d\grave{a} k\grave{u}es^a "seller of red (i.e. dyed) cloth" (not *f\bar{u}-z\check{\epsilon}\check{n}'-k\grave{u}es^a)
```

i.e. adjective cbs may only precede other adjectives or dependent pronouns. Compounds with adjectives may develop specialised lexical meanings:

```
nar{u}'-b\hat{\imath}l^a "finger" ("small hand")

t\grave{\iota}-s\bar{a}b\imath l\acute{\imath}m^m a traditional remedy ("black medicine")

g\grave{o}\check{n}'-s\bar{a}b\imath l\acute{\imath}g^a Haaf gosabliga "Acacia hockii" ("black thorn")
```

There are isolated set forms showing traces of the old agreement system; the dependents do not regularly appear with the class suffixes seen in

```
là'-b̄[əlíf'] "small coin" NT (lā'af') "cowrie", b̄['əlá "a little" dà-s̄['ər^{\epsilon} "some day, perhaps" (dāar^{\epsilon} "day", s̄['a "some") dàbis-s̄['ər^{\epsilon} "some day" (dàbisir^{\epsilon} "day") yēl-sým^{m\epsilon} "blessing" (yēl^{l\epsilon} "matter", sỳ\eta'' "good") "bride" (pu'ā^{a} "wife", pāalíg^{a} "new") dà-pāal^{a} "young man, son" (dāu "man")
```

In WK's speech (not DK's) and many written sources, $m^{\rm m}$ class nouns require adjectives in $-m^{\rm m}$, as does $b\bar{v}n$ "thing" in abstract (but not concrete) senses:

```
dā-páalìm<sup>m</sup>
                                "new millet beer"; WK does not accept *dā-pâal, *dā-páalìg.
        tì-sābılím<sup>m</sup>
                                "black medicine", a specific traditional remedy
        tì-vōnním<sup>m</sup>
                                "oral medication" ("swallowing medicine")
        tì-kōvdím<sup>m</sup>
                                "poison" ("killing medicine")
                                "anointing oil" (kp\bar{a}a\bar{n}m^{m/} "oil, grease")
        kpāň-sɔ́ɔňdìm<sup>m</sup>
        būn-bɔ́ɔdìm<sup>m</sup>
                                "desirable thing" (1 Cor 14:1: nɔ̀nulím<sup>m</sup> "love")
        būn-bɔ́ɔdìr<sup>€</sup>
                                "desirable thing" (BNY p17: a sheep)
but
        būn-ňγέtìm<sup>m</sup>
                                "the visible world"
        būn-ňyέtìr<sup>ε</sup>
                                "a visible object"
but
```

Adjectives may show apocope-blocking <u>3.2</u> as a downtoner. Only singular forms seem to be possible. (All examples KT):

```
Lì à n\bar{\varepsilon} fū-píəlìgā.

Lì à n\bar{\varepsilon} fū-píəlìgā lā.

Lì à n\bar{\varepsilon} wîug.

Lì à n\bar{\varepsilon} wiugē.

"It's the whitish shirt."

Lì à n\bar{\varepsilon} wiugē.

"It's red."

"It's reddish."

fū-wiugē lā

"the reddish shirt"

Lì à n\bar{\varepsilon} tītā'arı.

"It's biggish."
```

12.8.1.1 Bahuvrihis

The combination noun + adjective may be used as a bahuvrihi adjective itself:

```
"It's a dead hand."
Lì à n\bar{\varepsilon} n\bar{u}'-kpíil\delta\eta.
Bīig lā á nē nū'-kp(ilύη.
                                            "The child is dead-handed."
                                             "He's a dead-handed child."
\dot{O} à n\bar{\varepsilon} bí-[n\bar{u}'-kpíil\acute{v}\eta].
kùq-n5b-w5k<sup>o</sup>
                                             "long-legged stool"
kùg-n5b-wâ'adε
                                             "long-legged stools"
                                             "crushed-headed"
zūg-máuk<sup>o</sup> pl zūg-mâ'ad<sup>ɛ</sup>
z\dot{v}-w\bar{z}k^{3/}
                                             "long-tailed"
nāb-gíŋa
                                             "short-legged"
z\bar{u}-péelòg<sup>o</sup> pl z\bar{u}-péelà
                                             "bald"; cf Dau sɔ' zua ya'a pie
                                             "If a man has gone bald" (Leviticus 13:40)
                                             "toothless" (lām<sup>mɛ/</sup> "gum", fùe "draw out")
lām-fôɔg<sup>o</sup> pl lām-fôɔd<sup>ε</sup>
```

The two adjectives "one of a pair" $\underline{12.5.1}$ are often used in bahuvrihis: $n\bar{i}f$ - $n\bar{i}j$ - $n\bar{i}$

The construction is not modification of an adjective by a cb. In cases like $b\dot{p}-n\bar{u}-kp\dot{p}il\dot{v}\eta^{\circ}$ "child with a withered hand" the adjective is modifying the cb immediately preceding it, not *vice versa*: it is not possible to say * $b\dot{p}-n\bar{u}-kp\hat{p}im^{m}$. The adjective may even be plural despite singular reference of the whole compound:

```
bị-từb-kpịda "deaf child" (từbυr^{\epsilon} "ear", kpị "die") bị-từb-kpịda náma, bị-từb-kpịdis^{\epsilon} "child/children with blocked ears" (lī "block up")
```

12.8.1.2 Nouns as adjectives

Human-reference nouns may be used as adjectives modifying other human-reference nouns. This is particularly common with a|ba class words:

```
bì-sāana/ or bì-sáana
                                                     "stranger-child"
[only bù-sáaŋa
                                                     "stranger goat"]
        bì-kpī'im<sup>m/</sup> or bì-kpìilύη<sup>ο</sup>
                                                     "dead child"
[only bù-kpìilúŋ<sup>o</sup>
                                                     "dead goat"]
        bì-dāu or bì-dāvg<sup>o</sup>
                                                     "male child"
[only b\dot{v}-d\bar{a}vg^{\circ}
                                                     "male goat"]
        bì-pu'āa or bì-puāka
                                                     "female child"
        b_i-z\bar{u}'\theta m^{m/} or b_i-z\dot{v}nz\dot{v}\eta^a
                                                     "blind child"
```

The same behaviour is also seen with some agent nouns:

```
p \underline{u}'\dot{a}-z \dot{a} a \breve{n} s^a "dreamy woman" KT n \bar{n} n \cdot n \dot{\epsilon} n^{na} "envious person" b \dot{p} \cdot s \bar{n} n^{na} "silent child" only b \dot{v} \cdot s \bar{n} n \dot{u} g^a "silent goat"
```

However, WK usually reports a contrast between agent nouns/deverbal adjectives with head-second compounds in a|ba class and head-first compounds in $ga|s\varepsilon$ or $r\varepsilon|aa$ class, even with derivatives of intransitive verbs:

```
p u \dot{a} - k \bar{v} v d i g^a "murderous woman, murderess"
p u \dot{a} - k \bar{v} v d^{al} only "killer of women"

p u \dot{a} - l \bar{a} \dot{a} d i g^a "woman given to laughing"
p u \dot{a} - l \bar{a} \dot{a} d^a "laugher at women"
```

Nouns of any class expressing bodily defects can be used adjectivally:

```
b\dot{\hat{p}}-z\dot{v}nz\dot{o}\eta^a "blind child"

b\dot{\hat{p}}-g\dot{k}^a "dumb child"

b\dot{\hat{p}}-w\dot{a}bir^{\varepsilon} "lame child"

b\dot{\hat{p}}-b\bar{a}l\bar{\varepsilon}rvg^o "ugly child"

b\dot{\hat{p}}-p\dot{o}\tilde{n}'or^{\varepsilon} "crippled child"
```

Other examples, which are effectively appositional, include:

```
nàsàa-b̄iiga"European child"yàmmvg-b̄i-póŋa"girl slave" (yamug bipuŋ Acts 16:16, 1976 \underline{5.2})yàm-b̄i-póŋa"girl slave" WK(vs yàmmvg b̄i-póŋa"slave's girl")b̄i-póŋ-yàmmvga"slave girl"nà'-b̄iiga or b̄i-nà'aba"prince"dàu-b̄iiga or b̄i-dāu"male child"
```

12.8.2 Quantifiers

Quantifiers as determiners follow the head, except for $y\bar{i}ig\dot{a}$ "firstly." A head can appear as a cb only with $y\bar{i}nni$ "one" and in a few fixed expressions like $d\dot{a}$ - $p\bar{i}iga$ "ten days"; elsewhere, quantifiers are not subject to M dropping: $k\bar{u}g$ -yinni "one stone" but $k\bar{u}gvr$ $y\bar{i}nni$ "one stone."

Quantifiers precede dependent pronouns and $l\bar{a}^{\prime}$ "the, that", $\bar{n}w\dot{a}$ "this":

```
bvnama atan' nwa "these three things" (1 Cor 13:13) b\bar{v}n-námá atan' mwa 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'andəlib pii nε yi
ò ňyà'an-dòllıb p̄ii nē yí'

3AN after-follower:PL ten with two
"his twelve disciples" (Mt 26:20)
```

12.8.3 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. $\grave{A}m\bar{\epsilon}\eta\acute{a}$ "really, truly" occurs in the meaning "genuine, real":

```
\bar{\partial}n s\bar{\partial}b \acute{a} n\bar{\varepsilon} d\acute{v}'atà àm\bar{\varepsilon}\eta\acute{a} l\bar{a}.

3AN.CNTR NULL.AN COP FOC doctor:SG ADV:real:ADV ART
"That one's the real doctor."
```

With $\check{n}w\bar{a}d\imath s\ y\hat{v}vm\ l\bar{a}\ p\acute{v}vg\bar{v}-n$ "months in the year" (SB) and $w\bar{a}bvg\ m\bar{o} \supset gv-n\ l\bar{a}$ "the elephant in the bush" (WK), I have not recorded the full contexts, possibly e.g. $\grave{M}\ d\bar{a}a\ \check{n}y\bar{\varepsilon}\ w\bar{a}bvg\ m\bar{o} \supset gv-n\ l\bar{a}$ "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 Winà'am bậig lā yélà.

DEMSTIN 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 n\bar{\varepsilon} Yesu Kiristo ónì à Wínà'am bậig lā lábà-sòŋ. DEMST.IN COP FOC Yesu Kiristo REL.AN COP God child:SG ART news-good:SG.
```

12.8.4 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<sup>a</sup>
             "child"
                                 bì-kàṇā/
                                                     "this child"
                                 bì-sùŋ-kàŋā/
bì-sō'
             "a certain child"
                                                     "this good child"
bì-kànε?
             "which child?"
                                 bì-bó?
                                                     "what child?"
yeltəəd ayəpəi bane ka maliaknama ayəpəi mər la
νĒl-tɔ̂ɔd
                                      màliāk-námá, àyópòe
                àγźpàe
                           bánì kà
                                                                 mōr lā
matter-bitter:PL NUM:seven REL.PL and angel-PL
                                                     NUM:seven have ART
"the seven plagues which the seven angels have" (Rev 15:8)
```

12.8.5 $L\bar{a}$ and $\bar{n}w\dot{a}$

 $L\bar{a}'$ and $\check{n}w\grave{a}$ are corresponding deictic particles "that" and "this." Although $\check{n}w\grave{a}$ 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 $\check{n}w\grave{a}$ in identificational clauses 18.4 and after demonstratives 12.4.2.

Unlike $l\bar{a}^{\prime}$, $\bar{n}w\dot{a}$ can stand alone as a NP:

```
Nwa \acute{a} n\bar{\epsilon} b\bar{\mu}ig. "This is a child." WK; tones sic. This cop foc child:sg.
```

 $L\bar{a}'$ and $n\bar{w}a$ 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 a $n\bar{c}$ -clause, when it may follow the article attached to the clause $n\bar{c}$ -clause.

As article, $l\bar{a}^{\prime}$ corresponds in many cases to English "the", marking referents as specific and already established. However, unlike "the", $l\bar{a}^{\prime}$ is not typically used for "familiar background" references:

```
Wìnnıg lí yā. "The sun has set."
Sun:sg fall pfv.
```

It is not used with pronouns, or with proper names of people or places: $m\bar{a}n$ "me", \dot{A} - $W\bar{\imath}n$ "Awini", $B\dot{\jmath}k$ "Bawku." Nor is it used with abstract mass nouns:

```
Nəŋilim pv naada. "Love does not come to an end." (1 Cor 13:8) Nəŋılim pv nāadá=\emptyset. Love Neg.ind finish:ipfv=neg.
```

 $L\bar{a}^{\prime}$ is not used in vocatives, contrasting with $\check{n}w\grave{a}$, which often is:

```
B\bar{\imath}iga=\emptyset! "Child!"

Child:SG=VOC!

B\bar{\imath}is\;\check{n}w\acute{a}! "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, and with the complement of $\grave{a}\underline{e}\check{n}^a$ "be something" when used ascriptively:

```
\dot{M} b\bar{\imath}ig k\bar{a}'e=\emptyset. "I've no child" WK 1SG child:SG NEG.BE=NEG. \dot{O} \dot{a} n\bar{\varepsilon} b\bar{\imath}ig. "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>24.5</u>:

```
Dau da be mori o biribing

Dāu dá bè ø mōrí ò bị-díbìŋ

Man:SG TNS EXIST CAT have 3AN child-boy:SG

"Once there was a man who had a son ..." KSS p35
```

Tumtum pu gat o zugdaana.

Outside such contexts, an indefinite NP is usually *generic*; unlike English "the", $l\bar{a}^{l}$ is not used with a generic sense:

```
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. Tùg wélàa ø bìgisid lín àň tí-sī'a. Tree:sg fruit:pl cat show:ipfv 3In:nz cop tree-indf:in. "It's the fruit of the tree that shows what tree it is." (Mt 12:33) Kusaas ye ... "The Kusaasi say ..." KSS p16
```

A predependent NP ending in $l\bar{a}^{/}$ makes the following head definite, and the head does not itself take the article:

drawing the moral of a story.

```
n\grave{a}'ab\;l\bar{a}\;b\hat{i}ig "the chief's child" not *n\grave{a}'ab\;l\bar{a}\;b\hat{i}ig\;l\bar{a}
```

Only predependents with the article and demonstrative pronouns automatically make their heads definite; predependent personal pronouns or proper names do not:

```
Wínà'am máliāk"an angel of God"Wínà'am máliāk lā"the angel of God"\dot{m} b̄iig"my child" (at first mention)\dot{m} b̄iig lā"my child" (previously mentioned)
```

Contrast the common idiom at first introduction of a possessed referent, where $l\bar{a}'$ is absent, with cases where the referent has already been introduced:

```
Dau da be mori o biribing
```

```
Dāu dá bè ø mōrí ò bị-díbìŋ
```

Man:sg tns exist cat have 3AN child-boy:sg

"Once there was a man who had a son ..." KSS p35

On daa an pu'asadir la ka o kul **sidi** paae yuma ayopoi ka **o sid la** kpi.

Ón dāa áň pự'á-sādır lá kà ò kūl sīdı ø pāe gamma ga

year:PL NUM:seven and 3AN husband:SG ART die.

"She had married a husband when she was a girl, and after seven years her husband died." (Lk 2:36)

Note also the contrast of meaning produced by the article in

 \dot{M} $b\bar{i}ig$ $k\bar{a}'e=\emptyset$. "I've no child" WK 1SG child:SG NEG.BE=NEG.

 \dot{M} $b\bar{i}ig$ $l\bar{a}$ $k\bar{a}'e=\emptyset$. "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 $b\bar{a}^{\text{i}}$ and $s\grave{a}am^{\text{ma}}$ "father."

For an unambiguously indefinite specific meaning like "some, another", indefinite pronouns are used:

 $N\bar{a}$ '-s \hat{i} θ \hat{b} \hat{a} \hat{o} \tilde{n} \hat{b} \hat{i} d $n\bar{\varepsilon}$ $m\bar{o}$ ∂d . "Some cows are eating grass." Cow independent of the contraction of the contract

An indefinite pronoun is necessary to make the head indefinite after a predependent with the article:

 $n\grave{a}'ab$ $l\bar{a}$ $b\acute{l}$ - $s\bar{\it{o}}'$ "a child of the chief's" chief:sg art child indean

13 Adverbial phrases

13.1 Forms and functions

Many AdvPs represent adverbial *uses* of NPs. Other kinds of AdvP have fewer structural possibilities than NPs; for example, only specialised *postpositions* have NP predependents, and many adverbs do not conform to the structure of ordinary nouns.

Absolute clauses are AdvPs 21.1, as are several relative clause types.

As with NPs, coordination of AdvPs uses the particle $n\bar{\varepsilon}$:

Bēogυ-n nē zâam kà fò ná nịŋ tí-kàŋā.

Morning-Loc with evening and 2SG IRR do medicine-DEMST.SG.

"You'll use this medicine morning and evening." [Time]

Nyalima na be winnigin ne nwadigin ne nwadbibisin.

Nyālimá nà bē wi̯nnigī-n nē nwādigi-n nē nwād-bi̯bisī-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) [Place]

For manner-AdvP coordination see on sī'əm-clauses 21.2.1.

The prototypical use of AdvPs is as VP adjuncts. For AdvPs as dependents in NPs see 12.7.3; time/circumstance AdvPs may appear as postlinker adjuncts 17.2.1.

AdvPs also occur as verb arguments. AdvP subjects are most often seen with $\grave{a} e \check{n}^a$ "be something/somehow," but occur with other verbs too, especially statives.

Yiŋ venl, ka poogin ka'a su'um.

Yìn véňl kà pūvqv-n $k\bar{a}$ ' sýmm= \emptyset .

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 kpịi tì yēlá lā kế kà tì báŋ nòŋılím ø àň sị əm. Christ NZ TNS die 1PL about ART cause and 1PL realise love NZ COP INDEADV "Christ dying for us makes us understand what love is like." (1 Jn 3:16) (absolute clause AdvP as subject)

In $S \dot{v} \eta \bar{a} b \dot{\varepsilon}$ "OK it is" (WK), $s \dot{v} \eta \bar{a}$ used metalinguistically: "the word $s \dot{v} \eta \bar{a}$."

Verbs with appropriate meanings frequently take locative AdvPs as complements, rather than as adjuncts 16.9.3.

The verb $\grave{a} \not\in \check{n}^a$ "be something/somehow" typically has a derived manner-adverb or abstract noun as complement rather than an adjective as NP head $\underline{16.12.2}$:

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 nínì àláa=ø! "Don't do that!" ("thus")

NEG.IMP do ADV:thus=NEG.

Fv wvm ban yɛt si'em laa?

Fv wvm bán yɛt si'əm láa=ø?

2SG hear:IPFV 3PL:NZ say:IPFV INDF.ADV ART=PQ?

"Do you hear what they are saying?" (Mt 21:16)
```

Relative clauses with the proform $s\bar{\imath}$ ' ∂m^m "somehow" as head are accordingly used after verbs of cognition, reporting and perception, to express the subordinate interrogative sense "say [etc] what ..." 21.2.1.

For the idiom "X $n n v \bar{\epsilon} l \dot{a} \dots$?" "how can X ...?" see 19.1.

13.2 Time/circumstance

AdvPs expressing **time** $\underline{26.7}$ may be instantiated by proadverbs $\underline{13.6}$ or by structurally distinctive time adverbs such as $z\bar{\imath}n\acute{a}$ "today", $s\grave{u}$ ' es^a "yesterday", $d\bar{u}nn\acute{a}$ "this year." $B\bar{\varepsilon}og^{\circ}$ "tomorrow" has the form of a noun but cannot inflect or take dependents; $d\bar{a}ar^{\varepsilon}$ "day after tomorrow/day before yesterday" is in the same category but happens to be homophonous with the noun $d\bar{a}ar^{\varepsilon}$ "day."

Other time AdvPs are simply NPs with temporal meanings, and no special marking. They may consist of single nouns, such as $y\dot{v}'v\eta^{\circ}$ "night", $\dot{v}vn^{\rm n\epsilon}$ "dry season", $n\bar{l}nt\bar{l}\eta^{\rm al}$ "heat of the day", but such nouns inflect and may occur with dependents.

Absolute clauses <u>21.1</u> are frequently used to express time.

No formal distinction is made between points in time and periods of time:

```
Fù ná kūl bēog. "You'll go home tomorrow."

2SG IRR go.home tomorrow.

Tì kpélìm ànínā dábisà bí'əlà.

1PL remain ADV:there day:PL few.

"We stayed there a few days.
```

13.3 Place

Locative AdvPs consist of Kusaasi place names, specialised locative adverbs, or NPs followed by postpositions. The core locative postposition is the particle $n\bar{\imath}/\sim n^{\epsilon}$. Some postpositions are themselves followed by n^{ϵ} ; many postpositions are converted nouns. Nouns other than place names cannot otherwise be used alone as locatives.

Besides locative proforms, specialised locative adverbs include $y \hat{i} \eta^a$ "outside", $d \hat{a} t \hat{i} u \eta^o$ or $d \hat{i} t \hat{i} \eta^o$ "right(hand)", $d \hat{a} g \hat{o} b \iota g^a$ "left", $\hat{a} g \hat{o} l^{l\epsilon}$ or $\hat{a} g \hat{o} l \hat{a}$ "upwards", $l \bar{a} l l \hat{i}$ "far off" (perhaps from $l \bar{a} l n \hat{i}$.)

The locative particle takes the form $n\bar{\imath}^{\prime}$ after words ending in a short vowel in SF, after pronouns and after loanwords, and the liaison-word form n^{ϵ} elsewhere:

```
m\dot{v}'arar{\imath}-n "in a lake" yar{v}d\acute{a} n\grave{\imath} "among names" \grave{m} n\bar{\imath} "in me" m\bar{a}n n\bar{\imath} "in me" la'asvg doodin n\varepsilon suoya ni la'asvg doodi-n n\varepsilon suey\acute{a} n\grave{\imath} 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 $y\bar{i}n^{n\epsilon}y\bar{a}a-n^{\epsilon}$ which have the particular nuance "home", as in the parting formula

```
Pù'vsım yín. "Greet (those) at home." i.e. "Goodbye."
```

The article $l\bar{a}'$ may precede or follow the locative particle, as may quantifiers:

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 fv nini.

Kèm Siloam búlvg\bar{v}-nı ø pí\theta fv n\bar{l}ní.

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 lém ȳ n̄̄dıbí-n lā nā yá'asì ø yélì 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 e.g.

```
Ò bè dâ'a-n."He's at market."Ò bè siá'arī-n."He's at the bush."Ò bè pōɔgó-n."He's at the farm."Ò bè yín."He's at home."Ò bè mōɔgv-n."He's in the grasslands."Ò bè kōlıgı-n"He's at the stream."Ò bè tōvmmı-n."He's at work."
```

More precise meanings are expressed with postpositions 13.5.

Kusaasi place names are intrinsically locative and do not take the locative particle; however, they often have a locative proform in apposition, particularly to express rest at a place, as opposed to movement:

```
Ò bὲ Bók.
Ö bὲ Tέmpáan.
Ö kὲŋ Bók.
M ná kēŋ Bók.
Fỳ yûug Bók kpēláa?
Fỳ yûug Bókàa? SB
"He's at Bawku." ILK
"He's at Tempane." ILK
"He's gone to Bawku."
"I'm going to Bawku."
"Have you been long in Bawku (here)?"
(rejected by WK as "Mooré")
```

For my informants, foreign place names share the syntactic behaviour of Kusaasi place names, but (especially in the sense of rest at a place) NT often uses $n\bar{\imath}^/$ or paraphrases like *Jerusalem téŋ̄i-n* "in Jerusalem-land."

The locative particle also appears in some *time* expressions: $b\bar{\epsilon}og^{\circ}$ "tomorrow", $b\bar{\epsilon}og_{\circ}-n^{\epsilon}$ "morning", $v\bar{i}ig\hat{i}-n^{\epsilon}$ "at first" $s\bar{a}n-s\hat{i}+n$ $l\bar{a}$ "at one time, once..."

Proforms used as locative heads of relative clauses are intrinsically locative:

```
One ken likin zi' on ken si'ela.
Òпі
      kēn
              līkı-n
                           zī'
                                     э́п
                                            kēn
                                                   s\bar{i}'əla=\emptyset.
REL.AN go:IPFV darkness-LOC NEG.KNOW 3AN:NZ go:IPFV INDF.IN=NEG.
"He who walks in darkness does not know where he is going." (In 12:35)
ka mori fu ken zin'ikane ka fu pu booda.
kà mōrí fù ø kēŋ zíň'-kànı
                                      kà fù pū
                                                     bóɔdā=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)
```

Reason-why AdvPs are constructed by a metaphorical extension of the sense of the postposition $z\bar{u}g$ "upon"; similarly for proforms:

```
àlá z \dot{u} g^{\circ} "therefore" b\bar{o} z \dot{u} g^{\circ} "why?" d \dot{u} z \dot{u} g^{\circ} "therefore"
```

13.4 Manner

Various NP types can be used as manner AdvPs. AdvPs of manner may be proforms, and there are several morphologically distinctive manner-adverb formations; like specialised time adverbs, specialised manner-adverbs do not take dependents. They often show apocope-blocking 3.2; some have the manner-adverb prefix \grave{a} - 10.2 or are derived from adjective stems with the suffixes mm or -ga 8.2. Others include $p\bar{a}al\acute{v}$ "openly" and $n\~y\bar{a}e^{n\epsilon/}$ "brightly, clearly."

 $Ny\bar{a}e^{n\varepsilon/a}$ appears as complement of $ae\bar{n}^a$ "be something" and as an adjunct:

```
Wina'am a su'um nyain.
                                 "God is light." (1 Jn 1:5, 1996)
Wínà'am áň sóm
                         ňyāe.
God
         COP good: ABSTR brightly.
... k\varepsilon ka ti lieb nyain.
                                 "... make us light." (1 Jn 1:7)
... kέ
         kà tì lîəb
                          ňvāe.
... cause and 1PL become brightly.
Ka li sid nie nyain.
                                 "And there truly was light." (Genesis 1:3)
Kà lì síd nìe
                       ňγāe.
And 3IN 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 [ĵãĩ]. A number of manner-adverbs are formed by reduplication of roots:

```
n\dot{a}'an\bar{a}' "easily" k\bar{o}n'bk\bar{o} "solely, by oneself" t\dot{o}'bt\bar{o}' "straight away"
```

Reduplication of nouns or numbers 12.5.1 creates distributive manner-AdvPs:

```
zį̃ň'ig zį̂ň'ig "place by place" dàbisir dábisir "day by day"
```

Reduplication of manner-adverbs themselves is intensifying:

```
àmēŋá mēŋá "very truly"àsídà sídà "very truly"
```

```
    M wóm Kūsâal bị əlá.
    "I know Kusaal a little."
    1sg hear:IPFV Kusaal slightly.
```

```
\dot{M} wóm b\bar{l} \partial l b\bar{l} "I understand a very little." 1SG hear: IPFV little little.
```

Relative clauses with $s\bar{i}$ ∂m^m "somehow" are common as AdvPs 21.2.1.

Manner-adverbs resemble generic mass nouns in their syntactic behaviour in several respects. Even count nouns in generic senses may be encountered as AdvPs:

```
\dot{M} k \acute{\epsilon} \eta n \bar{b} \acute{a}. "I went on foot." SB; WK corrected this to 1SG go leg:PL. \dot{M} k \acute{\epsilon} \eta n \bar{\epsilon} n \bar{b} \acute{a}, using n \bar{\epsilon} "with."
```

A prepositional phrase with $n\bar{\varepsilon}$ parallels a count plural used adverbially in

```
À-\check{n}y\bar{\varepsilon} n\bar{\varepsilon} n\bar{i}f s\acute{o}\check{n}' o À-w\grave{o}m t\grave{o}ba.

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 tòm bédugō.

"She's worked a lot."

Ò tòm pāmm.

"She's worked a lot."
```

 $W\bar{v}sa$ "all" readily switches from quantifying an object to adverbial use:

```
Bà gòsī tí wūsa. "They've looked at us all." WK 3PL look.at 1PL.OB all. (for: Bà gòsí tì wūsa. 3PL look.at 1PL all.)
```

This is not a universal property of quantifiers:

```
B\grave{a}\ g\grave{o}s\bar{\imath}\ t\acute{\imath}\ b\grave{\epsilon}d\upsilon g\bar{\upsilon}. "They've looked at us a lot." WK B\grave{a}\ g\grave{o}s\acute{\imath}\ t\grave{\imath}\ b\grave{\epsilon}d\upsilon g\bar{\upsilon}. "They've looked at a lot of us." WK
```

Numbers have specific forms for "so many times" <u>12.5.1</u>; other count quantifiers sometimes appear similarly as adverbs:

```
Bà gòsī tí bábɪgā. "They've looked at us many times." WK Bà gòsí tì bàbɪgā. "They've looked at many of us." WK
```

13.5 Postpositions

Postpositions are adverbs with predependents; some also occur without. Most postpositions are literally or metaphorically locative. Postpositions may not be coordinated, but their predependents may:

```
tinam nɛ fun svuginɛ? "[what is there] between us and you?" (Mt 8:29) tīnám nē fūn svugū-né=ø? 

1PL with 2sG between-Loc=cQ?
```

Many postpositions represent special uses of ordinary nouns. Some are AdvPs which include the locative particle.

```
Z\bar{u}g^{ol} "onto" (z\bar{u}g^{ol} "head"):

\dot{O} digil gb\acute{a}\underline{u}\eta l\bar{a} t\acute{\epsilon}\epsilon b\grave{v}l l\bar{a} z\acute{u}g.

3AN lay.down book:SG ART table:SG ART upon.

"She's put the book on the table."
```

 $Z\bar{u}g^{3/}$ is frequently used metaphorically to express a **reason** "because of ..."; reason AdvPs often occur preposed with $k\dot{a}$ or as postlinker adjuncts:

```
b\bar{\it 5}-zúg\dot{\it 2}? "why?" d\bar{\it a} u u u u u u "on account of the man"
```

```
Pian'akanε ka m pian' tisi ya la zug, ya anε nyain.

Pian'-kànι kà m̀ piān' 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 words I have spoken to you, you are clean." (Jn 15:3)
```

```
The set expression s\bar{a}a z u q^{\circ} is used for "sky"; it is intrinsically locative:
        Ka kukor yi saazug na ...
        Kà kùkōr vī
                                            zúg nā ...
        And voice:sg emerge rain:sg onto hither
        "And a voice came from heaven..." (In 12:28)
Z\bar{u}g\dot{v}-n^{\varepsilon} "on":
                                                "on the table"
        téebùl lā zúgū-n
T\bar{\epsilon}\eta ir^{\epsilon} "under" (t\bar{\epsilon}\eta^{a} "ground"; with no predependent G\dot{\rho}sim\ t\bar{\epsilon}\eta ir! "Look down!"):
        téebùl lā ténìr
                                                "under the table"
P\bar{\nu}\nu g\nu - n^{\epsilon} "inside" (p\bar{\nu}\nu g^a "belly, inside"):
                                                 lā púugū-n.
        Dāu
                 lā bé nē dó-kàŋā
        Man:sg art exist foc hut-demst.sg art inside:sg-loc.
        "The man is inside that hut."
        ňwādis yûum lā púugū-n
                                                "months in the year" (metaphorical locative)
B\bar{a}b\dot{a} "beside" (pl of b\bar{a}b\imath r^{\epsilon/} "sphere of activity"):
                                                "beside my feet"
        m nābá bàba
Sisin q\bar{v} - n^{\epsilon/} "between" (replaced by sin q\bar{v} - n^{\epsilon/} in KB):
        tīnám nē fūn sísùvgū-n
                                                "between us and you"
Tùen<sup>ne</sup> "in front of" (with no predependent Gòsım tûen! "Look to the front!"):
        dāká lā tûen
                                                "in front of the box"
Gbin^{n\varepsilon} "at the bottom of" (gbin^{n\varepsilon} "buttock"):
        zūer lā gbín
                                                "at the foot of the mountain"
```

 $\check{N}y\dot{a}'a\eta^a$ "behind; after (time)" ($\check{n}y\dot{a}'a\eta^a$ "back", $li\ \check{n}y\dot{a}'a\eta^a$ "afterwards"):

 $S\bar{a}'an^{\epsilon/}$ "into/in the presence of", "in the opinion of", "chez":

Wínà'am sâ'an

"in the sight of God"

Fù ná dị'e tî ι m pụ'á-bàmmā lā sâ'an. 2SG IRR receive medicine woman-DEMST.PL ART among. "You'll get the medicine from where those women are."

 $Y\bar{\epsilon}l\acute{a}$ "about, concerning" (pl of $y\bar{\epsilon}l^{l\epsilon/}$ "matter, affair"):

```
Bà yèlō \emptyset mān yēlá wūsa. 3PL say 3AN.OB 1SG.CNTR about all. "They told him all about me."
```

 $K\bar{\jmath}\check{n}'\jmath k\jmath$ (cf $\grave{a}rak\acute{\jmath}\check{n}'$ "one" in counting) is used as in \grave{m} $k\bar{\jmath}\check{n}'\jmath k\jmath$ "by myself."

13.6 Proadverbs

	Demonstrative		Indefinite	Interrogative		
Place	$kpar{arepsilon}$	"here"	zìň'-sī̞'a	yáa ní	"where?"	
	kpēlá	"there"	"somewhere"	yáa	"whither	
	àní	"there"			/whence?"	
	ànịnā ^l	"there"				
Time	nānná	"now"	sān-sṭ¹a	sān-kán ^ε	"when?"	
	nānná-nā [/]	"now"	"sometime"	$bar{v}$ n-dâa $r^{arepsilon}$	"which day?"	
	sān-kán ^ε	"then"		bò-w <u>ì</u> n ^{nε}	"what time of day?"	
Manner	àňwá	"like this"	sį̇̃'əm ^m	wēlá	"how?"	
	àwá nā ^l	"like this"	"somehow"			
	àlá	"like that"				

The indefinites are used in relative clauses 21.2.1.

The \dot{a} - of the "manner" forms is preceded by the LF-final vowel -1 4.2.

Proforms expressing reason are formed with the postposition $z\bar{u}g^{\circ l}$: àlá $z\dot{u}g^{\circ}$ "because of that", $b\bar{z}z\dot{u}g\dot{z}$? "why?" (cf $b\bar{z}z\dot{u}g\bar{z}$ "because" 17.2.1.)

14 Ideophones

Adjectives cannot themselves take adverbs as modifiers. In e.g.

```
Lì à n\bar{\varepsilon} 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 * $f\bar{u}$ - $p[elig\ p\bar{a}mm\ l\bar{a}$ for "the very white shirt."

However, an adjective in any role may be immediately followed by an intensifying ideophone, as may the derived stative verbs. As is common cross-linguistically, ideophones often display unusual phonological features. Such ideophones are specific to particular adjectives and the corresponding stative verbs.

```
"It's very white."
Lì à nē pịəlìg fáss fáss.
Lì à nē sābilíg zím zím.
                                     "It's deep black."
Lì à nē zíň'a wím wím.
                                     "It's deep red."
Lì à n\bar{\varepsilon} fū-zíň'a wím wím.
                                     "It's a deep red shirt."
                                                                          WK
\dot{M} ňy\dot{\varepsilon} fū-zíň'a wím wím.
                                     "I've seen a deep red shirt."
                                                                          WK
F\bar{u}-zíň'a wím wím b\dot{\varepsilon}.
                                     "There's a deep red shirt."
                                                                          WK
M bôod fū-zíň'a wím wím lā.
                                     "I want the deep red shirt."
                                                                          WK
Ò à nē wāk tálılılı.
                                     "She's very tall."
Ò à nē gīŋ tírīgà.
                                     "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 gradable adjectives, have associated ideophones; thus WK has only the adverb $p\bar{a}mm$ in

```
Lì à s\acute{v}ŋ\bar{a} p\bar{a}mm. "It's very good."

Lì à n\bar{\epsilon} b\bar{\epsilon}'\epsilond p\bar{a}mm. "It's very bad."

Lì z\grave{u}lım p\bar{a}mm. "It's very deep."

Lì m\grave{a}'as p\bar{a}mm. "It's very damp."
```

Most dynamic verbs likewise are not associated with ideophones:

```
\grave{O} t\grave{v}m p\bar{a}mm. "She's worked hard." 
\grave{O} t\grave{v}m h\bar{a}l\acute{t}. "She's worked hard." 24.7 
\grave{O} z\grave{o} p\bar{a}mm. "She's run a lot." 
\grave{O} z\grave{o} h\bar{a}l\acute{t}. "She's run a lot."
```

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 z!' e^{ya} "be standing" and its dual-aspect derivatives are often followed by $s\bar{a}p\imath$ "straight" (LF $sappin\varepsilon$ KB), but the word is found also after other verbs.

```
ka ku nyaŋe due o meŋi zi'e sapii.
kà kú nyāŋı ø dúe ò mēŋı ø zí'e sāpii.
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 mɔɔgin la
màalım suā-dâvg sāpi mɔɔgv-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 $ny\bar{a}e^{n\varepsilon/}$ "brightly", for example 13.4.

A third type of ideophone overlaps with emphatics $\underline{24.7}$: so, for example $k \not\mid mm$ in $B\bar{b}$ $k \not\mid mm$ "what exactly?" $\underline{12.4.4}$.

15 Prepositions

 \dot{M}

gέň'

1SG get.angry:PRV with 2SG.

 $n\dot{\varepsilon}$ fù.

Prepositional phrases function as VP adjuncts or complements. They cannot be direct components of noun phrases. Neither prepositions nor their complements can be coordinated. $N\bar{\epsilon}$ "with" only takes NPs or AdvPs (including \dot{n} -clauses) as complements, but the other prepositions also appear as clause adjuncts 17.2.1.

 $N\bar{\epsilon}$ is "with" in both accompanying and instrumental senses. $N\bar{\epsilon}$ "and", coordinating NPs and AdvPs, is fundamentally the same word.

Some speakers only use free pronoun forms after $n\bar{\varepsilon}$, but WK and SB have

```
ni t\bar{\imath}^{\prime} or n\varepsilon t\hat{\imath}
ní ma
                                      ní v\bar{a}^{\prime} or n\dot{\varepsilon} v\dot{a}
ní f<sup>o</sup>
                                      ní bā<sup>l</sup> or nέ bà
nό [nῦ] LF nό-ο [nῦ:]
ni li^{\prime} or n\epsilon li
Written ne o is usually read [n\tilde{v}] in the audio NT.
Examples for n\bar{\varepsilon}:
Lìginím fò nịf
                        nέ fò nû'ua.
Cover:IMP 2SG eye:SG with 2SG hand:SG.
"Cover your eye with your hand."
Bà kèŋ nē nōbá.
                                      "They've gone on foot." WK
3PL go with leg:PL.
Dìm
                                 tΰ'as nē
                                             Winn\varepsilon = \emptyset.
        nē
               Win.
                        dā
Eat:IMP with God:SG, NEG.IMP talk with God:SG=NEG.
"Eat with God, don't talk with God."
(Proverb: Be grateful for God's generosity and don't complain.)
Kulim ne sumbugusum.
                                      "Go home in peace." (Mk 5:34)
Kùlım
               nē sùmbūgusím.
Go.home:IMP with peace.
[Bárıkà
           nέ
                  fὺ] kēn
                                 kēn.
[Blessing with 2SG] arrival arrival.
"Welcome!" (based on a greeting template <u>25</u>)
```

"I'm angry with you." SB

 $L\grave{a}'am\ n\bar{\varepsilon}$ "together with" derives from a *n*-catenation construction 19.1:

```
...mɔr ya'am yinne la'am nɛ tɛn'ɛsa yinne.
```

```
... mōr yā'am yīnní là'am nē tēň'esá yīnní.
```

Woo means "like." With pronoun complements WK has

```
      wōυ mān LF mánὲ
      wốυ tì

      wōυ fōn LF fónὲ
      wốυ yà

      wōυ ɔ̄n²
      wóυ bà

      wóυ lì
```

WK permits phrases introduced by $w\bar{v}v$ to be preposed with $k\grave{a}$ 24.3, but rejects this construction for $n\bar{\varepsilon}$ + NP:

```
Wūυ bύη nέ kà ò zót.
```

Like donkey:SG like and 3AN run:IPFV.

"Like a donkey, he runs."

```
but N_{\varepsilon} \dot{m} n\hat{u}'ug k\dot{a} \dot{m} s\bar{\iota}'\iota s.
```

With 1sg hand:sg and 1sg touch.

is not possible for "With my hand, I touched it."

The complement is often a $s\bar{i}$ ∂m relative clause 21.2.1:

```
Ò zòt wūu búŋ n zòt sị əm lā.
```

3AN run: IPFV like donkey: SG NZ run: IPFV INDF. ADV ART.

"He runs like a donkey runs."

 $W\bar{\varepsilon}n^{\mathrm{na/}}$ "resemble" takes as complement a prepositional phrase introduced by $w\bar{\upsilon}\upsilon$ or $n\bar{\varepsilon}$. A complement of $w\bar{\varepsilon}n$ $w\bar{\upsilon}\upsilon$, $w\bar{\varepsilon}n$ $n\bar{\varepsilon}$ or of $w\bar{\upsilon}\upsilon$ alone is followed by an empty particle $n\bar{\varepsilon}$ whenever it does not have the article $l\bar{a}^{\prime}$, even if it is a pronoun, or is specific, though not if it is a number (in which case, the meaning is "about"):

```
w\bar{\nu}v m\bar{a}n n\bar{\epsilon} "like me" w\bar{\nu}v b\acute{\nu}\eta n\bar{\epsilon} "like a donkey" w\bar{\nu}v t\bar{u}s\acute{a} \grave{a}y\i^{\dagger} "about 2000"
```

^{...} have sense one together with thought one.

[&]quot;... had one mind together with one thought." (Acts 4:32)

```
Alazugə məri ya'am wvv wiigi n\varepsilon...
Àlá zùgō, mòrī ø yā'am wvv wīigí n\overline{\varepsilon}...
Therefore, have 2PL.SUB sense like snake:PL like...
"Therefore, be wise as serpents ..." (Mt 10:16)
```

 $\dot{A}s\dot{\epsilon}\epsilon$ is "except for." Pronoun complements appear as free forms.

```
àsέε Wínà'am "except for God" (calguing Twi qye Nyame)
```

Hālí means "up to and including." Pronoun complements are free forms.

O daa pun ane ninkuud hali pin'ilugun sa.

```
\dot{O} dāa pún à nē nīn-kûvd hālí pīň'ilúgū-n sá. 3AN TNS previously COP FOC person-killer:SG even beginning:SG-LOC since. "He was a murderer from the beginning." (In 8:44)
```

 $H\bar{a}li$ can also appear as a prelinker adjunct and as an emphatic 24.7. As emphatic "even" preceding $n\bar{\epsilon}$ or $la^{\dot{}}am$ $n\bar{\epsilon}$ "(together) with" and a $n\bar{c}$ -clause complement, it produces the meaning "despite, even though, even as":

```
Hali la'am nɛ on daa an yɛlsvm wvsa daan la, o da lieb nɔŋdaan...

Hālí là'am nē ón dāa áň yēl-sým wvsa dâan lā,

Even together with 3AN:NZ TNS COP matter-goodness all owner:SG ART,

ò dà lịəb nōŋ-dâan...

3AN TNS become poverty-owner:SG...

"Despite his having possessed every blessing, he became poor..." (2 Cor 8:9)
```

Zugsəb yel ye, Hali ne man vve nwa...

```
Z\bar{u}g-s\acute{o}b y\acute{e}l y\bar{e}, H\bar{a}l\acute{u} n\bar{e} m\acute{a}n v\bar{v}\varrho n\~{w}\acute{a} ... head-null.an say that even with 1SG:NZ be.alive this ... "The Lord says: Even as I live .." (Rom 14:11)
```

```
hali nɛ man daa sɔbi tisi ya si'em la, m daa pv sɔbi li hālí nɛ̄ mán dāa sɔ̄bı ø tísì yā sṝ'əm lā even with 1SG:NZ TNS write CAT give 2PL.OB INDF.ADV ART \dot{m} dāa pv̄ sɔ̄bí lī ...
1SG TNS NEG.IND write 3IN.OB ...
"Despite how I wrote to you, I did not write it ..." (2 Cor 7:12)
```

16 Verb phrases

16.1 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 -ma appear only when the tone overlay is present.

The system separates tense, marked by preverbal particles, from aspect, marked by verb flexion and postverbal $n\bar{\varepsilon}^I$. 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 -ma 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}.

	T1	T2	Mood	Preverb		LW1	LW2	
lὲε	dàa	nàm	$\emptyset \leftrightarrow p\bar{v}$	pùn	VERB	n ^ε	m ^a	nē [/]
	sàa	<u>ἤγε̄ε(tι)</u>	$\emptyset \leftrightarrow d\bar{a}$	lèm		ya	f ^o	
	Ø		nà ↔ kὺ	tì			О	
	pà'			kpèlım			11	
	sà			là'am			tı	
	dāa			dèŋım			ya	
	dà						ba	

 \emptyset marks slots where the absence of a particle can be contrastive.

T1, T2 are slots for tense particles; LW1 for the liaison words n^{ϵ} 16.3.2 ^{ya} 18.3; LW2 for bound personal pronouns as (direct or indirect) objects, which unlike all other complements *precede* aspect-marking $n\bar{\epsilon}^{/}$ 16.2.1. Only one bound object pronoun may occur; cf n-catenation using tis^{ϵ} "give" 19.1.

The particles in the column "Mood" also mark polarity: positive \leftrightarrow negative. For $l\grave{\varepsilon}\varepsilon$ "but" see 16.7.

Tone Pattern A verbs have all-M tones in the irrealis mood 3.8.2.

16.2 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>16.6.2</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.

16.2.1 Aspectual $n\bar{\varepsilon}$

Following a verb word with no free words intervening, the VP focus particle $n\bar{\epsilon}'$ $\underline{24.1.2}$ 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.

 $N\bar{\epsilon}^I$ 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. Furthermore, $n\bar{\epsilon}^I$ can only be interpreted aspectually if no free words intervene between the particle and the verb, and the VP has positive polarity and indicative mood. When aspectual senses are not excluded by the meaning of the verb itself, the relevant aspect distinctions still occur, but are formally unmarked:

 \dot{O} $k \dot{u} e s i d \bar{i}$ $b \dot{a}$ $n \bar{\epsilon}$. "She's selling them." 3AN sell:IPFV 3PL.OB FOC.

```
\dot{O} k\dot{u}esid n\bar{\varepsilon} s\bar{u}mma l\bar{a}. "She is selling the groundnuts." 3AN sell:IPFV FOC groundnut:PL ART.
```

but \dot{O} kùesid sūmma lā nē. "She sells/is selling the groundnuts." 3AN sell:IPFV groundnut:PL ART FOC. (VP focussed: "They're not free.")

```
Ò zàbid. "He fights." 3AN fight:IPFV.
```

 \dot{O} $z\dot{a}bid$ $nar{arepsilon}.$ "He's fighting." 3AN fight:IPFV FOC.

but \dot{O} $p\bar{v}$ $z\acute{a}bid\bar{a}=\emptyset$. "He's not fighting/He doesn't fight." 3AN NEG.IND fight:IPFV=NEG.

 $N\bar{\epsilon}^{\prime}$ cannot have aspectual meaning in **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 24.5:

```
N\bar{i}igi )\bar{n}bid n\bar{\epsilon} m\bar{o}od. B\dot{a} n\dot{u}ud n\bar{\epsilon} k\hat{u}'em. Cow:PL chew:IPFV FOC grass:PL. 3PL drink:IPFV FOC water. "Cows eat grass. They drink water." ("What do cows eat? and drink?")
```

 $N\bar{\epsilon}'$ is omitted in replying to questions or commands by repeating the verb:

```
A: G\grave{o}sim! "Look!" B: \grave{M} g\acute{o}s\grave{i}d! "I'm looking!" A: F\grave{v} g\acute{o}s\grave{i}d n\acute{\epsilon}\epsilon? "Are you looking?" B: \grave{M} g\acute{o}s\grave{i}d! "I'm looking!"
```

16.2.2 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 $y\dot{a}$ '-clauses 20.2. 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>16.3.4</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.

Rain TNS rain.

"It rained." (before yesterday.)

but Sāa ní yā.

Rain rain PFV.

"It has rained."

The time is unspecified: "Perhaps the grass is still wet, or I am explaining that the area is not really a desert." (WK)
```

Perfective appears with present meaning with events and processes which can be conceptualised as being coextensive with the moment of utterance:

```
\dot{O} y\dot{\epsilon}l y\bar{\epsilon} ... "He says ...." (translating for the foreign doctor) 3AN say that ...
```

Performatives naturally fall into this category:

```
\dot{M} p\hat{v}'vs y\bar{a}. "Thankyou", "I thank you." (cf Hausa Naa good\grave{e}e)

\dot{M} s\underline{i}\acute{a}k y\bar{a}. "I agree." 1SG agree PFV.
```

Verbs of perception and cognition (often corresponding to English "stative" verbs that do not use the progressive present) frequently appear as present perfectives, once again corresponding to English simple present:

```
\dot{M} ny\dot{\epsilon} n\bar{u}'-b\dot{l}b\iota s\dot{a} \dot{a}t\dot{a}n'.

1SG see hand-small:PL NUM:three.

"I can see three fingers."

\dot{M} t\dot{\epsilon}n'\epsilon s k\dot{a} ...

"I think that ..."

1SG think and ...
```

With verbs which express a change of state in the subject the perfective may express the resulting state; such resultative perfectives are followed by aspectual $n\bar{\varepsilon}^{/}$ whenever syntactically permissible, because there is always a topic-time contrast with the situation preceding the action of the verb:

```
Lì bòdig yā. "It's got lost." 3IN lose PFV.
```

```
but Li bigliarding n\bar{\varepsilon}. "It's lost."
```

Most verbs expressing a change of state in the subject are either intransitive or patientive ambitransitive:

```
\hat{O} kpì n\bar{\epsilon}.
                                     "He's dead."
зан die гос.
Μ̀ qέň
                                     "I'm tired."
               nē.
1SG get.tired FOC.
Bà kừ dưa nẽ.
                                     "They're old."
3PL grow.old FOC.
                                     "It's full."
Lì p\dot{\varepsilon}'\varepsilon l n\bar{\varepsilon}.
3IN fill FOC.
                                     "It's closed."
Cy iL
          nē.
3IN close FOC.
M bύq
                nē.
                                     "I'm drunk." (← Hausa bùgu)
1SG get.drunk FOC.
Ò lèr
                                     "He's ugly." WK sic
              nē.
3AN get.ugly FOC.
Lì sòbig
                                     "It's black." WK sic
             nē.
3IN blacken Foc.
```

Agentive transitive verbs of dressing express a change of state in the subject:

```
\dot{M} y\dot{\varepsilon} f\bar{u}ug. "I've put a shirt on." 1SG put.on shirt:SG. \dot{M} y\dot{\varepsilon} n\bar{\varepsilon} f\bar{u}ug. "I'm wearing a shirt." 1SG put.on FOC shirt:SG.
```

A perfective form can *only* be interpreted as resultative if it expresses a change of state in the subject:

```
\dot{M} d\dot{a}' n\bar{\epsilon} b\dot{\nu}\eta. "I've bought a donkey."
1SG 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 assume-stance verb cannot accept a resultative reading:

```
\dot{O} digin n\bar{\epsilon}. "He's lain\ down." DK: "Someone calls at your house and gets no answer; he thinks you're out but I'm explaining that you've gone to bed."
```

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 19. Thus while English might say: "Two men stood with them, dressed in white", Kusaal must have

```
Ka dapa ayi' yɛ fupiela zi'e ba san'an.

Kà dāpá àyi' yɛ fū-piəlà 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:

```
Nw\bar{a}ds\bar{a} at\bar{a}n' b\bar{n}s\bar{a} b\bar{n}s\bar{s} b\bar{n}s\bar{s} b\bar{s}s\bar{s} b\bar{
```

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 21.1. In the same way, narrative generally features series of tense-unmarked perfectives describing events strictly in order 16.3.4.

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.

Kòkòma dá zàb tāabá à-sōň'e bị̄'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
```

16.2.3 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:

 $N\bar{l}dlb$ $kp\hat{l}id$. "People die." Person:PL die:IPFV. $N\bar{l}iq\hat{l}$ $\partial \tilde{m}bld$ $m\bar{l}od$. "Cows eat grass."

 \dot{M} zí \ddot{n} 'i. "I sit." 1SG be.sitting.

Cow:PL chew:IPFV grass:PL.

With aspectual $n\bar{\epsilon}'$, the imperfective of dynamic verbs has a meaning analogous to the English "progressive."

 $N\bar{a}$ '-s \hat{i} ∂b \hat{a} \hat{o} \hat{m} \hat{b} \hat{i} d $n\bar{\varepsilon}$ $m\bar{o}$ ∂d . "Some cows are eating grass." Cow-INDE.PL chew:IPFV FOC grass:PL.

 \dot{M} $z'_{1}\tilde{n}'_{1}i$ $n\bar{\varepsilon}$. "I'm sitting." 1SG be.sitting Foc.

With verbs describing events the sense is often "time-limited habitual":

 $N\bar{l}dtb$ $kp\hat{l}id$ $n\bar{\epsilon}$. "People are dying." Person:PL die:IPFV FOC.

Patientive ambitransitive verbs expressing changes of state can be used in progressive senses:

 \dot{M} yôɔd $n\bar{\epsilon}$ kúlì η $l\bar{a}$. "I'm closing the door." 1SG close:IPFV FOC door:SG ART.

Kỳ li η lã yô sơ $n\bar{\epsilon}$. "The door is closing."

Door:SG ART close:IPFV FOC.

Lì $m\dot{a}'ad$ $n\bar{\epsilon}$. "It is getting cool." ($m\bar{a}'e'$ "get cool") 3IN get.cool:IPFV FOC.

However, passives <u>16.9.1.1</u> cannot be used with progressive meaning:

Dāam lā nûud. "The beer gets drunk." WK

Beer ART drink: IPFV.

Dāam nûud zīná. "Beer gets drunk today." WK

Beer drink: IPFV today.

but $D\bar{a}am l\bar{a}$ $n\hat{u}ud$ $n\bar{\varepsilon}$. Only "The beer is for drinking." WK

Beer ART drink: IPFV FOC. ("Not for throwing away."); Focus on the verb:

not "The beer is being drunk."

* $D\bar{a}am\ n\hat{u}ud\ n\bar{\varepsilon}$ was rejected by WK altogether, probably because without a context the subject was intepreted as generic.

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."

3AN be.short.

 \dot{M} mớr pụ'ā. "I have a wife."

1SG have wife:SG.

With stative verbs, the default interpretation of following $n\bar{\epsilon}'$ is therefore as focussing the VP or a VP constituent:

 \dot{O} $g \dot{p} m$ $n \bar{\epsilon}$. "He's short." ("I was expecting someone taller.")

3AN be.short FOC.

 \dot{M} mốr n $\bar{\epsilon}$ pụ'ā. "I have a woman."

1SG have FOC woman:SG. (not "wife": implies an irregular liaison, WK)

However, if there is an explicit time reference in the clause itself (even just a tense marker) it 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. [This requirement for an explicit time marker in the same clause may reflect acceptability judgments based on short isolated clauses.]

Lì $v \grave{\epsilon} n$ $n \bar{\epsilon}$. "It's beautiful." (Focus on the verb.) 3IN be beautiful FOC.

but $N\bar{a}nn\acute{a}n\bar{a}$, li $v\grave{\epsilon}n$ $n\bar{\epsilon}$. "Just now, it's beautiful." Now. 3IN be beautiful FOC.

Lì $d\bar{a}a \ v \in n$ $n\bar{\epsilon}$. "It was beautiful." WK: "I gave you a cup, and it was OK then, but now you've spoiled it."

 $S\bar{a}n$ - $k\acute{a}n$ $l\ddot{a}$, $l\grave{\iota}$ $d\bar{a}a$ $z\acute{u}l\grave{\iota}m$ $n\bar{\epsilon}$. Time-DEM.SG ART, 3IN TNS be.deep FOC.

"At that time, it was deep."

 $M\dot{v}$ 'ar $l\bar{a}$ $d\bar{a}a$ $z\acute{u}l\grave{v}m$ $n\bar{\varepsilon}$. "The lake was deep." Lake:SG ART TNS be.deep FOC. (Implying, "Now it's shallow." WK)

If the following constituent does not permit focussing with $n\bar{\epsilon}'$ 24.1.2, $n\bar{\epsilon}'$ must be aspectual even if the verb is stative and there no explicit time marker:

M mór bīisá, àtáŋā.

1SG have child:PL NUM:three.exactly.

"I've got exactly three children."

but M mór nē bīisá àtáŋā.

1SG have FOC child:PL NUM:three.exactly.

"I've got exactly three children just now." DK: "You're on a school trip, talking about how many children everyone has brought."

Lì dāa áň súŋā. "It was good." WK

3IN TNS COP **good**:ADV.

Lì dāa á $n\bar{\varepsilon}$ số $\eta\bar{a}$. "At the time, it was good." WK

3IN TNS COP FOC good:ADV.

Lì à $n\bar{\varepsilon}$ sốnā. "It's good." ("Now; it wasn't before." WK)

3IN COP FOC good:ADV.

Emphatics 24.7 do not reject focus with $n\bar{\varepsilon}'$:

bozugo o ane fo biig men.

bō zúgó ò à né fò bīig mén.

Because 3AN COP FOC 2SG child:SG also.

"Because he is your child too." (Genesis 21:13)

16.3 Tense

16.3.1 Tense particles

Tense particles come first in the VP, preceded only by $l\grave{\varepsilon}\varepsilon$ "but." They are mutually exclusive:

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 $d\bar{a}a$

These particles (including \emptyset) may be followed immediately in the tense slot by either of the two auxiliary tense particles $n\grave{a}m$ "still/yet" or $\check{n}y\bar{\varepsilon}\varepsilon$ ($t\acute{i}$) "habitually." The day begins at sunrise:

```
Fù sá gbìs w\bar{\epsilon}l\acute{a}=\varnothing? "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:

```
\grave{O} sáa zàb nà'ab l\bar{a}. "Let him fight the chief tomorrow." 3AN TNS fight chief:SG 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 22.2, and in \dot{n} -clauses within narrative 16.3.4.)

Nàm means "still" or with a negative "yet":

```
Tum l\bar{a} n\acute{a}m b\grave{\varepsilon}\varepsilon=\varnothing? "Is there any medicine left?" Medicine ART still EXIST=PQ? ("Does the medicine still exist?")
```

```
dunia nam pv pin'il la d\bar{u}n'am p\bar{v} p\bar{i}n'il l\bar{a} world:sg nz still neg.ind begin art "before the world began" (Mt 25:34) ("The world having not yet begun.")
```

 \dot{M} $n\acute{a}m$ $z\bar{\imath}'$ \emptyset $n\'{y}\bar{\varepsilon}$ $gb\bar{\imath}g\imath mn\varepsilon = \emptyset$.

1SG still NEG.KNOW CAT see lion:SG=NEG.

"I've never seen a lion." SB (see 19.1 on n-catenation idioms)

 $\check{N}y\bar{\varepsilon}\varepsilon$ or $\check{n}y\bar{\varepsilon}\varepsilon$ tí (KT $\bar{\varepsilon}\varepsilon\check{n}$ tí, NT nyii ti, KB $\varepsilon\varepsilon nti$) means "habitually." The main verb is imperfective.

Ò ňyēε zábìd nâ'ab lā.
 3AN usually fight: IPFV chief: SG ART.
 "He's accustomed to fight the chief." WK

Ò ňyēε gōsid nâ'ab lā.
 3AN usually look.at:IPFV chief:sg ART.
 "He's accustomed to look at the chief." WK

Ò dāa ňyēε zábìd nâ'ab lā.
 3AN TNS usually fight: IPFV chief: SG ART.
 "He was accustomed to fight the chief." WK

 \dot{O} $\bar{\epsilon}\epsilon\check{n}$ ti $z\grave{a}b\imath d$ $n\bar{\epsilon}$ $n\hat{a}^{\dagger}ab$ $l\bar{a}$.

3AN usually fight: IPFV FOC chief: SG ART.

"He's accustomed to fight the chief." KT

 \grave{O} $\bar{\epsilon}\epsilon\check{n}$ ti $z\dot{i}\check{n}'i$ $kp\bar{\epsilon}l\acute{a}$. "She's accustomed to sit there." KT 3AN usually be sitting there.

 \grave{O} $\bar{\epsilon} \epsilon \check{n}$ ti $d\bar{\iota} g \iota$ $kp\bar{\epsilon} l\acute{a}$. "She's accustomed to lie there." KT 3AN usually be lying there.

Ti ε enti pu sobid dine ka ya na karim ka ku nyani gban'e li gbinne.

Tì ε enti pu sobid dine ka ya na karim ka ku nyani gban'e li gbinne.

1PL usually Neg.ind write:ipfv rel.in and 2PL irr read and Neg.irr prevail cat gbáň'e lì gbìnne=ø.

grab 3IN base:sg=neg.

"We do not write what you will read and not be able to grasp the meaning of."

"We do not write what you will read and not be able to grasp the meaning of." (2 Cor 1:13)

16.3.2 Discontinuous past

My informants use the **discontinuous-past** marker n^{ε} to make an earlier-today past with indicative meaning:

```
\dot{M} \acute{o}\breve{n}bid\bar{i}-n s\bar{u}mma. "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 roles of n^{ε} in Kusaal 20.1.

16.3.3 Periphrastic futures

Kusaal does not use tense-unmarked indicative imperfectives for immediate future (like English "I'm going home.") Note the use of the *perfective* in

```
\dot{M} k\acute{u}l y\bar{a}. equivalent in usage to "I'm going home now." 1SG go.home PFV. Perfective as an instantaneous present 16.2.2
```

There are two periphrastic indicative constructions for "to be about to ...": (a) $b \grave{>} c d^a$ "want" + gerund. The subject need not be animate; the construction is only possible with gerunds from dynamic verbs.

```
Trug l\bar{a} b\hat{\sigma}od l\bar{i}ig. "The tree is about to fall." Tree:SG ART want fall:GER.
```

Yv'vn bood gaadva, ka beog bood nier.

Yύ'vŋ bôɔd gáadùg kà bēog bôɔd nîər.

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 + $y\bar{\varepsilon}$ -purpose clause; the subject must be animate. (Cf also 22.2.)

```
\dot{M} y\dot{\varepsilon} \dot{m} ku\bar{a} s\bar{u}mma. "I'm going to hoe groundnuts." 1SG that 1SG hoe groundnut:PL.
```

```
\dot{M} y\dot{\varepsilon} \dot{m} k\dot{i}\dot{a} n\bar{i}m. "I'm going to cut meat" 1SG that 1SG cut meat:SG.
```

16.3.4 Implicit tense and narrative

Fù sáa nà kūl.

Tense markers are frequently absent. As a basic principle, explicit marking is not needed when the time reference is recoverable from the linguistic context, but the occurrence of tense markers is not arbitrary, and constrasts with \emptyset may occur.

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 simply means that the tense is present, whether the aspect is imperfective or perfective:

```
Nīdıb
          kpîid n\bar{\epsilon}.
                                  "People are dying."
Person:PL die:IPFV FOC.
Nīdıb
          kpîid.
                                  "People die."
Person:PL die:IPFV.
Ò mòr pu'ā.
                                  "He has a wife."
3AN have wife:sg.
                                  "She's died." ("present perfect")
Ò kpì yā.
3AN die PFV.
```

In isolation, it is not possible to interpret such expressions as referring to the past (see below on informal narrative.)

Tense-markers may be omitted with the irrealis mood, with $-n^{\varepsilon}$ as today-past, or with another time reference in the clause itself, like a time adverb:

```
"You'll go home tomorrow."
      2SG TNS IRR go.home.
                          bēog.
      Fù sáa nà kūl
or
      2SG TNS IRR go.home tomorrow.
      Fù nà kūl
or
                      bēog.
      2SG IRR go.home tomorrow.
      Fù ná kūl.
                                     "You will go home."
cf
      2SG IRR go.home
                                      (today, tomorrow, next week ...)
      M pá' ònbidī-n
                                     "I was eating groundnuts earlier today."
                          sūmma.
      1SG TNS chew:IPFV-DP groundnut:PL.
      M óňbidī-n
or
                     sūmma.
      1SG chew:IPFV-DP groundnut:PL.
```

M sá zàb nâ'ab lā sû'es. "I fought the chief yesterday."
1SG TNS fight chief:SG ART yesterday.
M záb nâ'ab lā sû'es.
1SG fight chief:SG ART yesterday.

or

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 $k\dot{a}$; 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 $k\dot{a}$ 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 $k\dot{a}$ to unmarked clauses with $k\dot{a}$; the Balaam's Donkey narrative 27.1 shows a higher proportion of tense-marked clauses without $k\dot{a}$ than typical NT narrative, for example. However, throughout KB, narrative favours long sequences of coordinated $k\dot{a}$ -clauses with perfective aspect without tense marking, narrating the sequence of events in order. Here $k\dot{a}$ itself corresponds to zero in English.

Less formal sources like the Three Murderers text 27.2 drop tense-marking in clauses without $k\grave{a}$ 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 $k\grave{a}\eta\bar{a}$ "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.)

Presented with isolated $k\grave{a}$ -clauses with perfective aspect and no tense marking, my informants always interpeted them as expressing events, rejecting any aspectual interpretation of the particle $n\bar{\varepsilon}^{l}$ in favour of constituent focus; but with tense marking, $n\bar{\varepsilon}^{l}$ was, as usual, taken as aspectual by default:

Lì bòdig $n\bar{\epsilon}$.

"It's lost."

Rejected by WK; accepted after some thought by DK, explained as contradicting "someone hid it" i.e. as contrastive focus

Bà kòdig $n\bar{\epsilon}$.

"They're old."

"They're old."

Kà bà kúdìg nē. And 3PL 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

But $K\grave{a}$ $l\grave{i}$ $d\bar{a}a$ $b\acute{o}d\grave{i}g$ $n\bar{\epsilon}$. And 3IN TNS get.lost FOC. "And it was lost."

Kà bà sá kừdıg nē. Kà bà dāa kứdìg nē.

etc all acceptable as "and they were old."

Thus, both with and without $k\grave{a}$, tense-marking signals disruption of the narrative flow:

Ka Yesu **daa** an yuma pii ne 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 dolnɛ ba teŋ dim la, ka keŋ ...

Kà Yesu ø dāa áň yúmà pịi nế àγí lā, kà bà kēŋ málòŋ And Jesus NZ TNS COP year:PL ten with NUM:two ART, and 3PL go sacrifice:SG lā wūv bán εεň tí nìnιd sī'əm lā. Kà màlυη lā dábisà ø ART like 3PL:NZ usually do:IPFV INDF.ADV ART. And sacrifice:SG ART day:PL NZ lā, kà bà lébidì ø kūn. Kà Yesu kpélim Jerusalem finish art, and 3PL return: IPFV CAT go.home: IPFV. And Jesus remain Jerusalem ò mà tέnī-n kà ò bā' nέ pū báŋ 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'εs yέ ò dàl nέ bà tèη-dìm $l\bar{a}$, $k\dot{a}$ $k\bar{\epsilon}\eta$... 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" O ma da ane Uria po'a in the genealogy of Jesus in Matthew 1.1ff 1996, which has dozens of clauses of the pattern $k\grave{a} \times du'\acute{a} \times$

Ka Jese du'a na'ab David. Ka David du'a Solomon. O ma **da** ane Uria po'a. Ka Solomon du'a Rehoboam.

```
Kà Jese dụ'á nâ'ab 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, 1996)
```

In contrast, the genealogy in Luke 3:23ff 1996 moves backwards in time and has dozens of consecutive examples of *ka* X *saam da ane* Y "and X's father **was** 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 $ka\ X\ saam\ da\ an\varepsilon\ Y$ at the beginning of paragraphs in the text, but $ka\ X\ saam\ an\ Y$ otherwise.

Tense-unmarked dynamic-verb imperfectives can appear without aspectual $n\bar{\varepsilon}^{/}$ 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 yɛ́lì bā yɛ̄ [...]. Kà bà lá'adō 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:

```
\bar{O}n d\bar{a}a \bar{n}y\bar{e}t s\dot{v}\eta\bar{a} \acute{o}n d\bar{a}a \acute{a}n b\acute{i}-l\ddot{i}a l\acute{a}a=\emptyset? 3AN.CNTR TNS See:IPFV good:ADV 3AN:NZ TNS COP child-baby:SG ART=PQ? "Did he see well when he was a baby?"
```

```
but Ka Pita yv'vn tiɛn Yesu n sa yɛl si'el la ye ...

Kà Pita yv̄'vn ti̞eň Yesu n sà yɛ̀l si̞'əl lā yɛ̄ ...

And Peter then remember Jesus NZ TNS say INDF.IN ART that ...

"And Peter then remembered what Jesus had said the day before..." (Mt 26:75)
```

Main clauses lack tense marking after absolute clauses preposed with $k\grave{a}$ 24.3, regardless of whether tense marking appears in the absolute clause (132/136 cases in Mark, Luke, and Acts 1-14, 1976.) After absolute clauses as postlinker adjuncts 17.2.1, tense marking in main clauses follows the usual principles for narrative, with absolute clauses agreeing with their main clauses in tense-marking (69/78 cases.)

 $N\bar{\varepsilon}$ is perhaps marking constituent focus in

Ka ban ken la, Jesus gbisid ne.

Kà bán kēn lā, Jesus abīsid 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 gbeem zeeg 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" $y\bar{\varepsilon}$ of indirect speech 22.2.1; cf:

Amaa ba da zot o nɛ dabiem, ban da pv niŋ o yadda ye o sid anɛ nya'andɔl la zug. Amaa ka Barnabas zaŋ Saul n mɔr o keŋ ...

```
Àmáa bà dà zòtō ø nē dábịəm, bán dà pō níŋò ø But 3PL TNS fear:IPFV 3AN.OB FOC fear, 3PL:NZ TNS NEG.IND do 3AN.OB yáddā yé ò sìd à nē ňyâ'an-dòl lā zúg. Àmáa kà Barnabas faith that 3AN truly COP FOC after-follower:SG ART upon. But and Barnabas záŋ Saul n mōró ø ø kēŋ ...
```

take Saul cat have 3AN.OB CAT go ...

"But they were afraid of him, because they did not believe that he was really a disciple. But Barnabas brought Saul ..." (Acts 9:26-27)

A tense-marked interruption in the narrative flow may itself contain clauses coordinated with $k\dot{a}$; the tense marker of the first such clause is not repeated, but the following $k\dot{a}$ -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 p\bar{v} m\bar{o}r b\bar{i}iga=\emptyset, b\bar{o}z\acute{u}g\bar{o} Elizabet dá à n\bar{\varepsilon} 3PL TNS NEG.IND have child:SG=NEG, because Elizabeth TNS COP FOC k\acute{v}nd\grave{v}'ar k\grave{a} b\grave{a} b\grave{a}y\acute{i}' l\bar{a} w\bar{v}sa m\acute{\varepsilon} k\grave{v}d\iota g n\bar{\varepsilon}. 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 n\varepsilon in the KB ka babayi' la wvsa m\varepsilon kvdig hali.)
```

16.4 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 $n\bar{\varepsilon}^{/}$ 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 -*ma* 16.6.2 but otherwise the verb word coincides in form with the indicative.

 \grave{O} $v\grave{v}l$ $t\^{l}$ m $k\grave{a}$ \grave{o} $n\acute{o}b\grave{l}r$ $p\~{v}$ $z\acute{a}b\~{\varepsilon}=\varnothing$. 3AN swallow medicine and 3AN leg:SG NEG.IND fight=NEG. "She took medicine and her leg didn't hurt." WK

 \dot{O} $v\dot{v}l$ $t\hat{\iota}\iota m$ $k\dot{a}$ \dot{o} $n\acute{o}b\dot{\iota}r$ $d\bar{a}$ $z\acute{a}b\bar{\varepsilon}=\emptyset$. 3AN swallow medicine and 3AN leg:SG NEG.IMP fight=NEG. "She took medicine so her leg wouldn't hurt." WK

The -ma imperative of dual-aspect verbs is perfective by default:

Kònsım! "Cough!"

Imperatives without independency-marking tone overlay make perfective/imperfective distinctions in the usual way by verb flexion:

 $D\bar{a}$ $k\acute{o}n\~s\bar{\epsilon}=\varnothing!$ "Don't cough!" (To a patient who has coughed NEG.IMP cough=NEG! during an eye operation with local anaesthetic) $D\bar{a}$ $k\acute{o}n\~sid\bar{a}=\varnothing!$ "Don't cough!" (Explaining before the operation

NEG.IMP cough: IPFV=NEG! what to avoid throughout)

See <u>18.3</u> on the postposed 2pl pronoun ya in commands to several people. The particle $n\bar{\varepsilon}^{l}$ cannot appear in its aspectual sense with the imperative, but $\grave{a}l\acute{a}$ "thus" after imperatives imposes continuous/progressive meaning:

Dìm! "Eat!"
Dìmí àlá! "Carry on eating!"

Informants contract $-\hat{i}$ - \hat{a} - either to $-\hat{i}$ - or to $-\hat{a}$ -: [dimila] [dimala].

Dìmī-ní àlá! "Keep ye on eating!" [dɪmɪnɪla] [dɪmɪnala] Eat:IMP-2PL.SUB ADV:thus!

Single-aspect verbs used as imperatives frequently add àlá:

Zì'é àlá! text zi'ela "Be still!" (Jesus to the storm, Mk 4:39, 1976)

 $Dig\bar{\imath}$ -ni "Keep (ye) on lying down." [dɪgɪnɪla] [dɪgɪnala] Be.lying.down-2PL.SUB ADV:thus!

Āa-ní àlá bāaňlím! "Be (ye) quiet!" COP-2PL.SUB ADV:thus quiet:ABSTR!

 $B\bar{\epsilon}\iota$ - $n\dot{\iota}$ àlá àn \dot{i} nā! "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.

Gòsımī ø! "Look ye!"

Look: IMP 2PL. SUB!

 $D\bar{a}$ $g\bar{b}s\epsilon = \emptyset!$ "Don't look!"

NEG.IMP look=NEG!

 $K\grave{\epsilon}l$ $k\grave{a}$ \grave{o} $g\bar{\varsigma}s!$ "Let her look!"

Cause: IMP and 3AN look!

 $K\grave{\varepsilon}m$ $n\bar{a}$ n $g\bar{b}s!$ "Come and look!"

Come: IMP hither CAT look!

 $D\grave{o}ll\bar{\imath}-n\acute{\imath}$ "Follow ye me!"

Follow-2PL.SUB 1SG.OB!

Mòr n̄n-báalìg! "Have pity!"

Have eye-pity!

Irrealis mood expresses future statements and questions and has the preverbal mood markers $n\dot{a}$ (positive) $k\dot{v}$ (negative.) Tone Pattern A verbs show a tone perturbation to all-M tonemes 3.8.2. The irrealis 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 20.4 for its use in conditionals.

16.5 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 $\underline{4.1}$. Aspectual $n\bar{\epsilon}'$ is incompatible with negative polarity.

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 $n\dot{a}$.

 \grave{O} $z\grave{a}b$ $n\hat{a}'ab$ $l\bar{a}.$ "He's fought the chief." 3AN fight chief:sg ART.

 \dot{O} $p\bar{v}$ $z\acute{a}b$ $n\grave{a}'ab$ $l\acute{a}a=\varnothing$. "He hasn't fought the chief." 3AN NEG.IND fight chief:SG ART=NEG.

 $Z\grave{a}m$ $n\hat{a}'ab$ $l\bar{a}!$ "Fight the chief!" Fight:IMP chief:SG ART!

 $D\bar{a}$ $z\acute{a}b$ $n\grave{a}'ab$ $l\acute{a}a=\varnothing!$ "Don't fight the chief!" NEG.IMP fight chief:SG ART=NEG!

 \grave{O} $n\grave{a}$ $z\~{a}b$ $n\^{a}$ 'ab $l\~{a}$. "He'll fight the chief." 3AN IRR fight chief:SG ART.

 \grave{O} $k\grave{v}$ $z\bar{a}b$ $n\hat{a}$ 'ab $l\acute{a}a$ = \emptyset . "He won't fight the chief." 3AN NEG.IRR fight chief:SG ART=NEG.

Three **negative verbs** are equivalent to negative particle + verb. They do not carry the independency tone overlay <u>16.6.1</u>. Negative clitics appear as usual.

 $K\bar{a}'$ e "not be, not have" appears as $k\bar{a}'$ before a complement <u>4.3</u>. It is the negative to both "be" verbs, $\grave{a} \underline{e} \check{n}^a$ "be something/somehow" and $b\grave{\varepsilon}$ "be somewhere, exist" and also to $m\bar{o}r^{a/}$ "have." * $P\bar{v}$ $b\acute{\varepsilon}$ is not found, but $p\bar{v}$ $m\bar{o}r$ is quite common; $p\bar{v}$ $\acute{a} \underline{e} \check{n}$ is rare but can be found in contrastive contexts.

 $D\bar{a}u$ $l\bar{a}$ $k\bar{a}'$ $n\dot{a}'ab\bar{a}=\emptyset$. "The man isn't a chief."

Man:SG ART NEG.BE chief:SG=NEG.

 $D\bar{a}\mu$ $l\bar{a}$ $k\bar{a}'$ $b\bar{i}iga=\emptyset$. "The man hasn't got a child."

Man:SG ART NEG.HAVE child:SG=NEG.

 $Pu'\bar{a}$ $l\bar{a}$ $m\acute{o}r$ $b\bar{i}ig$, $\grave{a}m\acute{a}a$ $d\bar{a}u$ $l\bar{a}$ $k\bar{a}'e=\varnothing$.

Woman:sg art have child:sg but man:sg art neg.have=neg.

"The woman has a child but the man hasn't."

 $D\bar{a}u$ $l\bar{a}$ $k\bar{a}'e=\emptyset$. "The man isn't there."

Man:SG ART NEG.BE=NEG.

 $D\bar{a}\mu k\bar{a}'e d\acute{o}g\bar{v}-n l\acute{a}a=\emptyset$. "There's no man in the room."

Man:SG NEG.BE room:SG-LOC ART=NEG.

 $D\bar{a}\mu$ $l\bar{a}$ $k\bar{a}$ ' $d\acute{o}g\bar{v}$ -n $l\acute{a}a$ = \emptyset . "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 $k\dot{a}'asig\varepsilon$ (always LF):

O $b\bar{i}ig$ $k\acute{a}$ ' $as\grave{i}g\bar{\epsilon}=\emptyset$. "She has no child."

Mit "see that it doesn't happen that ..." <u>19.2</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.

KB uses *mid* with no clitic: *Mid ka ya maali ya tvvm svma nidib tuon ye ba gos. Mit* appears with a NP object and no negative clitic in the sense "beware of ...":

Miti ziri nodi'esidib bane kene ya sa'an na la.

Mitī ø zīrí nò-dí'əsidıb báni kēnní 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)

 $Z\bar{\imath}$ ' "not know" normally replaces negative particle + $m\bar{\imath}$ '. A clause-final LF zi'isig ε also appears in KB, NT (e.g. Lk 12:40.)

```
B \grave{v} \eta - b \bar{a} \breve{n}' a d z \bar{\imath}' \qquad y \bar{\varepsilon} t \bar{\varepsilon} \eta \qquad t \acute{v} l l \bar{a} = \emptyset.
```

Donkey-rider:sg NEG.KNOW that ground:sg be.hot=NEG.

"He who rides a donkey does not know the ground is hot." (Proverb)

 $M_{\overline{i}}$ does occur with negative particles:

```
M biig Solomon anε dasaŋ , ka pv mi' wvv lin nar si'em.
```

 \dot{M} $b\bar{\imath}ig$ Solomon \acute{a} $n\bar{\varepsilon}$ $d\acute{a}$ - $s\bar{a}\eta$, $k\grave{a}$ $p\bar{v}$ $m\bar{\imath}'$ 1SG child:SG Solomon FOC COP young.man:SG, and NEG.IND know

wบิบ lín nār sīุ'əmm=ø.

how 3IN:NZ be.proper INDF.ADV=NEG.

"My son Solomon is young, and does not know how things ought to be." (1 Chronicles 22:5)

16.6 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 $k\grave{a}$ other than content clauses, regardless of whether they are subordinate or coordinate. The markers are primarily tonal, but there are associated segmental manifestations.

16.6.1 Tonal

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 $l\grave{\varepsilon}\varepsilon$ "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 $ny\bar{\varepsilon}\varepsilon$) 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 syllable before liaison (changed as usual to H before liaison words beginning with a fixed-L toneme $\underline{4.4.3}$.)

Examples of tone overlay manifesting independency marking in main clauses (with zab^{ϵ} "fight", $g\bar{s}s^{\epsilon}$ "look at", $naab^{a}$ "chief"):

Ò zàb nâ'ab lā.	"He's fought the chief."
Ò gòs nâ'ab lā.	"He's looked at the chief."
Ò sà zàb nâ'ab lā.	"He fought the chief yesterday."
Ò sà gòs nâ'ab lā.	"He looked at the chief yesterday."

In contrast, the intrinsic tones appear after $k\dot{a}$, 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." "And he's looked at the chief." Kà ò qōs nâ'ab lā. Ò dāa záb nà ab lā. "He didn't fight the chief." Ò dāa gōs nâ'ab lā. "He didn't look at the chief." Ò pū záb nà ab láa. "He hasn't fought the chief." Ò pū gōs nâ'ab láa. "He hasn't looked at the chief." Ò vá' zàb nà ab lā. "If he fights the chief." Ò yá' gōs nâ'ab lā. "If he looks at the chief." Ón zàb nà ab lā. "He having fought the chief" Ón gōs nâ'ab lā. "He having looked at the chief."

Content clauses have independency marking 22.2:

```
B\grave{a} y\grave{\epsilon}l y\acute{\epsilon} \grave{o} z\grave{a}b n\hat{a}'ab l\bar{a}. 3PL say that 3AN fight chief:SG ART. "They say he's fought the chief."
```

Bà kùvdī, bá.

Examples for the final M before liaison, using the verbs $b \partial d \iota g^{\varepsilon}$ "lose", $y \bar{a} d \iota g^{\varepsilon l}$ "scatter" and the pronouns m^a "me" ba "them":

Intrinsic tones:	bòdıgı m ^a	bòdıgıdī m ^{al} ipfv	bòdıgı bā ^l
	yādıgí m ^a	yādıgídī m ^{al} ipfv	yādıgí bā ^l
With overlay:	bòdıgī m ^{a/}	bòdıgıdī m ^{al}	bòdıgī bá
	yàdıgī m ^{a/}	yàdıgıdī m ^{al}	yàgıdī bá

Before a liaison word with initial fixed-L toneme, M must change to H <u>4.4.3</u>:

"They kill them."

```
B\grave{a}\ g\grave{o}s\~{o} \varnothing. "They looked at her." 3PL look.at 3AN.OB. "They looked at her child." 3PL look.at 3AN child:SG.
```

M spreading after bound personal pronoun subjects is affected by independency marking. Bound pronoun subjects are normally followed by M spreading despite their own fixed L tonemes: however, the *third* persons \grave{o} \grave{h} \grave{b} are never followed by M spreading when the following VP has independency marking.

Thus, with no independency marking after coordinating $k\dot{a}$:

```
Kà m záb nà ab lā."And I've fought the chief."Kà ò záb nà ab lā."And he's fought the chief."but m² záb nâ ab lā."I've fought the chief."O zàb nâ ab lā."He's fought the chief."
```

The first and second person pronouns are followed by M spreading unless the VP has independency marking and they are immediately preceded by $y\bar{\varepsilon}$ "that" 22.2:

```
\dot{O} t\grave{\epsilon}\check{n}' \epsilon s \ k\grave{a} \dot{o} z\grave{a}b n\hat{a}'ab l\bar{a}. "He thinks he's fought the chief." WK 3AN think and 3AN fight chief:SG ART.
```

 \dot{O} $t\grave{\epsilon}\breve{n}'\epsilon s$ $k\grave{a}$ \dot{m} $z\acute{a}b$ $n\^{a}'ab$ $l\~{a}.$ "He thinks I've fought the chief." 3AN think and 1SG fight chief:SG ART.

but \dot{O} $y \dot{\epsilon} l$ $y \dot{\epsilon}$ \dot{o} $z \dot{a} b$ $n \hat{a}' a b$ $l \bar{a}$. "He says he's fought the chief." 3AN say that 3AN fight chief:SG ART.

and \grave{O} yèl yé \grave{m} zàb nâ'ab lā. "He says I've fought the chief." 3AN say that 1SG fight chief:SG ART.

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:

 \dot{O} $\dot{k}\dot{v}$ $z\bar{a}b$ $n\hat{a}'ab$ $l\acute{a}a=\varnothing$. "He will not fight the chief." 3AN NEG.IRR fight chief:SG ART=NEG.

 $\dot{\mathbf{O}}$ $l\grave{\epsilon}\epsilon$ $d\bar{a}a$ $z\acute{a}b$ $n\grave{a}'ab$ $l\bar{a}.$ "But he did fight the chief." 3AN but TNS fight chief:SG ART.

 \dot{O} yèl yé mì nà zāb nâ'ab lā. "He says I'll fight the chief." 3AN say that 1SG IRR fight chief:SG ART.

16.6.2 Segmental

There are two segmental features of independency marking. They occur when and *only* when the verb word itself has undergone *tone* overlay. Verbs which have intrinsic L tonemes have unchanged stem tonemes after overlay, but these segmental features and the following M spreading reveal its presence.

The particle $y\bar{a}$ follows any perfective verb form carrying the tone overlay which would otherwise be phrase-final. Texts write ya solid with the verb; prior to 2016 it usually appears as -eya after consonants. $Y\bar{a}$ may be connected historically with the perfective flexion -ra of one conjugation of Nawdm verbs. Phrase constituents can only follow $y\bar{a}$ by right dislocation 24.4. Examples:

```
Ò zàb yā.
                                      "She's fought."
      3AN fight PFV.
                                      "She's looked."
         gàs yā.
      3AN look PFV.
                                      "She fought (yesterday.)"
      Ò sà zàb yā.
      3AN TNS fight PFV.
      Sāa
              ní yā.
                                      "It has rained."
      Rain:sg rain PFV.
                                      "I think it's fallen down." (content clause)
      M têň'es kà lì lù vā.
      1SG think and 3IN fall PFV.
      Ò zàbī m.
                                      "He's fought me." (not final)
But
      3AN fight 1SG.OB.
      Ò gòsī, m.
                                      "He's looked at me." (not final)
      зан look.at isg.ов.
             dāa ní.
                                      "It rained." (M preverbal particle)
      Sāa
      Rain:sg TNS rain.
```

```
Ò dāa záb.
                                   "He fought." (M preverbal particle)
3AN TNS fight.
Ò nà zāb.
                                   "She'll fight." (irrealis)
3AN IRR fight.
Kà ò záb.
                                   "And he fought." (no independency marking)
And SAN fight.
                                   "And he looked." (no independency marking)
Kà ò gōs.
And 3AN look.
Ò pū
            z\acute{a}b\bar{\varepsilon}=\emptyset.
                                   "He's not fought." (negative)
3AN NEG.IND fight=NEG.
                                   "He's not looked." (negative)
Ò pū
            a\bar{s}s\varepsilon = \emptyset.
3AN NEG.IND look=NEG.
Ò gìm.
                                   "She's short." (stative)
Ò mì'.
                                   "She knows." (stative)
Ò nòn.
                                   "She loves him." (stative)
Before interrogative prosodic clitics the toneme of y\bar{a} becomes L, not H:
Lì bòdig yā.
                                   "It's got lost."
3IN get.lost PFV.
                                   "Has it got lost?"
Lì bòdig vàa=\emptyset?
3IN get.lost PFV=PQ?
```

The flexion -ma 7.1 marks imperatives of dual-aspect verbs whenever they carrying the independency-marking tone overlay:

Gòsım!	"Look!" (or $G\grave{o}s\bar{\imath}m!$ with the vowel absorbed $\underline{2}$)
Gòsımī m! Look:IMP 1SG.OB!	"Look at me!"
Gòsımí fò nû'ug! Look:IMP 28G hand:SG!	"Look at your hand!" (or <i>Gòsím fò nû'ug!</i> with the vowel absorbed)

"Receive ye!" Dì'əmī ø! Receive: IMP 2PL SUB! Dìˈəmī-ní bā! "Receive ve them!" Receive: IMP-2PL SUB 3PL OB! "Receive ve her!" Dìˈəmī-nó Receive: IMP-2PL.SUB 3AN.OB! Dìˈəmī-ní àlá! "Keep ye on receiving!" Receive: IMP-2PL.SUB ADV: thus! "Don't look!" (negative) But Dā $g\bar{s}s\varepsilon=\emptyset!$ NEG.IMP look=NEG! Κὲl "Let her look!" kà ò aɔ̄s! Cause: IMP and 3AN look! (No independency marking: subordinate) Kὲm n gōs! "Come and look!" nā Come: IMP hither CAT look! (No independency marking: subordinate) Dòllī-ní "Follow ye me!" (single-aspect verb)

16.7 *Lὲε* "but"

Follow-2PL.SUB 1SG.OB!

 $L\grave{\varepsilon}\varepsilon$ "but" precedes even tense particles, but like a preverb, and unlike a postsubject particle, it prevents the independency-marking tone overlay from falling on the verb, and is then itself followed by M spreading:

Kà ò lée dāa záb nà'ab lā.

And 3AN but TNS fight chief:sg ART.

"But he fought the chief."

Bà lèe záb nà'ab lā. "But they've fought the chief." WK

3PL but fight chief:sg ART.

Kà bà lée zàb nà'ab lā. "But they've fought the chief." WK

And 3PL but fight chief:sg ART.

```
L\grave{\varepsilon} \varepsilon z\acute{a}b \quad n\grave{a}'ab \quad l\bar{a}! "But fight the chief!" WK But fight chief:SG ART!
```

Ka man pian'ad la lee ku gaade.

```
K\grave{a} m\bar{a}n pi\grave{a}\check{n}'ad l\bar{a} l\acute{\epsilon}\epsilon k\grave{v} q\bar{a}ad\epsilon=\emptyset.
```

And 1SG.CNTR speech ART but NEG.IRR pass=NEG.

"But my words will not pass away. (Mt 24:35, 1996)

NT has the *ma*-imperative, suggesting tone overlay on the verb, in

Lee iemini o na'am so'olim la...

```
Lèe jəmī-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; he corrected e.g. *Lèɛ gósìm nâ'ab lā! to

```
Lè\varepsilon gōs n\hat{a}'ab l\bar{a}! "But look at the chief!" But look at chief:sg ART.
```

16.8 Preverbs

Preverbs follow all other preverbal particles. All carry the independency-marking tone overlay in place of the following main verb (cf $l\grave{\epsilon}\epsilon$ "but" $\underline{16.7}$.)

Pùn "previously, already":

 \grave{O} $p\grave{v}n$ $z\acute{a}b$ $n\grave{a}'ab$ $l\bar{a}$. "He's already fought the chief." 3AN already fight chief:SG ART.

Kà ò pún zàb nà lā.

And SAN already fight chief:SG ART.

"And he's already fought the chief."

 $L\grave{\varepsilon}m$ "again" (cf $l\grave{\varepsilon}b^{\varepsilon}$ "return"):

 \dot{M} $n\bar{i}f$ $l\acute{\epsilon}m$ $z\acute{a}b\grave{i}d$ $n\bar{\epsilon}$. "My eye is hurting again." 1SG eye:SG again fight FOC.

 $K\grave{a}$ \grave{o} $l\acute{\epsilon}m$ $z\grave{a}b$ $n\grave{a}'ab$ $l\bar{a}$. "And he's fought the chief again." And 3AN again fight chief:SG ART.

 $l\acute{a}a = \emptyset$.

Ò ρῦ

lém zàb nà'ab

```
3AN NEG.IND again fight chief:SG ART=NEG.
       "He hasn't fought the chief again."
       Ò nà lēm záb nà ab lā.
                                           "He'll fight the chief again."
       3AN IRR again fight chief:SG ART.
       Ka so' kudin ku len nyee li ya'asa.
       Kà sɔ̄'
                   kūdım kύ
                                  lēm ňyέε lī
                                                       vá′asā=ø.
       And INDEAN ever NEG.IRR again see 3IN.OB again=NEG.
       "Nobody will ever see it again." (Rev 18:21, 1996)
       Kpèlim is "still" before an ipfy, but "immediately afterwards" before a pfy. It
occurs also as a main verb "remain, still be." KB has the reduced form kp \hat{\epsilon} n.
       Ka o kpelim zu'om.
                                           "Immediately he went blind."
                                          (Acts 13:11, 1996: KB Ka o kpen zu'om.)
       Kà ò kpélìm
                               zū'em.
       And 3AN immediately go.blind.
       m biig Josef nan kpen vue.
       m bīia
                    Josef nán kpèn vūę.
       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^{\epsilon} "gather"); as a main verb l\dot{a}'am^{m} is "associate with."
       ka nidib wυsa da la'am kpi nε o.
                      wūsa dá là'am
       kà nīdıb
                                           kpì né
       and person:PL all TNS together die with 3AN.
       "so all people died together with him." (2 Cor 5:14)
       D \dot{\epsilon} \eta \iota m "beforehand" (cf d \dot{\epsilon} \eta^{\epsilon} "go, do first": \dot{m} d \dot{\epsilon} \eta \bar{\iota} f "I've got there before you";
d \grave{\epsilon} \eta^{\epsilon} is used with the same meaning in n-catenation <u>19.1</u>.)
       Pin'ilugun sa ka Pian'ad la da pun denim be.
       Pīň'ilúgū-n
                          sá
                                  kà Piàň'ad lā dá pùn
                                                                 dènım
                                                                              bè.
       Beginning:SG-LOC hence and word:SG ART TNS already beforehand EXIST.
       "In the beginning, the Word already existed beforehand." (In 1:1)
```

```
M\grave{a}ligim "again" (cf Toende Kusaal malig "do again"): 
 Amaa\ man\ pian'ad\ la\ kv\ maligim\ gaad\varepsilon. 
 \grave{A}m\acute{a}a\ m\bar{a}n\ pi\^{a}\check{n}'ad\ l\bar{a}\ k\acute{v}\ m\bar{a}ligim\ g\acute{a}ad\bar{\varepsilon}=\varnothing. 
 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 $h\bar{a}li$ ti $p\bar{a}a$... "up until" see $\underline{17.2.1}$. If the next VP is perfective, ti corresponds instead 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.

Kèm ø tí ňyē dứ atà. "Go to see the doctor." SB
Go:IMP CAT after see doctor:sG.

Beogv ti nied la ka ba gaad!
Bēogv ø tì nied la ka ba gaad!
Morning Nz after appear:IPFV ART and 3PL pass.
"Before morning appears they have passed!" (Isaiah 17:14)
```

16.9 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; "obligatory" complements need not in fact be explicitly present, but when they are absent, the gap functions as an anaphoric pronoun.

NP and AdvP complements can be classified as direct and indirect objects, as predicative complements, or as locative complements.

16.9.1 Transitivity and objects

Indirect objects precede direct, and objects precede other complements. A bound pronoun before a noun object therefore cannot be the direct object:

```
\dot{M} dāa tísì \bar{l} \bar{l} \bar{n} a'ab \bar{l} a. "I gave the chief to it." sic 1SG TNS give 3IN.0B chief:SG ART.
```

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 k\bar{v} n\bar{i}dá=\emptyset, dā z\bar{u}udá=\emptyset ...

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**:

```
\dot{O} p\bar{v} z\acute{a}mm=\varnothing. "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 $\grave{a} e \check{n}^a$ "be something/somehow":

```
Mānι Ø áň dứ atà kà fūn mén ágň.
1SG.CNTR CAT COP doctor:SG and 2SG.CNTR also COP.
"I'm a doctor and you are too."
```

For null anaphora for preposed objects see $\underline{24.3}$; in adnominal $k\grave{a}$ -catenation, see $\underline{19.2}$. In conversation, the antecedent may be in the previous speaker's words:

```
Q. F\dot{v} mớr gb\bar{a}\mu\eta l\acute{a}a=\varnothing? "Do you have the letter?" 2SG have letter:SG ART=PQ?
```

```
A. \bar{\mathcal{E}}\check{\mathcal{E}}\check{m}, \check{m} \acute{m}\acute{o}r. "Yes, I have it." Yes, 1sg have.
```

```
Q. F\dot{v} b\acute{o}od\acute{o}-o=\varnothing? "Do you love her?" 2SG want-3AN.OB=PQ?
```

```
A. A\dot{y}ii, \dot{m} p\bar{v} b\acute{o}od\bar{a}=\emptyset. "No, I don't love her."
No, 1SG NEG.IND want=NEG.
```

Agentive ambitransitive verbs appear with and without objects, with no change in the role of the subject, and no anaphoric implication if the object is absent:

```
bane zuud nidibi gban'ad
bànı zūud nīdıbı ø gbāň'ad
REL.PL steal:IPFV person:PL CAT seize:IPFV
"those who steal people by force" (1 Tim 1:10)
```

```
one daa zuud "he who used to steal" (Eph 4:28)  \dot{\partial} n \iota \quad d\bar{a}a \ z\bar{u}ud  Rel.an this steal:IPFV
```

Some verbs, both obligatory transitives and not, only take objects of a very limited type, often expressed with a noun formed from the same stem:

"What work do you do?"

```
2SG work:IPFV what-work=CQ?

Ka ya ninkuda zaansim zaansima.

Kà yà nṛn-kúdà zàansım záansımà.

And 2PL person-old:PL dream:IPFV dream:PL.

"And your old people dream dreams." (Acts 2:17)
```

 $b \acute{o} - t \grave{v} v m a = \emptyset$?

Fù túm

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 $y\dot{o}$ "close", $n\bar{a}e^l$ "finish", $z\dot{a}mis^{\epsilon}$ "learn/teach", $n\bar{a}mis^{\epsilon}$ "suffer/make suffer", $b\dot{o}dig^{\epsilon}$ "lose, get lost", $b\dot{a}s^{\epsilon}$ "go/send away", $d\bar{u}e^l$ "raise/rise", $m\bar{a}'e^l$ "get cool."

Many, though not all, patientive ambitransitive verbs express a change of state and can use the perfective form in a resultative sense <u>16.2.2</u>:

```
\dot{M} n\acute{a}a t\bar{\nu}\nu ma l\bar{a}. "I've finished the work." 1SG finish work ART. T\bar{\nu}\nu ma l\bar{a} n\acute{a} n\bar{\epsilon}. "The work is finished." Work ART finish Foc.
```

Almost any verb can take an indirect object expressing benefit, interest etc:

```
"He cooked (for) me."

3AN cook 1SG.OB.

"I like it." ("It's sweet for me.")

3IN be.sweet 1SG.OB.

"They are well." ("Health exists for them.")

Health Exist 3PL.OB.
```

Ditransitive verbs require an indirect object, which cannot be ellipted unless any direct object is too, with a necessarily anaphoric sense; tis^{ϵ} "give" is the prototypical example, along with causatives like dis^{ϵ} "feed", $n\bar{u}lvs^{\epsilon}$ "give to drink."

```
M tís nâ'ab
                  lā dāká.
                                    "I've given the chief a box."
1SG give chief:SG ART box:SG.
M tís nâ'ab
                                   "I've given it to the chief."
1SG give chief:SG ART.
M tísō ø
                  dāká.
                                   "I've given him a box." Not *M tís dāká.
1SG give 3AN.OB box:SG.
Dā
        tísò, ø
                     s\bar{i}'əla=\emptyset.
                                   "Don't give her anything!"
NEG.IMP give 3AN.OB INDF.IN=NEG.
Dā
        tis\bar{\varepsilon}=\emptyset!
                                   "Don't give it to her!"
NEG.IMP give=NEG.
M 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. $k\grave{a}d$ X $s\grave{a}r\acute{i}y\grave{a}$ "judge X", $m\bar{o}r$ X $n\bar{i}n$ - $b\acute{a}al\grave{i}g$ or $z\grave{o}$ X $n\bar{i}n$ - $b\acute{a}al\grave{i}g$ "have pity on X", $n\grave{i}\eta$ X $y\grave{a}dd\bar{a}$ "believe X, believe in X", $z\grave{o}$ X $d\grave{a}b\bar{i}$ or "fear X", $s\dot{i}ak$ X $n\bar{o}r$ "obey X", $n\check{w}\grave{e}$ X $n\^{u}$ "make an agreement with X."

```
"They are afraid of him."
Bà zòtō, ø
                 dábīəm.
3PL feel: IPFV 3AN.OB fear.
Wina'am na kad nidib poten'esua'ada saria.
Wínà'am ná kād nīdıb
                           pύ-tèň'-sū'adá
                                                sàríyà.
         IRR drive person:PL inside-mind-secret:PL judgment.
"God will judge people's secret thoughts." (Rom 2:16, 1996)
                               "They believed her."
Bà nịŋō, ø
                yáddā.
3PL do
         3AN.OB assent.
Ò ňwè' nâ'ab
                               "He made an agreement with the king."
                lā nû'ua.
```

3AN strike king:SG ART hand:SG.

16.9.1.1 Passives

For passive meaning expressed by an empty $b\grave{a}$ "they" as subject see <u>12.4.1</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.

M nú dāam lā. "I've drunk the beer."

 $D\bar{a}am\ l\bar{a}$ $n\acute{u}$ $y\bar{a}$. "The beer has got drunk."

Beer ART drink PFV.

Indirect objects cannot become passive subjects:

 $N\grave{a}'ab$ $l\bar{a}$ $t\acute{i}s$ $y\bar{a}.$ only "The chief was given [to someone.]" Chief:sg art give PFV.

Imperfective passives can only appear with habitual/propensity meanings. Stative verbs accordingly cannot make passives.

 $S\bar{\jmath}b^{\varepsilon}$ "write" (cf $s\bar{\jmath}b^{\varepsilon}$ "make/go dark") is patientive ambitransitive and can form a resultative; the ipfv $s\bar{\jmath}bid^{a/}$ only accepts intransitive use along with an AdvP:

Gbàun $l\bar{a}$ sób $n\bar{\varepsilon}$. "The letter is written."

Letter:sg art write foc.

Gbàna sớbìd zịná. "Letters get written today." WK

Letter:PL write:IPFV today.

 $Gb\grave{a}\mu\eta$ $l\bar{a}$ $s\acute{o}b\grave{i}d$ $s\acute{v}\eta\bar{a}$. "The letter is writing well (i.e. easily.)" WK Letter:SG ART write:IPFV good:ADV.

16.9.1.2 Middle use of intransitives

The assume-stance verbs 9.1.1 are used transitively for parts of one's own body more often than the make-assume-stance series:

Lìginím fò n $\bar{i}f$ n $\dot{\epsilon}$ fò n \hat{u} 'ug.

Cover:IMP 2SG eye:SG with 2SG hand:SG.

"Cover your eye with your hand."

```
Dìginím fò nû'ug. "Put your hand down." Lie.down:IMP 2SG hand:SG.
```

Similarly $n \nmid e$ "appear" is usually intransitive, corresponding to transitive $n \grave{\varepsilon} \varepsilon l^{\varepsilon}$ "reveal", but $n \nmid e$ is much more frequent than $n \grave{\varepsilon} \varepsilon l^{\varepsilon}$ before \grave{o} $m \bar{\varepsilon} \eta^{a/}$ "him/herself" etc.

```
Ka o nie o mɛŋ Jemes san'an ...
Kà ò nie ò mēŋ Jemes sâ'an ...
And βΑΝ appear βΑΝ self James among ...
And he revealed himself to James (1 Cor 15:7)
```

16.9.2 Predicative complements

Predicative complements may or may not be required, in the sense of omission implying anaphora. As in English, they can be "depictive" or "resultative"; in Kusaal this falls out naturally from the stative or dynamic nature of the verb:

```
Kel ka m liebi fo tomtom yinne.
```

```
Kèl kà mì lịəbì fò tòm-tōm yīnní.
```

Cause:IMP and 1SG become 2SG work-worker:SG one.

"Make me [become] one of your servants" (Lk 15:19); dynamic $l \partial b^{\epsilon}$

```
\dot{M} á né fù tùm-tūm. "I am your servant."; stative àenă 1SG COP FOC 2SG work-worker:SG.
```

For $k\dot{a}$ -catenations as resultative predicates see <u>19.2</u>.

Adjectives may appear as NP heads so long as the NP is a predicative complement. This is most frequent with $\grave{a} \not\in \check{n}^a$ "be something" 16.12.2, but is seen also with other verbs:

```
Lì à n\bar{\varepsilon} píəlìg. "It's white, a white one."

Lì à n\bar{\varepsilon} píəlìg fáss. "It's very white."

Bà à n\bar{\varepsilon} píəlà. "They're white."
```

Mam ane pielug amaa m ya'a paae bugumin asee ka m leb zin'a.

```
M\bar{a}m\ \acute{a}\ n\bar{\epsilon}\ p\acute{[}əl\grave{v}g\ \grave{a}m\acute{a}a\ \grave{m}\ y\acute{a}'\ p\bar{a}e\ b\acute{u}g\acute{v}m\bar{\imath}-n, 1SG COP FOC white:SG but 1SG if reach fire-LOC, \grave{a}s\acute{\epsilon}\epsilon\ k\grave{a}\ \grave{m}\ l\acute{\epsilon}b\ z\`{\i}\check{n}'a. except and 1SG become red:SG.
```

"I am white, but when I reach the fire I turn red." [a crayfish] (BNY p16)

```
si'el zie sabili wuu nidne. s\bar{\imath}'el zi'e sābillì ø wōv n\bar{\imath}d n\bar{\epsilon}. INDF.IN stand black:SG CAT like person:SG like. "something stood, black like a person." KSS p16
```

Most adjectives do not permit this. All examples in my materials involve adjectives without corresponding stative verbs. More often, compounds with $n\bar{l}n$ -"person" or $b\bar{v}n$ - "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 n\bar{\varepsilon} b\bar{\upsilon}n-p\hat{\imath}\partial l-kà\eta\bar{a}. "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 fo na pod o yo'or ye Yesu.

Kà fò ná pód ò yō'or yē Yesu.

And 2SG IRR dub 3AN name:SG that Jesus.

"And you will call him Jesus." (Mt 1:21)

Ka o pod biig la yo'or Yesu.

Kà ò pód bṣig lā yô'or Yesu.

And 3AN dub child:SG ART name:SG Jesus.

"And he called the child Jesus." (Mt 1:25)
```

man-INDF.AN and 3AN name:SG call:IPFV John. "a man [habitually] called John." (Jn 1:6)

 $B\grave{u}el^{\varepsilon}$ "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 $y\bar{\varepsilon}$:

```
on ka ba buon ye Pita la \dot{o}n kà bà bûen yē Pita lā REL.AN and 3PL call:IPFV that Peter ART "who was called Peter" (Mt 10:2)

It is often used as a passive with y\bar{v}'vr^{\varepsilon/} "name" as the subject: dau\ so'\ ka\ o\ yv'vr\ buon\ Joon.
dau\ so'\ ka\ o\ y\bar{v}'vr\ bûen\ Joon.
```

Màal^E "make" is used with object and resultative predicative complement in

Ka o maal o men nintita'ar.

Kà ò mâal ò mēŋ nīn-títā'ar.

And 3AN make 3AN self person-great:sg.

"He made himself out to be a great man." (Acts 8:9. 1976)

16.9.3 Locatives

1SG emerge PFV.

3AN lie.down PFV.

Ò pū

Locative AdvPs occur as complements after verbs of position and movement. Some verbs require a locative complement, and its absence is anaphoric.

```
M νί
                               "I left Bawku."
           Bàk.
1SG emerge Bawku.
M yí
                               "I've left [there]."
           νā.
```

No single-aspect verb or dual-aspect verb derived from a stance verb requires a locative; nor does $k\bar{\varepsilon}\eta^{\varepsilon/}$ "go/walk." No verb requires a locative second complement.

```
tūň'e ø kēnná=ø.
     3AN NEG.IND be.able CAT go:IPFV=NEG.
     "She can't walk."
     Ò kèn Bók.
                                   "She's gone to Bawku."
but
     3AN go Bawku.
     Ò dìgin yā.
                                   "He's lain down."
```

"Lie down here!" but Dìginim $kp\bar{\varepsilon}!$ Lie.down: IMP here!

> Ò dìgil gbáun lā. "She's put the book down." 3AN lay.down book:SG ART.

but Ò dìgil gbáun lā téebbl lā zúg. 3AN lay.down book:SG ART table:SG ART upon. "She's put the book on the table."

```
Àláafờ bέο Ø. "He's well." ("Health exists for him.")
Health EXIST 3AN.OB. Indirect object but no complement.
```

but Dāu lā bέ nē dó-kàŋā lā pύυgō-n.

Man:sg art exist foc hut-demst.sg art inside:sg-loc.

"The man is inside that hut."

16.9.4 Prepositional phrases

 $W\bar{\varepsilon}n^{\rm na/}$ "resemble" usually takes a phrase introduced by $n\bar{\varepsilon}$ or $w\bar{\upsilon}\upsilon$ 15.

Ka o nindaa wenne nintaŋ ne.

Kà ò nịn-dáa wēn nē nịntāŋ nē.

And 3AN eye-face:sg resemble with sun:sg like.

"His face is like the sun." (Rev 10:1, 1996)

 $L\bar{a}l^{\mathrm{la}/}$ "be far" usually takes a phrase introduced by $n\bar{\varepsilon}$:

Amaa o pυ lal nε tii.

Àmáa ò $p\bar{v}$ $l\bar{a}l$ $n\dot{\varepsilon}$ $t\bar{\iota}\iota=\emptyset$.

But 3SG NEG.IND be.far with 1PL=NEG.

"But he is not far from us." (Acts 17:27)

 $D\bar{o}l^{\mathrm{la/}}$ "accompany" with the preposition $n\bar{\varepsilon}$ means "be in accordance with":

Li dolne lin sob Wina'am abaunun si'em la ye ...

Lì dòl $n\bar{\epsilon}$ lín $s\bar{b}$ Wínà'am $gb\acute{a}u\eta\bar{v}$ -n $s\bar{\imath}$ 'əm $l\bar{a}$ $y\bar{\epsilon}$... 3IN follow with 3IN:NZ write God book:SG-LOC INDEADV ART that ... "This is in accordance with what is written in God's book ..." (1 Cor 2:16)

The preposition $n\bar{\varepsilon}$ can be distinguished from focus- $n\bar{\varepsilon}^{/}$ 24.1.2 by contexts where focus is prohibited. $Y\bar{i}$ "emerge" does not take a prepositional phrase:

 \dot{M} yı́ $n\bar{\varepsilon}$ Bók. "I come from Bawku." SB 1SG emerge Foc Bawku.

but Meeri one yi Magdala "Mary who came from Magdala"

Meeri ɔ́nì ȳ Magdala (Mk 16:9, 1996)

Mary REL.AN emerge Magdala

16.9.5 Clauses

 $K\bar{\varepsilon}$ "let" and $m\hat{\imath}t$ in the sense "let not" always take a $k\grave{a}$ -catenation. $N\bar{a}r^{al}$ "be obliged to" and $b\grave{o}od^a$ in the sense "want to" take purpose clauses, and the meaning is anaphoric if it is absent. $G\bar{u}r^{al}$ in the sense "wait for (an event)" takes a NP headed by a gerund or a purpose-clause. $\grave{A}\underline{e}\check{n}^a$ "be something/somehow", uniquely flexible in its variety of argument types, may also take a content-clause complement.

Verbs of cognition, reporting, and perception have as complement a content clause, a relative clause with $s\bar{i}|_{\partial m}$, or a postpositional AdvP with $y\bar{\varepsilon}l\acute{a}$ "about." Most such verbs have an anaphoric sense without such an object.

16.10 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>17.2.1</u>.

```
B\grave{a} d\grave{i}t n\bar{\varepsilon} s\bar{a}'ab d\acute{o}-k\grave{a}\eta\bar{a} l\bar{a} p\acute{v}vg\bar{v}-n. 
3PL eat:IPFV FOC porridge hut-DEMST.SG ART inside:SG-LOC. 
"They're eating porridge in that hut."
```

16.11 Verb-phrase-final particles

For the independent-perfective marker $y\bar{a}$ see 16.6.2.

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!"

```
\dot{M} m\acute{o}r k\^{u}'em n\acute{a}= "Shall I bring water?" SB 1SG have water hither=PQ?

\dot{B} u g\acute{o}m l \bar{a} y\acute{t} y\acute{a} n\acute{i} n\acute{a}= "Shall I bring water?" SB \dot{B} u g\acute{o}m l \bar{a} y\acute{i}t y\acute{a} n\acute{i} n\acute{a}= "Nere is the light coming from?"

\dot{F} v y\acute{i} y\acute{a} n\acute{i} n\acute{a}= "22SG emerge where Loc hither=CQ?"

"Where have you come from?" WK

\dot{S} a is often used temporally, for "since" or "ago":
```

```
Fu na baŋ li nya'aŋ sa.
```

Fù ná báŋ lì ňyá'aŋ sá.

2SG IRR realise 3IN behind since.

"You will come to understand afterwards." (Jn 13:7, 1976)

Lazarus pun be yaugun la daba anaasi sa.

Lazarus pún bè yáugū-n lā dābá ànāasí sà.

Lazarus previously exist grave:sg-loc art day:pl num:four since.

"Lazarus had already been in the grave four days." (In 11:17)

The particles are VP-final, not clause-final:

 $K\grave{\varepsilon}m$ $n\bar{a}$ n $g\bar{\jmath}s.$ "Come and look!" SB Come:IMP hither CAT look.

Man ya'a ρυ kεεn na tu'asini ba ...

 $M\bar{a}n$ $y\dot{a}'$ $p\bar{v}$ $k\bar{\varepsilon}\varepsilon$ -n $n\bar{a}$ \emptyset $t\dot{v}'as\bar{\imath}$ - $n\dot{\imath}$ $b\bar{a}...$

1SG.CNTR if NEG.IND come-DP hither CAT talk-DP 3PL.OB...

"If I had not come to talk to them ..." (In 15:22)

 $N\bar{a}^{l}$ and $s\dot{a}$ often follow any article $l\bar{a}^{l}$ ending an \dot{n} -clause containing them; closely parallel constructions may show either $n\bar{a}$ $l\bar{a}$ or $l\bar{a}$ $n\bar{a}$:

mwādig-kánì kēn nā lā
month REL.SG come:IPFV hither ART
"next month" SB

dunia kane ken la na

dūniyá-kàni kēn lā nā

world-rel.sg come: IPFV ART hither

"the world which is coming" (Lk 20:35)

ti tum one tum man **na la** tuuma.

tì túm ònı tùm mān nā lā tūvma

1PL work REL.AN send 1SG.CNTR hither ART work

"Let us do the work of him who sent me." (In 9:4)

M diib ane ye m tum one tumi m la na boodim naae.

 \dot{M} $d\bar{\imath}\iota b$ \dot{a} $n\bar{\epsilon}$ $y\dot{\epsilon}$ \dot{m} $t\dot{\upsilon}m$ $\dot{\jmath}n\iota$ $t\dot{\upsilon}m\iota$ m $l\bar{a}$ $n\bar{a}$ $b\dot{\jmath}\upsilon d\dot{\imath}m$ $\not{\varrho}$ $n\bar{a}e$.

1SG food COP FOC that 1SG work REL.AN send 1SG.OB ART hither will CAT finish.

My food is that I do the will of him who sent me completely. (Jn 4:34)

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 vîib 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 lebug la na

Nīn-sâal Bîig lā lébùg lā nā

Person-smooth:sg child:sg art return:ger art hither

"the return of the Son of Man" (Mt 24:27)

16.12 Verbs "to be"

16.12.1 Existence and location

 $B\grave{\varepsilon}$ means "exist"; with a focussed or foregrounded locative, it means "be located in a place":

Wínà'am bέ. "God exists." (Calque of the West African Pidgin

God Exist. *God dey*, implying "It'll all work out.")

Àláafὑ bέο ø. "She's well." ("Health exists for her.")

Health EXIST 3AN.OB.

 $W\bar{a}ad$ $b\dot{\varepsilon}$. "It's cold."

Cold.weather Exist.

Mam bene moogin. "I'm in the bush." BNY p8

Mām bέ nē mɔɔgυ-n.

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

Moogin ka mam bε. "I'm in the bush." BNY p10

Mɔ̄ɔgύ-n kà mām bέ.

Grass:sg-loc and 1sg.cntr exist.

 $D\bar{a}y$ $l\bar{a}$ $b\dot{\varepsilon}$ $n\bar{\varepsilon}$ $d\acute{o}$ - $k\grave{a}\eta\bar{a}$ $l\bar{a}$ $p\acute{v}vg\bar{v}$ -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?")

 $D\dot{a}u$ - $s\bar{o}'$ $b\dot{\varepsilon}$ $d\acute{o}$ - $k\dot{a}\eta\bar{a}$ $l\bar{a}$ $p\acute{v}vg\bar{v}$ -n.

Man-INDF.AN EXIST hut-DEMST.SG ART inside:SG-LOC.

"There's a certain man in that hut."

For the corresponding negative $k\bar{a}'\dot{\varrho}$ see <u>16.5</u>; * $p\bar{v}$ $b\dot{\varepsilon}$ is not used. $B\dot{\varepsilon}$ plays a role analogous to a "passive" to $m\bar{o}r^{a\prime}$ "have" in constructions like:

 \dot{M} $b\bar{i}ig$ $b\dot{\epsilon}$. "I have a child." Equivalent to \dot{M} $m\acute{o}r$ $b\bar{i}ig$. 1SG child:SG EXIST.

 \dot{M} $b\bar{i}ig$ $k\bar{a}'e=\emptyset$. "I have no child." Equivalent to \dot{M} $k\bar{a}'$ $b\bar{i}iga$. 1SG child:SG NEG.BE=NEG.

 $B\dot{\varepsilon}$ can be used in direct commands:

EXIST-2PL.SUB ADV:thus ADV:there.

 $B\acute{\epsilon} \epsilon$ $\grave{a}n\acute{n}\bar{a}$. "Be (i.e. stay) there!" SB EXIST ADV:there.

 $B\bar{\epsilon}\imath-n\dot{\imath}$ àlá ànínā. "Be ye there!" [bɛ:nala anina]

16.12.2 Copula

The copula verb is $\grave{a}e\check{n}^a$. On the loss of e and nasalisation see $\underline{4.3}$.

 \grave{O} \grave{a} $n\bar{\varepsilon}$ $b\bar{\imath}ig$. "She is a child." 3AN COP FOC child:SG.

but $M\bar{a}n\iota_{\omega} \varnothing \acute{a}n \acute{a}\acute{b}'at\grave{a}$ $k\grave{a}$ $f\bar{\nu}n$ $m\acute{e}n$ $\acute{a}e\check{n}$.

1SG.CNTR CAT COP doctor:SG and 2SG.CNTR also COP.

"I'm a doctor and you are too."

The usual negative is $k\bar{a}'e$, but $p\bar{v}$ $\acute{a}e\check{n}$ does occur, e.g. in expressing contrasts:

 \dot{M} $k\bar{a}$ ' $d\dot{v}$ ' $at\bar{a}a$ = \emptyset . "I'm not a doctor." 1SG NEG.BE doctor:SG=NEG.

 $M\bar{a}$ nı \emptyset áň $d\acute{v}$ 'atà àmáa $f\bar{v}$ n $p\bar{v}$ áňy \bar{a} = \emptyset . 1SG.CNTR CAT COP doctor:SG but 2SG.CNTR NEG.IND COP=NEG. "I'm a doctor but you aren't."

Àeňa can be used in direct commands:

```
Āa-ní àlá bāaňlím! "Be (ye) quiet!" COP-2PL.SUB ADV:thus quiet:ABSTR!
```

The sense may be ascriptive or specifying (cf CGEL p266.) If it is **ascriptive**, the complement is non-referring, and normally focussed with $n\bar{\epsilon}'$ if permitted 24.1.2:

```
\grave{O} \grave{a} n\bar{\varepsilon} b\bar{\imath}ig. "She is a child." 3AN COP FOC child.sg.
```

In **specifying** constructions the subject usually has n-focus 24.1.1:

```
Mans an konbkem suŋ la.

Mānı ø áň kóňb-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) M\bar{a}n\iota_{\varnothing} = \alpha \bar{n}_{\varnothing} "I am he." (Jn 18:5, 1976) 1SG.CNTR CAT COP 3AN.OB.
```

Nobibisi a mam disun.

```
Nō-bíþīsì ø áň mām dí-sùŋ.
```

Hen-small:PL CAT COP 1SG.CNTR food-good:SG.

"Chicks are my favourite food." BNY p13

When the complement of $\grave{a} \not e \check{n}^a$ is definite, the construction is usually specifying, with the subject in focus:

```
    M á nē dΰ'atà. "I'm a doctor." ("What do you do?")
    1SG COP FOC doctor:SG. Ascriptive.
    but Mānι Ø áň dΰ'atà lā. "I'm the doctor." ("Which one is the doctor?")
    1SG.CNTR CAT COP doctor:SG ART. Specifying.
```

However, definite complements may be in focus as "pragmatically non-recoverable" because of their internal structure or other factors $\underline{24.1.2}$.

 $\grave{A} \not e \breve{n}^a$ allows a wide range of different types of NP as arguments. It can take an AdvP of any type as subject 13.1:

 $Z\bar{\imath}n\acute{a}$ \grave{a} $n\bar{\varepsilon}$ $d\acute{a}$ 'a. "Today [time] is market."

Today cop foc market:sg.

Yiŋ venl, ka poogin ka'a su'um.

Yìŋ véňl kà pūvgv-n kā' s $vmm=\emptyset$.

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 noni ya si'em la ane bedego.

Mán nờn yā sị əm lã á nẽ bédug \bar{v} .

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)

 $\grave{A} \not e \check{n}^a$ takes a predicative complement. Some adjectives can appear as NP heads as predicative complements after $\grave{a} \not e \check{n}^a$ and other verbs 16.9.2, but typically $\grave{a} \not e \check{n}^a$ has a derived manner-adverb or abstract noun as complement instead. In any case, such constructions are ascriptive, and use $n\bar{\epsilon}^I$ where syntactically permissible:

Mam ane sabilig, la'am ne wala m venl hali.

 $M\bar{a}m~\acute{a}~n\bar{\epsilon}~s\bar{a}b\imath lig,~l\grave{a}'am~n\bar{\epsilon}~w\bar{a}l\acute{a}~\grave{m}~v\acute{\epsilon}\breve{n}l~h\bar{a}li.$ 1SG COP FOC black:SG, together with how 1SG be.beautiful so.far. "I am dark, although I am very beautiful." (Song of Songs 1:5)

Lì à $n\bar{\varepsilon}$ $n\dot{a}$ 'anā. "It's easy."

3IN COP FOC easily.

Lì à $n\bar{\varepsilon}$ $b\bar{v}gvsig\bar{a}$. "It's soft."

3IN COP FOC soft:ADV.

 $L i \ \dot{a} \ n \bar{\varepsilon} \ z \bar{a} a l i m.$ "It's empty."

3IN COP FOC empty: ABSTR.

Lì àn s \acute{v} $\eta \bar{a}$. "It's good." 24.1.2

3IN COP good:ADV.

Absolute clauses and even content clauses may be complements of $\grave{a}e\check{n}^a$:

M diib ane ye m tum one tumi m la na boodim naae.

17 Clauses

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.

17.1 Clause types

Criteria for describing a clause as main or subordinate do not always neatly align. Independency marking of VPs <u>16.6</u> in principle marks a clause as non-subordinate, but main clauses are downranked to subordinate content clauses without internal alteration, and **main clauses preceded by** *coordinating kà* "and" lack independency marking. *Kà* was perhaps once always subordinating; its coordinating role is characteristic especially of narrative, and cross-linguistically, non-initial narrative clauses are often formally subordinate. There are three types of clause subordination: nominalisation, catenation, and complementisation.

	independency-marked	not independency-marked
main <u>18</u>	main without <i>kà</i>	main with initial kà
complementised <u>22</u>	yē/kà content	yε̃/kà purpose
catenated <u>19</u>		n/kà catenation
nominalised		n absolute/relative <u>21</u>yà' conditional <u>20</u>

Main and content clauses can be statements, questions or commands. Only main and content clauses may lack VPs.

Complementised clauses are introduced by $y\bar{\varepsilon}$ "that", less often $k\dot{a}$. Purpose clauses lack independency marking, have VPs with imperative mood, and show tense marking only if the main clause is ellipted; content clauses are downranked main clauses, with independency marking and the full range of main clause structures:

```
\dot{M} p\bar{v} b\hat{\sigma} y\hat{\epsilon} f\hat{v} k\bar{\epsilon}\eta B\hat{\sigma}k\bar{\sigma}=\emptyset.

1SG NEG.IND want that 2SG go Bawku=NEG.

"I don't want you to go to Bawku."
```

Ka o ba' nɛ o ma pv baŋ ye o kpɛlim yaa. Kà ò bā' nɛ ò mà pv báŋ yɛ ò kpɛlim 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) Catenated clauses introduced by n lack their own subjects and resemble serial verb constructions in many ways; those introduced by $k\grave{a}$ have their own subjects. Catenated clauses lack independency and tense marking. They are part of their main clauses for focus purposes, and the main clause is often semantically subordinate.

Clauses marked by the post-subject particles \dot{n} and $y\dot{a}'$ are nominalised. They have independent tense-marking. Like other AdvPs and NPs, \dot{n} -clauses are coordinated with $n\bar{\varepsilon}$, not $k\dot{a}$:

```
... pa'ali ba [on daa nyɛ Zugsɔb la suorin, ka o pian' tis o si'em],
nε [Saul n mool Yesu yela nε svnkpi'eun Damaskus tenin si'em.]
... pá'alì bā
                óп
                       dāa ňyē Zūg-sób
                                              lā sūerí-n,
                                                              kà ò
... teach 3PL.OB 3AN:NZ TNS see head-NULL.AN ART road:SG-LOC and 3AN
piāň' ø tísò ø
                       s\bar{\imath}'əm, n\bar{\varepsilon} Saul n m\bar{\jmath}ol
                                                      Yesu vélà
speak CAT give 3AN.OB INDF.ADV with Saul NZ proclaim Jesus about
nē
     sūň-kpî¹on
                    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)
```

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.
ka\ pv\ nar\ ka\ ba\ buolim\ ye\ Tvmtvmma=\emptyset.
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 dislocation 24.4. Even a catenated clause after $k\bar{\varepsilon}$ "cause" is unexpectedly placed after the VP-final perfective marker $y\bar{a}$ in

```
Amaa Wina'am kεya ka ya an nɔɔr yinne nɛ Yesu Kristo.
Àmáa Wínà'am kέ yá kà yà áň nōɔr yīnní nē Yesu Kristo.
But God cause PFV and 2PL COP mouth:sg one with Jesus Christ.
"But God has caused you to be in agreement with Jesus Christ." (1 Cor 1:30)
```

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 yel beog daar [ye fvne ke [ka mam Abram lieb bvmmora.]]] \dot{M} pv bôod yé fv tí yèl beog dāar yē 1SG NEG.IND want that 2SG after say tomorrow day.after.tomorrow that \dot{V} \dot{V}

A content clause within an absolute nominalised clause:

```
[ban mi' [ye biig la kpinɛ la]] zug bán mṛ' yē bṛig lā kpị nɛ 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 n sɔ̄b gbáu̞ŋ-si̞'a n tís Efesus dím lā ø nwá.

Paul nz write book-INDEIN CAT give Ephesus NULL.PL ART CAT this.

"This is the letter Paul wrote to the Ephesians." (1996 NT heading)
```

17.2 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** $k\grave{a}$ "and" and $y\bar{\varepsilon}$ "that" are placed before the subject (which may itself be ellipted after $k\grave{a}$.) Clause-level adjuncts may precede, follow, or occupy the clause-linker position before the subject.

 $Y\bar{\varepsilon}$ is invariably subordinating, but $k\dot{a}$ may be coordinating or subordinating: it appears in a great variety of constructions and meanings.

Kusaal is strictly SVO; deviations not achieved by preposing always represent dislocation. Indirect objects precede direct, and objects precede other complements. VP adjuncts follow complements.

Emphatics <u>24.7</u> 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, unless preceded by coordinating $k\grave{a}$ 16.6, and they have structural possibilities not permitted to other clauses, including lacking VPs altogether.

17.2.1 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. English conjunctions largely correspond to clause linkers, prelinker adjuncts and linker adjuncts.

Linker adjuncts do not occur along with linker particles at all. They include

```
k\bar{\upsilon}\upsilon "or" b\bar{\varepsilon}\varepsilon "or" d\ln z\acute{u}g\bar{\jmath} "therefore" l\ln z\acute{u}g\bar{\jmath} "therefore" al\acute{a}z\grave{u}g\bar{\jmath} "thus" b\bar{\jmath}z\acute{u}g\bar{\jmath} "because"
```

 $B\bar{o}$ zúg \bar{o} is stigmatised as a calque in ILK, but is in fact freely used in KB:

```
Ya pvn mi' nε'εŋa, bɔzugɔ li daa maalnɛ ya san'an.

Yà pvn mṝ' nē'ŋá, bɔ̄ zúgɔ̄ lì dāa mâal nɛ́ yà sā'an.

2PL already know DEMST.IN, because 3IN TNS make FOC 2PL among.

"You already know this, because it was done in your presence." (Acts 2:22)
```

It may also appear after an absolute clause, like the postposition $z\bar{u}g^{3}$ alone. **Prelinker adjuncts** precede any linkers. $H\bar{a}li$ asigma sigma si

```
\grave{a}m\acute{a}a "but" h\bar{a}l\acute{i} "until" \grave{a}s\acute{\epsilon}\epsilon "unless" \grave{a}l\acute{a}z\grave{u}a "thus"
```

KB has no examples of $k\grave{a}$ $\grave{a}m\acute{a}a$ to 365 of $\grave{a}m\acute{a}a$ $k\grave{a}$, one of $k\grave{a}$ $\grave{a}s\acute{\epsilon}\epsilon$ to 247 of $\grave{a}s\acute{\epsilon}\epsilon$ $k\grave{a}$ and 436 examples of $h\bar{a}l\acute{\iota}$ $k\grave{a}$ but none of $k\grave{a}$ $h\bar{a}l\acute{\iota}$ as a clause adjunct. Prelinker adjuncts also precede $y\bar{\epsilon}$, both as linker and "resumptive" $y\bar{\epsilon}$ 22.2.1. Thus

```
Ka sieba la' o. Amaa ka sieba yɛl ye ...

Kà sṣəba lá'o ø. Àmáa kà sṣəba yɛ́l yɛ̄ ...

And INDEPL laugh 3AN.OB. But and INDEPL say that...

"Some laughed at him, but others said..." (Acts 17:32)
```

```
Wina'am daa pv gaŋi ti ye ti tvm dian'ad tvvma, amaa ye ti bɛ nyain. Winà'am dāa pv gāŋi tī yɛ́ tì tvm diā'ad tvvmà=ø, God tns neg.ind choose ipl.ob that ipl work dirt work=neg, àmáa yɛ́ tì bɛ́ nyāe. 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 preposed elements:

```
Amaa on sadigim kpi la, bɔ ka m lɛm lɔɔd nɔɔr ya'asɛ?
Àmáa ɔ́n sādɪgim kpi lā, bɔ́ kà m̀ lém
But 3AN:NZ since die ART, what and 1SG again
lɔ̄ɔd nɔ̄ɔr yá'asè=ø=ø?
tie:IPFV mouth:SG again=NEG=CQ?
"But since he has died, why should I still be fasting?" (2 Samuel 12:23)
```

Some constituents occur exclusively as postlinker adjuncts: $y\grave{a}$ '-clauses "if/when ..." 20.1, $s\bar{a}d\imath g\acute{i}m$ -clauses 21.1, $b\bar{\epsilon}og\acute{o}$ "tomorrow" and $d\bar{a}a$ - $s\acute{i}$ ' $\epsilon r\bar{\epsilon}$ "perhaps." $Y\grave{a}$ '-clauses and $s\bar{a}d\imath g\acute{i}m$ -clauses can only appear after main clauses by dislocation.

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 those referring to place or manner as well, may be placed before the clause subject by preposing with $k\grave{a}$ 24.3. This means that AdvPs referring to time, circumstance or reason can potentially occur before the subject alone, preceded by $k\grave{a}$, followed by $k\grave{a}$, or both preceded and followed by $k\grave{a}$, whereas other types of AdvP *must* be followed by $k\grave{a}$ when they appear before the subject. Thus

```
N\bar{a}nn\acute{a}-n\acute{a} \grave{m} \acute{a} n\bar{\epsilon} n\^{a}'ab. "Now I am a chief." Now-hither 1SG COP FOC chief:SG.
```

is grammatical, but * $M\bar{\nu}$ 00 mām b $\dot{\epsilon}$ was corrected by WK to

```
M\bar{o}οg\dot{v}-n k\grave{a} m\bar{a}m b\dot{\varepsilon}. "I'm in the bush." Grass:sg-loc and 1sg.cntr exist.
```

Any AdvPs or clauses expressing time, circumstances, or reason may appear as postlinker adjuncts, including absolute clauses, $d \ln z u g$ "therefore" $l \ln z u g$ "therefore", $l \ln n y a \ln n g$ "afterwards", $l \ln n g \ln n g$ "as things stand", $a \ln n g \ln n g$ "truly."

In KB nannanna $n\bar{a}nn\acute{a}-n\bar{a}^l$ "now" appears without preceding or following $k\grave{a}$ much more often than not (394/437 cases) and is thus usually a clause adjunct. WK requires $k\grave{a}$ after $k\grave{a}$ $n\bar{a}nn\acute{a}-n\bar{a}$, showing that that for him $n\bar{a}nn\acute{a}-n\bar{a}^l$ is a prelinker adjunct but can be a preposed VP adjunct; this rule is not followed in KB.

```
Kà nānná-ná kà m̀ áň nâ'ab. "And now I am a chief."

And now-hither and 1SG COP chief:SG. Rejected by WK without the second kà
```

Dìn zúg and lìn zúg "therefore" without final - σ appear very often before κa (177/371 cases), i.e. as preposed VP adjuncts. Constructions without κa probably arose by original VP-only dìn zúg and lìn zúg encroaching on the function of the corresponding linker adjuncts dìn zúgō and lìn zúgō.

Bō zúg without -o appears in KB only as preposed bō zúg kà ...? "why ...?"

```
Bozug ka li aan ala? "Why is it so?" (Haggai 1:9) Bō zúg kà lì áaň àlá=\emptyset? What on and 3IN COP thus=CO?
```

 $H\bar{a}li$ can be a prelinker adjunct before a n-catenated clause:

```
Ti nwa'ae li hali paae Nofa.

Tì nwa'a lī hālí ø pāe Nofa.

1PL strike 3IN.OB until CAT reach Nophah.

"We struck them as far as Nophah." (Numbers 21:30)
```

Clause adjuncts are otherwise found only in main and content clauses. The position of the negative clitic shows that the $k\dot{a}$ -clauses are not subordinate in e.g.

```
O pv yeed fuug), hali ka li yuug.

Ò pv yêed fuugó=ø, hālí kà lì yûug.

3AN NEG.IND wear:IPFV shirt:SG=NEG, even and 3IN take.long.

"He had not worn clothes for a long time." (Lk 8:27)
```

M kv basif ka fv **keŋɛ** asɛɛ ka fv niŋi m zug bareka.

```
\dot{M} \dot{k}\dot{v} \dot{b}\bar{a}si f \dot{k}\dot{a} f\dot{v} \dot{k}\bar{e}\eta\dot{\epsilon}=\emptyset \dot{a}s\dot{\epsilon}\varepsilon \dot{k}\dot{a} f\dot{v} n\dot{i}\eta\dot{v} \dot{m} z\bar{u}g \dot{b}\acute{a}rik\dot{a}. 1SG NEG.IRR leave 2SG.OB and 2SG go=NEG unless and 2SG do 1SG head:SG blessing. "I will not let you go unless you bless me." (Genesis 32:26)
```

 $W\bar{\nu}\nu$ "like" 15 appears as a linker adjunct before content clauses:

ka tuumbe'ed **ku** len so'e ti wuu ti aa li **yamugo**. kà tòvm-bɛ̄'ɛd kớ lēm sớ'v tī wūv tì áaň lì yàmmvgō=ø. and work-bad:PL NEG.IRR again own 1PL.OB like 1PL COP 3IN 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 wvv ya a\mathbf{n}\boldsymbol{\varepsilon} m biis n\varepsilon. \dot{M} pián'adī \boldsymbol{\varphi} tísidī yá wvv yà á né \dot{m} bīis n\bar{\varepsilon}. 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)
```

17.2.2 Subjects

Kusaal is not a pro-drop language. A dummy subject pronoun lì (never \grave{o}) is required in impersonal constructions:

```
Lì tùl.

"It [weather] is hot."

Lì àň súŋā.

"It's good."

Contrast Mooré yaa sõama, with no pronoun.

Lì nàr kà fù kūl.

"It's necessary for you to go home."

3IN must and 2SG go.home.
```

 $Zi'isig\varepsilon$ 16.5 appears without a subject as "unbeknownst" at KSS p16. Lì may be omitted in $y\grave{a}$ '-clauses:

```
Ya'a\ ka'ans\ alaa,\ m\ naan\ kv\ yslins\ ya\ ys\ldots Ya'\ k\bar{a}'a-ni\ \dot{a}l\dot{a},\ \dot{m}\ n\bar{a}an\ k\dot{v}\ y\bar{s}l\iota-ni\ y\bar{a}\ y\bar{s}\ldots 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)
```

See <u>18.3</u> for omission and movement of subject pronouns in commands. Subject pronouns are regularly ellipted after $k\grave{a}$ when they would have the same reference as the subject of the preceding clause, except when $k\grave{a}$ introduces a content clause; M spreading still follows $k\grave{a}$. As $k\grave{a}$ -catenation typically involves a change of subject, this is characteristic of coordination, where a retained pronoun after $k\grave{a}$ usually signals a change of subject. Conversations may be reported $K\grave{a}$ \grave{o} $y\acute{e}l$... with each \grave{o} marking a switch of speaker. The implication of subject change can override gender agreement (which is no longer robust <u>12.4.1</u>) even in the face of semantic inappropriateness, though it cannot override number:

```
Pu'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.")
```

```
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

The pronoun after $k\dot{a}$ may be ellipted as referring to the subject of a preceding preposed absolute clause:

```
Ban wυm nε'εηa la ka sin.
```

```
Bán wòm n\bar{\epsilon}'ŋá lá kà sịn.

3PL:NZ hear DEMST.IN 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 again remains:

```
Náe yàa=ø? "[Have you] finished?" Finish pfv=po?
```

17.2.3 Post-subject particles

```
For va' "if" 20.1; nominaliser-n 21; sadigim "since" 21.1; naan(i) 20.1.
```

Sìd "truly":

```
\dot{O} sìd dāa á n\bar{\varepsilon} nâ'ab. "Truly, he was a chief." WK 3AN truly TNS COP FOC chief:SG.
```

 $K\bar{v}lim$ or $k\bar{v}dim$ "always" (\leftarrow Hausa) is most often found with negatives:

```
Ka so' kudin ku len nyee li ya'asa.
```

Nyāan or *nāan* "next, afterwards":

```
Ka Yesu tans nε kυkətita'ar ka nyaan kpi.
```

```
Kà Yesu táňs nē kúkō-títā'ar kà ňyāan kpí.
```

And Jesus shout with voice-great:sg and next die.

"Jesus cried out with a loud voice and then died." (Mt 27:50)

```
Pà' tì "perhaps":
```

```
One pa'ati an Kristo la bee?

\bar{\mathcal{D}}nı \emptyset pá' tì àn Kristo lā bée=\emptyset?

3AN.CNTR CAT perhaps COP Christ ART or=PQ?

"Perhaps he is the Christ?" (Jn 4:29)
```

 $Y\bar{\upsilon}'\upsilon n$ "then, next"

```
Manoa yu'un da baŋ ye o anɛ Zugsɔb maliak.
```

```
Manoa yū'υn dá bàŋ yέ ò à nē Zūg-sɔ́b máljāk.
```

Manoah then TNS realise that 3AN COP FOC head-NULL.AN angel:SG.

"Then Manoah realised that he was an angel of the Lord." (Judges 13:12)

17.3 Ellipsis

Informal ellipsis is liable to be declared incorrect by speakers if their attention is drawn to it; it does not affect meaning. Ellipsis of subject pronouns can become standardised in greetings or proverbs. Systematic ellipsis occurs after $k\grave{a}$ (above), with VP complements 16.9.1, in implicit tense marking 16.3.4, and in replies to questions 16.2.1. Ellipsis may be used to avoid repetition of identical constituents in coordination within NPs 12.1, or of clauses, e.g.

```
Dāu lā ňyế bị-díbìŋ kōv bị-púŋàa=ø?
Man:sg ART see child-boy:sg or child-girl:sg=pq?
"Did the man see a boy or a girl?"
```

Some cases are formalised, e.g. $y \hat{\epsilon} l$ before $y \hat{\epsilon} 22.2$, questions with $k \acute{\nu} \upsilon$ or $b \acute{\epsilon} \epsilon$ 18.2, indirect commands 22.1 22.2.1, preposing and n-focus 24.3 24.1.1, and $h \bar{a} l \acute{\iota}$ as an intensifier 24.7.

Unlike phrase-level bound words, clause-level bound words may be left standing alone after ellipsis:

```
Wina'am tisid ... ka mɛ tisid ... Wínà'am tísìd ... kà mɛ́ tìsɪd ... God give:IPVF ... and also give:IPFV ... "God gives ... and [God] also gives ..." (1 Cor 15:38); emphatic mɛ̀ \underline{24.7}
```

18 Main clauses

Main clauses show information-packaging possibilities $\underline{24}$ not found in subordinate clauses other than content clauses, which are downranked main clauses and show the same structures $\underline{22.2}$. Unless preceded by coordinating $k\grave{a}$, they display independency marking $\underline{16.6}$. They divide into declarative types (the unmarked default), content and polar questions, commands, and types lacking VPs. They are coordinated with $k\grave{a}$ "and", $k\bar{v}v$ "or", $b\bar{\varepsilon}\varepsilon$ "or"; $k\bar{v}v$ and $b\bar{\varepsilon}\varepsilon$ are synonyms in this use. $K\grave{a}$ corresponds to English zero before $l\grave{\varepsilon}\varepsilon$ $\underline{16.7}$ and in narrative $\underline{16.3.4}$.

18.1 Content questions

Content questions (except those with $l \nmid a 18.4$) 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 4.4.1. $N \bar{\epsilon}^{l}$ may not appear 24.1.2.

There is no special interrogative word order, but if the subject contains the interrogative pronoun it must be n-focussed 24.1.1 whenever syntactically possible, and interrogatives other than subjects are very often preposed 24.3:

```
F\dot{v} b\hat{z} b\hat{z} b\hat{z}=\emptyset?
                                       "What do you want?"
2SG want what=co?
F\grave{v} bɔ̂əd lín\grave{\varepsilon}=\emptyset?
                                       "Which do you want?"
2SG want DEM.IN=CO?
Ànό'ənὶ ø ňyε bíigà=ø?
                                       "Who has seen a child?"
Who
           CAT see child:sG=CO?
Ànô'ən bịigì 🛒 ĕ ňwá=ø?
                                       "Whose child is this?"
Who
         child:sg cat this=co?
                                       "Whom did the man see?"
Dāu
         l\bar{a} ňy\dot{\epsilon} àn\dot{\beta}'\dot{\beta}n\dot{\epsilon}=\phi?
Man:sg art see who=co?
                       l\bar{a} ny \in \varepsilon = \emptyset? "Whom did the man see?"
Ànô'ən kà dāu
Who
         and man:sg ART see=cq?
Preposing is obligatory for b\bar{z} z\acute{u}g, "why?" and for b\bar{z} when used for "why?":
                                       "Why are you crying?"
Βź
      kà
           fù kύmmà=ø?
What and 2SG weep:IPFV=CQ?
```

18.2 Polar questions

Polar questions are of two types. One is exactly like a statement but ending in a LF showing final vowel lengthening and tone changes imposed by the polar-question clitic 4.4.1. $N\bar{\epsilon}^{/}$ appears as in statements. The answer expected is $\bar{\epsilon}\epsilon\check{n}$ 18.4.

```
D\bar{a}\mul\bar{a} ny\hat{\epsilon}b\hat{i}ig\hat{a}a=\emptyset?"Has the man seen a child?"Man:SG ART see child:SG=PQ?"Am I a man?"\dot{M}\dot{a}\bar{a}"Am I a man?"1SG COP FOC man:SG=PQ?"Are they killing goats?"B\hat{a}k\hat{v}vdn\bar{\epsilon}b\hat{v}vs\hat{\epsilon}\epsilon=\emptyset?"Are they killing goats?"3PL kill:IPFV FOC goat:PL=PQ?"Don't you understand?"F\hat{v}p\bar{v}"Don't you understand?"2SG NEG.IND hear:IPFV=NEG=PQ?(expects \bar{\epsilon}\epsilon\tilde{n}, here "no")
```

The second type follows the ordinary statement form with either $b\dot{\varepsilon}\varepsilon$ "or" (expecting disagreement) or $k\dot{v}v$ "or" (expecting agreement; rare in NT/KB):

```
D\bar{a}\mu l\bar{a} ny\hat{\epsilon} b\bar{p}ig k\acute{v}v=\emptyset?

Man:SG ART see child:SG or=PQ?

"Has the man seen a child?" (I expect so.)

D\bar{a}\mu l\bar{a} ny\hat{\epsilon} b\bar{p}ig b\acute{\epsilon}\epsilon=\emptyset?

Man:SG ART see child:SG or=PQ?

"Has the man seen a child?" (I expect not.)
```

18.3 Commands

For indirect commands, see $\underline{22.1}$ $\underline{22.2.1}$. In direct commands the subject is 2nd person: 2sg pronouns are deleted, and 2pl pronouns moved to immediately after the verb, assuming the liaison-word form $\underline{^{ya}}$ $\underline{4.2}$. Thus

```
F\grave{v} g\acute{o}s b\bar{\imath}ig l\bar{a}. "You (sg) have looked at the child." 2SG look.at child:SG ART. "You (pl) have looked at the child." 2PL look.at child:SG ART.
```

```
but
       Gàsım
                    bīia
                              lā!
                                            "Look (sq) at the child!"
       Look.at:IMP child:SG ART!
       Gàsımī,
                                            "Look (pl) at the child!"
                             bīia
                                      lā!
                     Ø
       Look.at:IMP 2PL.SUB child:SG ART!
       Dā
               aās bīia
                              1\dot{a}a = \emptyset!
                                            "Don't (sg) look at the child!"
       NEG.IMP look child:SG ART=NEG!
       Dā
                                bīig
                                         1\dot{a}a = \emptyset!
               gōsi, ø
       NEG.IMP look 2PL.SUB child:SG ART=NEG!
       "Don't (pl) look down!"
                                            "Don't (sg) look."
       Dā
               g\bar{s}\varepsilon=\emptyset!
       NEG.IMP look=NEG!
       Dā
               gōsı, yá=ø!
                                            "Don't (pl) look."
       NEG.IMP look 2PL.SUB=NEG!
```

2sg/2pl subject pronouns are not changed after $y\dot{a}$ '-clauses:

```
Fv ya'a mɔr pu'a, fvn da mɔɔd ye fv bas oo.

Fv yá' mōr pu'ā, fvn dā mɔɔd yɛ́ fv báso-o=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 22.2.1, even when the addressee is the same as in the original utterance:

```
Ò yèl yé bà gòsim tēŋi-n.
3AN say that 3PL look:IMP ground:SG-LOC.
"She said to them: Look down!" WK
Ò yèl yé fù gòsim tēŋi-n.
3AN say that 2SG look:IMP ground:SG-LOC.
"She said to you SG: Look down!"
Ò yèl yé yà gòsim tēŋi-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; such speakers also repeat ^{ya} in catenated clauses.

tēnι-n.

```
3AN say that 3PL look:IMP 2PL.SUB ground:SG-LOC.

"He said to them: Look down!"

Kèmī ø nā n gōsī ø!

Come:IMP 2PL.SUB hither CAT look 2PL.SUB!

"Come (ye) and look!" (WK Kèmī nā n gōs!)
```

Ò vèl vé bà gòsimī ø

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)

18.4 Verbless clauses

Identificational clauses have the form NP + catenator-n + deictic particle or $w\grave{a}$ $n\bar{a}$ "this here." The NP may be an interrogative pronoun.

```
Kùlıŋı ø lā.
                                 "That is a door."
Door:sg cat that.
Kùlını ø wá nā.
                                 "This here is a door."
Door:SG CAT this hither.
                                 "See you tomorrow" ("That's tomorrow.")
Bēoqυ ø lā.
Tomorrow CAT that.
B\bar{5}\circ \emptyset l\acute{a}=\emptyset?
                                 "What's that?"
What CAT that=CO?
Ňwāamıs ø ňwá!
                                 "Monkeys!"
                                                    [w̃ã:mɪsa]
Monkey:PL CAT this!
                                 (Said by a passenger in my car, on suddenly
                                  catching sight of some.)
```

Identificational clauses may append clauses by catenation:

```
Anɔ'ɔn nwaa yisid nidib tvvmbɛ'ɛdi basida? 
Ànɔ̂'ɔn ø ňwáa ø ȳɪsɪd n̄ɪdıb tv̂vm-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)
```

```
Yel boo nwa ka Wina'am ke ka li paae ti?

Yel-boo ø ňwá kà Winà'am ké kà lì páa tì=ø?

Matter-what cat this and God cause and 3IN arrive 1PL.OB=CQ?

"What is this that God has made to come to us?" (Genesis 42:28)
```

Indentificational clauses can be embedded in verbal clauses:

```
Ya ningid boo nwa?

Yà nínìd bóo ø ňwá=ø?

2PL do:IPFV what CAT this=CQ?

"What is this you are doing?" (Nehemiah 2:19)

Fu maal boo la tis mam?

Fù mâal 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)
```

Lia clauses have the form X + lia, meaning "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.

```
Fè mà l\bar{a} l[a=\emptyset] "Where is your mother?" 2SG mother:SG ART be.where=CQ? (WK to a child in the outpatient clinic.)

Ka awai la dia [sic]? "But where are the nine?" (Lk 17:17, 1976)

Kà àwāe l\bar{a} l[a=\emptyset]?

And NUM:nine ART be.where=CQ?
```

Vocative clauses usually either precede a main clause, or stand alone. They take the form of NPs followed by the vocative prosodic clitic 4.1:

```
\dot{M} p\mu'\bar{a} n\dot{\varepsilon} \dot{m} b\bar{i}is\varepsilon=\emptyset!
1SG wife:SG with 1SG child:PL=VOC!
"My wife and my children!"
```

```
\dot{M} diammā=ø, bó kà fò kúesida=ø?
1SG parent.in.law:SG=VOC, what and 2SG sell:IPFV=CQ?
"Madam, what are you selling?"
```

Vocatives do not take the article $l\bar{a}^{\prime}$, but often end in $\bar{n}w\dot{a}$ "this":

Bī̞is ňwá!	"Children!"	[bi:sa]
Pu̯'ā ňwá!	"Woman!"	[pʊ̯awã]
Zōn ňwá	"Fools!"	[zɔn:a]

Some **particles** occur characteristically as complete utterances. Some are onomatopoeic; others are widely shared among local languages.

```
T\grave{o}. "OK." (= Hausa t\^{o}o)
B\acute{a}p. "Wallop!"
N\acute{f}\acute{a}! "Well done!"
```

"Yes" is $\bar{\epsilon}\epsilon n$; "No" is $\dot{a}yi\iota$. 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 n\grave{a}a n\acute{\epsilon}\epsilon=\varnothing? "Is it finished?"

3IN finish FOC=PQ?

\bar{\epsilon}\epsilon\check{n}. "Yes."

\acute{A}y\grave{\imath}\iota. "No"

Lì p\bar{v} n\bar{a}\acute{e}e=\varnothing=\varnothing? "Isn't it finished?"

3IN NEG.IND finish=NEG=PQ?

\bar{\epsilon}\epsilon\check{n}. "No."

\acute{A}y\grave{\imath}\iota. "Yes."
```

19 Catenated clauses

A clause may be followed by one or more VPs, each introduced by catenator-n; for the realisation of this particle see 4.2. Complements, VP adjuncts, and even other clauses introduced by $k\grave{a}$ 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 $Z\bar{u}g$ -sób máliāk dāa kēŋ n yô'ɔg sārɪgá dôɔg But and head-NULL.AN angel:SG TNS go CAT open prison:SG house:SG zá'-nōɔr lā yō'vŋ-kán, n mōrí bā n yṣis yṣiŋ. 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'asòg lā nīdıb $sisbug\bar{v}-n$, n And man-INDEAN rise CAT stand assembly:SG ART person:PL among-LOC, CAT COP níd kà ò yū'ur bûen Gamaliel, n áň ónì Pharisee person:sg and 3AN name:sg call:IPFV Gamaliel, CAT COP REL.AN teach:IPFV Wínà'am wádà lā yélà, kà lém àň yū'ur dâan nīdıb sâ'an. 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 $k\grave{a}$ for catenator-n makes it impossible to interpret "auxiliary" verbs in the specialised senses associated with n-catenation:

```
\dot{M} zání \dot{m} nú'ugò \dot{\varphi} sī'ıs dāká lā. 1SG pick.up 1SG hand:SG CAT touch box:SG ART. "I touched the box with my hand."
```

```
?? M záŋí m̀ nû'ug kà sī'ıs dāká lā.
"I picked up my hand and touched the box."
```

```
M dāa kûes bòŋv ø tís dó'atà.
1SG TNS sell donkey:SG CAT give doctor:SG.
"I sold a donkey to the doctor."
```

?? M dāa kûes bùn kà tís dú'atà.

"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>18.4</u>:

```
Anɔ'ɔn nwaa yisid nidib tvvmbɛ'ɛdi basida?

Ànɔ̂'ɔn ø ňwáa ø ȳsɪd nīdıb tv̂vm-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 catenation constructions using $k\grave{a}$ in place of catenator-n 19.2. 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 24.1.2.

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 $\bar{e}m$ dátā $nd\bar{\imath}$ "je désire manger."

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 $t\hat{t}$ is often found with non-initial VPs in n-catenation.

Catenation seems always to involve semantic subordination. However, it may be the *first* component which is semantically subordinate; many verbs have characteristic "auxiliary" roles in catenation, preceding or following the "main" verb depending on their own semantics. Moreover, the order of events, if they are not simultaneous, must always be mirrored in the order of the VPs <u>16.2.2</u>.

N-catenations are sometimes attached to the *object* of $\check{n}y\bar{\varepsilon}$ "see, find"; I have no examples of this construction with other verbs.

```
ka na nye Ninsaal Biig la n kenna ne o na'am. kà ná ny\bar{\epsilon} N\bar{\imath}n-sâal B\bar{\imath}ig l\bar{a} n k\bar{\epsilon}n n\bar{a} né ò n\bar{a}'am. and IRR see person-smooth:sG child:sG ART CAT come:IPFV hither with 3AN kingdom. "...will see the Son of Man coming with his kingdom." (Mt 16:28, 1996: l\bar{a} not l\dot{a})
```

19.1 N-catenation

Common n-catenation patterns with verbs without specialised roles are (a) main VP + imperfective VP expressing accompanying events:

```
Ka Ninsaal Biig la kena dit ka nuud...

Kà Nṛn-sâal Bṛig kɛ̄n nā Ø dít kà nūud ...

And person-smooth:sG child:sG come:IPFV hither CAT eat:IPFV and drink:IPFV...

"And the Son of Man comes eating and drinking ..." (Mt 11:19)
```

(b) perfective VP expressing prior event + main VP

```
Ka dapa ayi' yɛ fupiela zi'e ba san'an.

Kà dāpá_àyṛ́' yɛ́ fū-pṛ́əlà_ ø zṛ̀'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 mɔr antu'a zugv o yɛla na sɔbi tis na'atita'ar laa. Àmáa m̀ pv̄ mōr ántù'a zúgv´ò yēlá ø nà sōbi 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\grave{\varepsilon}m ø t\acute{\iota} ny\bar{\varepsilon} d\acute{v}'at\grave{a}. "Go and see the doctor." Go:IMP CAT after see doctor:SG.
```

Man ya'a ρυ kεεn na tu'asini ba ...

```
M\bar{a}n y\dot{a}' p\bar{v} k\bar{\varepsilon}\varepsilon-n n\bar{a} \emptyset t\dot{v}'as\bar{\imath}-n\dot{\imath} b\bar{a}...
```

1SG.CNTR if NEG.IND come-DP hither CAT talk-DP 3PL.OB..

"If I had not come to talk to them ..." (In 15:22): Note DP on both verbs.

(d) $H\bar{a}li$ "until" can precede n-catenated clauses as a prelinker adjunct 17.2.1. Catenated VPs can be coordinated with $k\dot{a}$ "and":

```
ka\ ke\eta\ ...\ n\ ian'asid\ ka\ pian'ad\ n\ du'osid\ Wina'am\ yu'ur\ su'u\eta a.
k\grave{a}\ k\bar{e}\eta\ ...\ n\ i\bar{a}\bar{n}'asid\ k\grave{a}\ pi\bar{a}\bar{n}'ad\ n\ d\bar{u}'esid\ Win\grave{a}'am\ y\^{v}'vr\ s\~v\eta \bar{a}.
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.

```
S \circ g \dot{a} \cdot s \circ \dot{b} = s \circ \dot{b
```

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)

Certain verbs have characteristic specialised meanings in n-catenation. Dual-aspect verbs agree in aspect with the main VP verb.

The following *precede* the (semantically) main VP:

 $B\dot{\varepsilon}$ "exist, be somewhere" + $\dot{a}n\dot{n}a$ "there" + imperfective "be in the process of ..."

```
\grave{O} b\grave{\epsilon} \grave{a}nínā n \check{n}w\hat{\epsilon}'\epsilond b\bar{i}ig l\bar{a}.

3AN EXIST ADV: there CAT beat:IPFV child:SG ART.

"He's currently beating the child."
```

 $\grave{A} e \check{n}^a$ "be something/somehow" can be used in clefting 24.2:

```
Li ane o sidi sv'oe li.

Lì á né ò sīdı ø sv'v lī.

3IN COP FOC 3AN husband:SG CAT own 3IN.OB.
"It's her husband who owns it." (1 Cor 7:4)
```

 $M_{\bar{i}}$ " "know" and $z\bar{\imath}$ " "not know": $n\grave{a}m\ m_{\bar{i}}$ " n + perfective "always have X-ed", $n\grave{a}m\ z\bar{\imath}$ " n + perfective "never have X-ed":

```
Makir bane buudi paadi ya la nan mi' paae sieba men.
      Mākir bànı būudı pāadi, yā
                                             lā nám mī' ø pāe sīəba mén.
      Testing REL.PL sort reach: IPFV 2PL.OB ART still know CAT reach INDE.PL also.
      "Trials of the kind that have reached you have always reached others too."
      (1 Cor 10:13)
      \dot{M} nám z\bar{\imath}' ø ňy\bar{\imath} gb\bar{\imath}gımn\varepsilon=ø.
      1SG still NEG.KNOW CAT see lion:SG=NEG.
      "I've never seen a lion." SB
Z a \eta^{\varepsilon} and n \bar{c} k^{\varepsilon} "pick up, take" with object "using" (of a literal object as instrument)
                   sύ'υgὺ ø kịá n<u>ī</u>m
      M nók
      1SG pick.up knife:SG CAT cut meat:SG ART.
      "I cut the meat with a knife."
      M zání, 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\bar{p}r^{a/} "have" + object "bringing" with motion verbs:
                         kà fù mōró ø ø kē
      Dābá, àyópòe
                                                          nā.
      Day:PL NUM:seven and 2SG have 3AN.OB CAT come hither.
      "Bring her here in a week." WK
Dɔ̃lla/ "accompany in subordinate role, attend"
      Bà dòllō, ø
                      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 pįň'il ø pá'alì bā ...
      And Peter begin CAT teach 3PL.OB ...
      "Peter began to tell them." (Acts 11:4)
      Tì dénì ø tísò ø
                                    lór.
      1PL precede CAT give 3AN.OB car.
      "We previously gave him a car." (d \varepsilon \eta^{\varepsilon}) "do/go first")
```

```
Ka dau sə' duoe zi'en la'asvg la svvgin ...
                        dūe ø zî'ən
                                           là'asva
                                                    lā รบ์บ<sub>ุ</sub>สุบิ-n ...
      And man-indfan rise cat stand.up assembly art among-loc ...
      "And a man (having risen) stood up in the synagogue ..." (Acts 5:34)
K\bar{\epsilon}\check{n} "come" and k\bar{\epsilon}\eta^{\epsilon/} "go" can be used similarly as initiators:
      M kέηὶ ø pịə nû'us.
                                        "I went and washed my hands."
      1SG go CAT wash hand:PL.
Su'\bar{a}^a "conceal" is used in this construction for "secretly":
      Ka Na'ab Herod su'a buol baŋidib la ...
      Kà Nà'ab Herod sụ'ā, ø bûəl bāŋıdıb
      And king:SG Herod conceal CAT call understander:PL ART...
      "Herod secretly called for the wise men ..." (Mt 2:7)
Nìn wālá literally "do how?" is used in catenation for "how can ...?" (see also 19.2):
      Ninsaal na nin wala an pupiel Wina'am tuonne? Ninsaal biig na nin wala pu
       mor taal Wina'am tuonnε?
      Nīn-sâal
                          ná nịŋ wālá ø àň pύ-pịəl
                                                                Wínà'am tû\thetann\hat{\epsilon}=\emptyset?
      Person-smooth:sg irr do how cat cop inside-white:sg God
                                                                           before=co?
                                  nà nịŋ wālá ø pū
      Nīn-sâal
                          bîiq
                                                           mōr tâal
      Person-smooth:sg child:sg irr do how cat neg.ind have fault:sg
      Wínà'am tû\thetann\hat{\epsilon}=\emptyset?
                 before=co?
      God
      "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)
N_{V}\bar{a}\eta^{\epsilon} means "overcome" as a main verb; as an auxiliary it means "carry out
successfully, prevail in":
                                        "I have overcome the world." (In 16:33)
      Ka m nyan dunia.
      Kà m nyān
                          dūnıya.
      And 1sg overcome world:sg.
                  ňyāηι ø záb nà láa=ø.
      \dot{M} p\bar{v}
```

1SG NEG.IND prevail CAT fight chief:SG ART=NEG.

"I wasn't able to fight the chief."

Unlike English "can", $ny\bar{a}\eta^{\epsilon l}$ 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 kύ ňyāŋι 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 nṛdıb vōυ-n

law-REL.IN prevail:IPFV-DP CAT cause:IPFV-DP and person:PL be.alive-DP.

"a law which could make people live." (Gal 3:21, 1996)
```

 $T\bar{u}\bar{n}'e$ 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 z\bar{\epsilon}m(sì bà pàŋı ø nà tūň'e sṛ'əm 3PL TNS give and 3IN 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 $t\bar{u}\check{n}'e$ 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 kứ
               t\bar{u}n'e, ø su'\bar{a}a=\emptyset.
and 3IN NEG.IRR be.able CAT hide=NEG.
"which cannot be hidden" (Mt 5:14)
Ya na tun'e zin' tenin la ne ti.
Yà ná tūň'e ø zíň'i
                             tēηι-n
                                         lā nέ 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)
Fυ tun'e nyεt si'ela?
Fù túň'e ø ňyēt
                        sí'əlàa=ø?
2SG be.able CAT see:IPFV INDF.IN=PQ?
"Can you see anything?" (Mk 8:23)
```

```
O pv tun'e pian'ada.
      Òρῦ
                 tūň'e ø piāň'adá=ø.
      3AN NEG.IND be.able CAT speak:IPFV=NEG.
      "He could not speak." (Lk 1:22)
      With n\sqrt{n}n^{\epsilon} as the main verb in the sense "overcome":
      bozugo ba ku tun'e nyane ba mena.
      bō zúgō bà kù
                          tūň'e ø ňyāní bà mēná=ø.
      because 3PL NEG.IRR be.able CAT control 3PL self=NEG.
      "because they cannot control themselves." (1 Cor 7:5, 1996)
      The following verbs follow the main VP:
Tis^{\varepsilon} "give" is used for "to, for"; the meaning may have nothing to do with "giving",
and is simply a way of adding an indirect object. This can be used to put an indirect
object after a direct, or to have both direct and indirect bound pronoun objects.
      Fu pu ma' n tis ninsaala, amaa fu ma' n tis ne Wina'am Siig Sun.
                 má' n tìs nīn-sáalā=ø,
                                                      àmáa fù má'
      2SG NEG.IND lie CAT give person-smooth:SG=NEG but
                                                             2SG lie
      n tís nē Wínà'am Sí-sòη.
      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)
      M dāa kûes bùŋv
                              ø tís dύ'atà.
      1SG TNS sell donkey:SG CAT give doctor:SG.
      "I sold a donkey to the doctor."
G\grave{a}ad^{\varepsilon} "pass, surpass" is used in comparisons:
      Isaac kárìm, ø gát
                                  Iohn.
      Isaac read: IPFV CAT pass: IPFV John.
      "Isaac reads better than John." SB
```

À-Wīn gím ø gát À-Būgvr.

PERS-Awini be.short CAT pass:IPFV PERS-Abugri.

"Awini is shorter than Abugri." SB

```
Fυ sid non mam gat bamaa?
      Fù síd nòn mām, ø gát
                                          bámmáa=ø?
      2SG truly love 1SG CAT pass: IPFV DEMST.PL=PO?
      "Do you really love me more than these?" (In 21:15)
G\grave{a}lis^{\varepsilon} "get to be too much" (S\~{a}a g\~{a}l\`{i}s v\~{a} "There's too much rain"):
                                         "She's eaten too much."
      Ò dì n gálìs.
      зам eat caт exceed.
      Dā
              kárìm
                        gbánà ø gálisìdā=ø.
      NEG.IMP read:IPFV book:PL CAT exceed:IPFV=NEG.
      "Don't read books too much."
B\grave{a}s^{\varepsilon} "send/go away" is used for "away, off, out":
      Anɔ'ən nwaa yisid nidib tvvmbɛ'ɛdi basida?
      Ànô'ən ø ňwáa ø yīsıd
                                         nīdıb
                                                    t\hat{v}vm-b\bar{\varepsilon}'\varepsilon dv \not o b\acute{a}sid\grave{a}=o?
               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 dù ø nāe.
                                         "He's finished eating."
      3AN eat CAT finish.
      Ò dù ø tīg.
                                        "She's eaten to satiety."
      3AN eat CAT get.sated.
Verbs of motion occur in n-catenation with meanings like local prepositions e.g.
      Ò kàt
                     kíkīr-bê'ed-nàm n yīisíd
                                                     nīdıb.
      3AN drive:IPFV fairy-bad-PL
                                      CAT expel: IPFV person: PL.
      "He drives evil spirits out of people."
                                         "Shift along up to me." (pāe/ "reach")
```

 $W\bar{\varepsilon}n^{\text{na}/}$ "be like" is very common in *n*-catenation. It takes a prepositional phrase with $w\bar{\nu}v$ "like" or $n\bar{\varepsilon}$ "with" as complement. Any object without the article $l\bar{a}'$, even a pronoun or proper name, is followed by a meaningless $n\bar{\varepsilon}$. As a main verb:

ø páa m.

Shift.along:IMP CAT reach 1SG.OB.

Eŭrigim

Ka o nindaa wenne nintaŋ ne.

```
Kà ò nīn-dáa wēn nē nīntāŋ nē.
```

And BAN 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)

 $W\bar{\varepsilon}n\ n\bar{\varepsilon}$ and $w\bar{\varepsilon}n\ w\bar{\upsilon}\upsilon$ behave as unitary prepositions to the extent that $w\bar{\varepsilon}n$ + preposition + complement can be preposed with $k\dot{a}$, or dislocated as in

Da lo ya nindaase, wenne foosua dim la ninid si'em la.

```
D\bar{a} l\acute{o} y\grave{a} n\bar{i}n-d\acute{a}as\bar{\epsilon}=\emptyset, w\bar{\epsilon}n n\bar{\epsilon} f\bar{o}os\acute{v}g d\acute{i}m l\acute{a} \emptyset NEG.IMP tie 2PL eye-face:PL=NEG, resemble with puff:GER NULL.PL ART NZ n\dot{i}\eta d s\bar{i}'\partial m l\bar{a}.
```

do: IPFV INDF. ADV ART.

"Don't screw up your faces like the hypocrites do." (Mt 6:16, 1976)

 $L\grave{a}'am^{\mathrm{m}}$ "together" is also found as a preverb <u>16.8</u> and in the compound preposition $l\grave{a}'am$ $n\bar{\varepsilon}$ "together with" <u>15</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.

```
... y\bar{\varepsilon} l\acute{a}b\grave{a}-s\grave{v}\eta m\acute{o}ol\grave{v}g l\bar{a} k\acute{\varepsilon}t k\grave{a} b\bar{u}ud\imath w\bar{v}sa l\acute{a} am\grave{v}d ... that news-good:sg proclamation art cause:iPFV and tribe all gather:iPFV n\bar{\varepsilon} t\bar{a}aba \emptyset p\bar{v}d\imath g\acute{\iota}d W\acute{\iota}n\grave{a} am p\acute{\iota}in\grave{\iota}. 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" is rarely preceded by liaison (never in KB) and has now effectively simply become an adverb; it is even preposable with $k\dot{a}$ 24.3. ILK glosses it "repeat", but I have no examples as a main verb.

```
ka m lem yeti ya'as ... "and I say again ..." (Gal 1:9, 1996) kà m lém yèti \emptyset yâ'as and 1SG again say:IPFV CAT again "Again I looked ..." (Rev 5:11, 1976) Yà'as kà m gōs ... Again and 1SG look ...
```

19.2 Kà-catenation

Certain constructions with a clause introduced by $k\grave{a}$ have clear affinities with catenation using n. They never have alternate forms with the linker $y\bar{\varepsilon}$. 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.

 $K\bar{\varepsilon}$ "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 $k\varepsilon l$ ka fv $m\varepsilon \eta$ an $zanbinn\varepsilon$ 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 $k\bar{\varepsilon}$, though imperative often replaces irrealis mood.

Ba kvdim niŋidi lin ye li kɛ ka ba **da** nyɛ Kristo kum dapuudir namisvg laa. Bà kvdim niŋidī lí yé lì ké kà bà dā ňyɛ Kristo kúm 3PL ever do:IPFV 3IN.OB that 3IN cause and 3PL NEG.IMP see Christ death $d\grave{a}$ -pvvdir $n\acute{a}$ mɪs \grave{v} g $l\acute{a}$ a= \rlap/v . 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)

```
dine na ke ka ba da kpi'ilim.

D\bar{\imath}n\imath ø ná ké kà bà dā kp\bar{\imath}'ilímm=ø.

3IN.CNTR CAT IRR cause and 3PL NEG.IMP finish=NEG.

"That will cause them not to come to an end." (Genesis 6:20)
```

After $k\dot{\varepsilon}\varepsilon$ -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 ane wada la ket ka tvvmbe'ed nyet paŋ.

Kà lì à né wādá lā ø két kà tvvm-bē'ed ňyēt páŋ.

And sin 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)
```

The irregular imperative $k\grave{\epsilon}l^a$, followed by a $k\grave{a}$ -clause with imperative mood, creates a way of expressing commands to third or first persons:

```
Κὲl
           kà ò
                    ą̄s tēηι-n.
Cause: IMP and 3AN look ground: SG-LOC.
"Let him look down."
              k\grave{a} d\grave{a}b\bar{\imath}= \emptyset!
Dā
        kέ
NEG.IMP cause and fear
                            EXIST=NEG.
"Don't be afraid." ("Let fear not exist.")
Κὲl
          [or Kèli]
                          ø٦
                                  kà tì pŷ'vs Wínà'am.
               cause:IMP 2PL.SUB and 1PL greet God.
Cause:IMP
"Let us praise God."
```

 $K\grave{\epsilon}l\ k\grave{a}$... is often ellipted informally, leaving the lack of independency marking as the only sign that the clause is a command:

```
M gás
                  nīf
                         lā.
                                        "I've looked at the eye."
      1SG look.at eye:SG ART.
                                        Independency marked: tone overlay on gós
      M qās
                                        "Let me look at the eye." (Overheard in clinic)
but
                   nīf
                         lā.
                                        No tone overlay on gos
      1SG look.at eye:SG ART.
      \dot{M} díginè\varepsilon = \emptyset?
                                        "Am I to lie down?" (Overheard in clinic)
      1SG lie.down=PO?
                                        No independency imperative -ma
      Ò záb nà ab lā.
                                        "He should fight the chief."
      3AN fight chief:SG ART.
                                        M spreading after ò, not záb 16.6.1
```

Mt is a defective verb used only in the imperative 16.5. Much its most common use is with ka-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 ka ya maali ya tuum-suma nidib tuon ye ba gos.

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)
```

 $X n n n w \bar{\epsilon} l \dot{a} n...?$ "how can X ...?" has an impersonal variant using a dummy subject in the main clause and the effective subject in $k \dot{a}$ -catenation.

```
Li niŋ wala ka o an David yaaŋa?
Lì niŋ wēlá kà ò áň David yâaŋà=ø?

3IN 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 $k\grave{a}$:

```
M na niŋ wala ka nyɛ faangirɛ?

M ná nṣṇ wēlá kà nyē fāangírè=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 dā\mu dāa z\mui Listra n\mui kà p\nu t\mui e\mu0 k\nu8 k\nu8 nn\mu9. 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 k\bar{\varepsilon} n\bar{a} \emptyset l\bar{\upsilon}\upsilon d n\bar{\upsilon}\upsilon r k\dot{a} p\bar{\upsilon} n\bar{\upsilon}ud d\acute{a}amm=\emptyset. 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 bɛ kpɛla kv kpii ...

Yà sieba bɛ kpɛla kv kpii ...

Yà sieba bɛ kpɛla v kv kpii = \emptyset ...

2PL INDEPL EXIST here CAT NEG.IRR die=NEG ...

There are some of you here who will not die ..." (Lk 9:27)
```

An **adnominal** $k\grave{a}$ -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>16.9.1</u>. The sense resembles a non-restrictive relative clause:

```
Anina ka o nyɛ dau ka o yv'vr buon Aneas.
Àníná kà ò ňyē dáu kà ò yv'vr bûen 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 ane ya taaba bane pu'usid Wina'am ka li nar ka ya kad saria.

Lì à n \acute{e} yà tāaba bánì pù'vsid Wínà'am kà lì nár 3IN COP FOC 2PL fellow REL.PL greet:IPFV God and 3IN 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 <u>18.4</u>, the NP of the main clause can be the anchor:

Yɛl bɔɔ nwa ka Wina'am kɛ ka li paae ti? Yɛl-bɔɔ ø nwa ka Wina'am kɛ ka lì paa tì=ø? Matter-what cat this and God cause and 3IN arrive 1PL.OB=CQ? "What is this that God has made to come to us?" (Genesis 42:28)

Adnominal $k\dot{a}$ -catenation underlies $k\dot{a}$ -clefting and preposing.

The subject of the catenated clause does not normally refer to the anchor; if it does, the $k\grave{a}$ -catenation is a resultative predicate 16.9.2:

...ka la'am maan gigis ka ba wum ka pia'ad.

...kà lâ'am màan gígìs kà bà wóm kà pịāň'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 $n v \bar{\epsilon}$ "see", this construction has the predicative sense "see as":

M dāa nyē dāu lá kà ò án nâ'ab.

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"

 \dot{M} dāa p \bar{v} \ddot{n} y \bar{e} dāu lá kà \dot{o} á \ddot{n} ná'ab \bar{a} = σ .

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- $n\bar{\epsilon}^{l}$ in the catenated clause:

* \dot{M} dāa p \bar{v} $\ddot{n}y\bar{\varepsilon}$ dāu lá kà ò á n $\bar{\varepsilon}$ ná'abā= \emptyset .

1SG TNS NEG.IND see man:SG ART and 3AN COP FOC chief:SG=NEG.

20 Conditional clauses

20.1 Structure

Conditional clauses have a $y\dot{a}$ '-clause as postlinker adjunct, after any other adjuncts. The main clause can be of any type, including a command or a question.

```
Fù yá' gōs kpēlá, bó kà fù ňyētá=ø?
2SG if look here, what and 2SG see:IPFV=CQ?
"If you look here, what do you see?"
```

 $Y\dot{a}$ '-clauses cannot be coordinated, but there may be several in a main clause:

```
Ka ligidi la ya'a pɔ'ɔg, m ya'a ti lɛb na, m na yɔɔf.

Kà līgidi lā yá' pò'ɔg, m yá' tì lɛb nā, m ná yóɔ_f.

And money ART if get.small, 1SG if then return hither, 1SG IRR pay 2SG.OB.

"If the money runs short, when I return I will repay you." (Lk 10:35)
```

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' mor pu'a, fvn da mood ye fv bas oo.

Fv ya' mor pu'a, fvn da mood ye fv baso-o=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)
```

Yà'-clauses can appear clause-finally because of dislocation due to weight:

```
Dinzug li naan a su'um ba ya'a pu du'an dau kaŋaa. Dìn-zúg lì nāan áň sớm bà yá' p\bar{v} d\hat{v}'a-n dá\psi-kàŋáa=\psi. Thus 3IN 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)
```

 $Y\dot{a}$ '-clauses express tense independently. They can have irrealis mood, but an indicative event-perfective need not have past reference:

```
Fv ya'a na dəllimi keŋ, m na keŋ.

Fv yá' nà dəllí m\bar{\iota}_{\varnothing} k\bar{\epsilon}\eta, m ná k\bar{\epsilon}\eta.

2SG if IRR accompany 1SG CAT go, 1SG IRR go.

"If you will go with me, I will go." (Judges 4:8)
```

```
M ya'a pv keŋɛ, Svŋid la kv kɛɛn ya ni naa. \dot{M} yá' pv kɛŋɛ́=ø, svŋid lā kv kɛɛn̆ 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)
```

The **discontinuous-past marker** n^{ε} 16.3.2, beside tense, is used to express *modal remoteness* (cf English preterite in non-temporal usage, CGEL pp148ff.) It then 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 apart from imperatives. In catenation, n^{ε} in the first VP is usually repeated in all. It appears most often in $y\dot{a}$ '-clauses, but can occur both with and without $n\bar{a}an(\iota)$ elsewhere:

```
Man boodin nε yanamε naan aan ma'asiga bεε yanamε naan aan tuuliga.

Mān bóodī-n nē yānámì ø nāan âa-n mā'asígā bēε

1SG.CNTR want-DP that 2PL NZ then COP-DP cold:ADV or yānámì ø nāan âa-n tūulígā.

2PL NZ then COP-DP hot:ADV.

"I might wish you had been cold or you had been hot." (Rev 3:15)
```

Post-subject $n\bar{a}an(i)$ "in that case, matters being so" is distinct from $n\bar{y}aan$ "next, then" ($n\bar{y}a'a\eta^a$ "behind"), but before 2016 $n\bar{y}aan$ often appears as $n\bar{a}an$. 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 fù zí'ı mā=ø, 2SG IRR deny occasion:SG NUM:three that 2SG NEG.KNOW 1SG.OB=NEG, kà nō-dâvg ňyāan kāas. and hen-male:SG next cry. "You will thrice deny 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.

Fù ná kī'ıs mān nóor àtáň' kà nō-dâvg

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 thrice deny me before the cock crows twice." (Mk 14:30, 1996)
```

 $N\bar{a}an(\iota)$ originates from the verb $n\bar{a}an^{\epsilon/}$ "be there", which typically appears as an auxiliary with its own locative complement before a n-catenated clause:

Ka nwadbibis na naan agola lit tenin na.

Kà ňwād-bíbìs ná nāan àgólà ø lít tēŋı-n nā.

And moon-small:PLIRR be.there ADV:above CAT fall:IPFV ground:SG-LOC hither.

"And the stars [being] above will fall to earth." (Mk 13:25)

Fv ya'a sid ane Wina'am Biiq fvn naanim dapuudir la zuqv siq na.

Fù yá' sìd à $n\bar{\varepsilon}$ Wínà'am B $\hat{\mu}$ ig, fūn náanìm dá-pūvdír lā 2SG if truly COP FOC God child:SG, 2SG.CNTR be.there:IMP wood-cross:SG ART zùgv \emptyset s $\bar{\imath}$ g $n\bar{a}$.

upon CAT descend hither.

"If you are truly the Son of God, come down here from the cross." (Mt 27:40)

I will omit CAT in interlinear glossing after $n\bar{a}an\iota$.

In subordinate clauses KB usually simply has irrealis $n\dot{a}$ where older versions had $n\bar{a}an$. Modal $n\bar{a}an(\iota)$ most often appears in conditional main clauses; in other main clauses $n\bar{a}an$ without n^{ϵ} often represents $n\bar{a}an$, as above.

 $N\bar{a}an(\iota)$ without n^{ε} is often effectively equivalent to $y\dot{a}'$ "if/when."

Li an sum ye dau yinne naan kpi nidib la yela gaad ...

Lì àň súm yē dāu yīnní nāan kpi nīdib lā yélà ø gàad ...

3IN 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 sīgɪsú f nē kpísìnkpìl 2SG:NZ then do bad and 3PL put.down 2SG.OB with fist:SG kà fù sín kà mōr sūgʊrú, lì sòm áň bó= \emptyset ? and 2SG be.silent and have forbearance, 3IN 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)

Nonir lem kae' gaad nidi naan kpi o zuanam zugo.

Nòŋır lém kā'e ø gâad nṛdí ø nāan kpị 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 zunzon naani ve'ed zunzon ne.

```
Bà wēn n\bar{\epsilon} zúnzòŋ Ø nāanı vē'ɛd zúnzòŋ n\bar{\epsilon}.

3PL resemble with blind.person:sg Nz then lead:IPFV blind.person:sg like.

"They are like when a blind person leads a blind person." (Mt 15:14, 1996)
```

 $N\bar{a}an(\iota)$ with n^{ε} expresses contrary-to-fact, as in conditional clauses:

Li su'm ka fu daa naan zaŋin m ligidi n su'an banki ni. Lì sv'm kà fv dāa nāan záŋí-n m l̄gudu n sv'a-n bánkì ní. 3IN be.good and 2SG TNS then take-DP 1SG money CAT hide-DP bank:SG LOC. "You should have put my money in the bank." (Mt 25:27, 1976)

Yà' nāan(1) means "if only":

```
M zugdaan la ya'a naan siaki keŋ nyɛɛn nodi'es la bɛ Samaria la! \dot{M} zūg-dâan lā yá' nāan siákì ø kēŋ ø nyɛɛ-n 1SG head-owner:SG ART if then agree CAT go CAT see-DP n\acute{o}-d\mathring{i}'əs lá ø bɛ Samaria lā! mouth-transmitter:SG ART CAT EXIST Samaria ART! "If only my lord would agree to go to see the prophet in Samaria!" (2 Kings 5:3)
```

20.2 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 (cf Hausa idan, Jaggar p608.) With main clauses with past reference, $y\dot{a}$ is only used for conditionals; for the meaning "when", absolute clauses are used 21.1.

```
Nid ya'a tvm tvvma, o di'ed yɔɔd. 
N\bar{l}d yá' tvm tvvma, o di'əd yɔ̄ɔd. 
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 pv vv'vg kuminɛ, alaa ti labasvŋ la mɔɔlvg la anɛ zaalim. Kà Kristo yá' dà pv̄ vv̄'vg kūmɪ-nɛ́=ø, àláa tì làba-svŋ And Christ if this neg.ind come.alive death-loc=neg, adv:thus ipl news-good:sg lā mɔ́ɔlv̀g lā á nē zāalím. Art proclamation art cop foc empty:Abstr. "If Christ did not rise from death, our preaching is empty." (1 Cor 15:14)

```
Fù yá' siàk, tì ná dīgīlí 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 fυ na wυm o pian'ad.

```
Bēog yá' nìe, fò ná wóm ò piàň'ad.
```

Tomorrow if appear, 2SG IRR hear 3AN speech.

"When tomorrow comes, you will hear his words." (Acts 25:22)

20.3 Hypothetical

If discontinuous-past n^{ε} occurs in the $y\dot{a}$ '-clause and the main clause has irrealis mood without $n\bar{a}an(\iota)$, the meaning is hypothetical. In the 1976 NT the main clause also has n^{ε} , but not in later versions. KB sometimes uses constructions identical to open conditionals with irrealis in the main clause in this meaning.

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 3in loc, 3in depth irr reach-dp 3an bridle:sg.

"If a horse went down in it, its depth would reach its bridle." (Rev 14:20, 1976)

KB: Ka wief ya'a sigi li ni, li zuluŋ na paae o salibir.

Nobir ya'a yelin ye, on pu a nu'ug la zug, o ka' niŋgbiŋ nii, lin ku nyaŋin keen ka o ka' niŋgbiŋ nii.

```
Nóbìr yá' yèlī-n yē, ón pō áň nû'ug lā zúg,
```

Leg:sg if say-dp that 3AN:NZ NEG.IND COP hand:sg ART upon,

 $\delta k\bar{a}' nin-gb\bar{i}n nii=\emptyset$, $l\bar{i}n k\dot{v} ny\bar{a}n-n \emptyset$

3AN NEG.BE body-skin:SG LOC=NEG, DEM.IN NEG.IRR accomplish-DP CAT

```
k\varepsilon - n ka \dot{o} k\bar{a}' n(n-g) \bar{n} n(1-g)
```

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)

KB: Nəbir 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.

20.4 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 pu keen na tu'asini ba, ba naan ku morin taale.

```
M\bar{a}n y\dot{a}' p\bar{v} k\bar{\epsilon}\epsilon-n n\bar{a} \emptyset t\dot{v}'as\bar{\imath}-n\dot{\imath} b\bar{a}, b\dot{a} n\bar{a}an k\dot{v} 1SG.CNTR if NEG.IND come-DP hither CAT talk-DP 3PL.OB, 3PL then NEG.IRR m\bar{\sigma}r\imath-n t\hat{a}all\bar{\epsilon}=\emptyset.
```

have-DP fault:SG=NEG.

"Had I not come to speak to them, they would not have been guilty." (In 15:22)

M ya'a mərin su'ugu m nu'ugin m naan kuunif nannanna.

M yá' mɔrɪ-n sú'vgù m nú'ugī-n, m nāan kūv-ní f nānná-nā.

1SG if have-DP knife:SG 1SG hand:SG-LOC, 1SG then kill-DP 2SG now.

"If I'd had a sword in my hand, I'd have killed you right now." (Numbers 22:29)

Ba ya'a daa mi'in ε li, ba naan k υ kpa'an Zugs \flat b on ε an na'atita'ar la dapuudir zug \flat .

Bà yá' dāa mṛ'i-ní lī, bà nāan k \acute{v} kpā'a-n Zūg-s \acute{o} b \acute{o} nì 3PL if TNS know-DP 3IN.OB, 3PL then NEG.IRR fasten-DP head-NULL.AN REL:AN àň ná'-t \id tā'ar lā dá-p \id v \emph{v} ug \id = \emph{v} . COP king-great:SG ART wood-cross:PL 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)

Contrary-to-fact conditions in the past are also sometimes marked with irrealis mood along with past tense markers in the main clause; WK specifically confirmed that the sense of this combination is contrary-to-fact, not future-in-the-past.

Bɔzugɔ Josua ya'a da tisini ba νυ'υsυm zin'ig, Wina'am da kυ lɛm pian' dabis-si'a yɛla ya'asɛ.

 $B\bar{o}$ $z\dot{u}g\bar{o}$ Josua $y\dot{a}'$ $d\dot{a}$ $t\dot{i}s\bar{i}$ - $n\dot{i}$ $b\bar{a}$ $v\bar{v}'vs\dot{i}m$ $z\dot{i}\bar{n}'ig$, $W\dot{i}n\dot{a}'am$ $d\dot{a}$ $k\dot{v}$ Because Joshua if this give-dr splind resting place:sg, God this negligible $l\bar{e}m$ $p\dot{i}a\bar{n}'$ $d\dot{a}b\dot{i}s$ - $s\bar{i}'a$ $y\dot{e}l\dot{a}$ $y\dot{a}'as\bar{e}=\emptyset$. again speak day-indexin 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)

Without a *và*'-clause:

Ò dāa ná zāb nâ'ab lā.

3AN TNS IRR fight chief:SG ART.

"He would have fought the chief (but didn't.)" WK

21 N-clauses

Kusaal transforms complete clauses into AdvPs or NPs by inserting the post-subject particle \dot{n} (for the realisation, see <u>4.2</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.

 \dot{N} -clauses have independent tense marking (but relative to the *narrative* timeline within narrative <u>16.3.4</u>.) Irrealis mood replaces imperative:

```
Yanamɛ na mɔr sam si'a anɛ ye ya nɔŋ taaba.

Yānámì ø nà mɔr sām-si'a á nɛ̄ yɛ́ yà nɔ́ŋ tāaba.

2PL NZ IRR have debt-INDF.IN COP FOC that 2PL love each.other.

"The 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 $k\dot{a}$. Contrastive pronouns can be subjects of \dot{n} -clauses:

```
wuu mane a si'em la. "as I am." (1 Cor 7:7, 1996) w\bar{\nu}\nu mánì \bar{\rho} àn \bar{s}i'\bar{\rho}m lā. like 1SG.CNTR NZ COP INDEADV ART.
```

Dependents of \grave{n} -clauses may only be articles or predependent NPs, but \grave{n} -clauses can themselves be predependents.

Absolute \dot{n} -clauses normally take the article $l\bar{a}^{l}$. After relative clauses $l\bar{a}^{l}$ has its usual function; clauses without $l\bar{a}^{l}$ are usually indefinite but specific.

```
Ōп
               á nε̄ dáu-kànι
                                                  sû'es
        sōb
                                  sà kε̄
                                           nā
                                                           lā.
3AN.CNTR NULL.AN COP FOC man-REL.SG TNS come hither yesterday ART.
"That one's the man who came vesterday."
Dàp-bànı bòod yé bà nyée f
                                     kέ
                                          nā.
Man-Rel.pl want that 3pl see
                              2SG.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)
ònι
      du'à nē Sīig
REL.AN bear with spirit:SG
```

The article is not repeated a second time after an \dot{n} -clause which ends in a NP with $l\bar{a}'$. If the clause contains the VP-final particles $n\bar{a}'$ "hither" or $s\dot{a}$ "hence", these may follow an article belonging to the \dot{n} -clause 16.11.

If a \dot{n} -clause has a negative VP, the negative prosodic clitic is dropped unless the \dot{n} -clause lacks $l\bar{a}^{l}$ and is itself clause-final in the superordinate clause <u>23</u>.

21.1 Absolute clauses

 \hat{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 this fight chief:sg art.

"The man has fought the chief."

dāu lá ø dāa záb nà'ab lā

Man:sg art nz this 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 $\underline{17.2.1}$ or as VP adjuncts, generally preposed with \underline{ka} $\underline{24.3}$. As Kusaal is stricter than English in requiring constituent order to reflect event order, the VP-final adjunct position is usually confined to cases where the absolute clause expresses a state of affairs rather than a single event:

```
\bar{\partial}n d\bar{a}a \bar{n}y\bar{\epsilon}t s\acute{v}\eta\bar{a}, \acute{o}n d\bar{a}a \acute{a}n b\acute{i}-l\bar{i}a l\acute{a}a=\emptyset? 3AN.CNTR TNS see:IPFV good:ADV, 3AN:NZ TNS COP child-baby:SG ART=PQ? "Did she see well when she was a baby?"
```

Tense markers in an absolute clause are the same as in the main clause; the main clause markers may be omitted if the absolute clause precedes. It is thus not possible to manipulate the time relationship with tense particles; instead, this is determined by aspect, with a perfective in the absolute clause implying a prior event and imperfective a simultaneous one, setting the temporal scene for the main clause.

```
Ka ban dit la, Yesu yeli ba ...
      Kà bán dìt
                         lā, Yesu yélì 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 men ...
      Kà bán yị
                          lā, kà Zūg-sób
                                                máliāk níe
                                                                 \delta m\bar{\epsilon}\eta ...
      And 3PL:NZ emerge ART and head-NULL.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 uses as verb arguments 13.1:
      Dine ke ka m a saalbiis zua la ane
       mam pu sa'amidi ba la'ad ka me pu diti ba ki la.
                   kà m̀ án̆ sâal-bīis
      Dìnı ké
                                                         lā á nē mán
                                                zuá
      REL.SG cause and 1SG COP smooth-child:PL friend:SG ART COP FOC 1SG:NZ
              sáň'amìdí bà lā'ad kà mέ pū
                                                       dítí, bà kị
                          3PL goods:PL and also NEG.IND eat:IPFV 3PL millet ART=NEG.
      NEG.IND spoil:IPFV
      "What makes me a friend of human beings is
      that I don't spoil their property or eat their millet." BNY p20
      Verbs of perception or communication take content clauses or relative clauses
with indefinite pronouns as objects, never absolute clauses.
      Absolute clauses with sādigím "since, because" immediately following
nominaliser-\dot{n} occur as postlinker adjuncts expressing "reason why":
      Amaa on sadigim kpi la, bɔ ka m lɛm lɔɔd nɔɔr ya'asɛ?
                   sādīgim kpi lā, bó
      Àmáa ón
                                          kà m lém
      But
            3AN:NZ since
                            die ART, what and 1SG again
      ไว้วd
             nāər
                       v\acute{a}'as\grave{\varepsilon}=\emptyset=\emptyset?
      tie: IPFV mouth: SG again = NEG = CQ?
      "But since he has died, why should I still be fasting?" (2 Samuel 12:23)
      Tiname sagidim aan o biis la, ti da ten'es ...
      Tīnámì ø sādīgim áan ò bīis
                                             lā, tì dā
                                                            tēň'es ...
               NZ since
                            COP 3AN child:PL ART, 1PL NEG.IMP think ...
      "Since we are his children, we should not think ..." (Acts 17:29)
```

For absolute clauses with post-subject $n\bar{a}an(\iota)$ see $\underline{20.1}$.

Absolute clauses occur after $h\bar{a}l\acute{\iota}$ $n\bar{\epsilon}$ or $h\bar{a}l\acute{\iota}$ $l\grave{a}$ and $h\bar{a}l\acute{\iota}$ n $t\grave{\iota}$ $p\bar{a}a$..."up until the time when ..." $\underline{17.2.1}$.

Before the postposition $z\bar{u}g^{\circ/}$ "on account of", or $b\bar{\upsilon}$ $z\acute{u}g\bar{\upsilon}$ "because", absolute clauses form reason-why AdvPs used as adjuncts:

```
Ban mor d \varepsilon \eta la zug, ba ku di'e baa.

Bán mōr d \overline{\varepsilon} \eta lā zúg, bà kù dị'ə báa=ø.

3PL:NZ have wound:SG ART upon, 3PL NEG.IRR receive 3PL.OB=NEG.

"Because they have a defect, they will not be accepted." (Leviticus 22:25)

Mán ňwè' dāu lā zúg kà pōlıs gbáň'a m.

1SG:NZ strike man:SG ART upon and police seize 1SG.OB.

"The police arrested me because I struck the man." ILK
```

It is commoner for causation to be simply implied by an absolute clause as postlinker adjunct or preposed VP adjunct, or just by coordination with $k\dot{a}$.

 $Y\bar{\epsilon}l\acute{a}$ "concerning" appears after absolute clauses in NT section headings, and absolute clauses alone are used as picture captions:

```
Jesus n kpen' Jerusalem la yela

Jesus n kpèň' Jerusalem lā yélà

Jesus Nz enter Jerusalem ART about

"[about] Jesus entering into Jerusalem."

Ban meed yir "A house being built"

Bán mèed yīr

3PLNZ build:PFV house:SG
```

21.2 Relative clauses

Relative clauses are of two structural types: those which use relative pronouns, and those which use indefinite pronouns in the role of relatives. The relative clause subject is followed by 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 n.

In either case, the pronoun may be a head, as clause antecedent, or a dependent after a cb which is the clause antecedent. Relative clauses are restrictive when the pronouns are compounded with a cb, but need not be so otherwise.

Written materials avoid $kan\varepsilon k\grave{a}n\iota$ as a relative for human reference (invariably so after proper names), substituting $on\varepsilon \grave{o}n\iota$, which cannot be preceded by a cb; the resulting construction is appositional (note, incidentally, that this example is unequivocally non-restrictive):

```
o sid one da be ne o la \dot{o} sīd \dot{o}nì dà bè né \dot{o} lā 3AN husband:SG REL.AN TNS EXIST with 3AN ART "her husband, who was there with her" (Genesis 3:6)
```

kokor kaŋa lini yi arazana ni la na

νí

línì

kùkōr-káŋā

(Rev 21:27)

Uncompounded pronouns are obviously necessary with heads that lack cbs or have a coordinate structure:

àrazánà ní lā nā

Mam Paul nε Timoti banε an Yesu Kristo tvmtvmnib la

Mām Paul nē Timoti bánὶ àň Yesu Kristo tým-tūmníb lā

1SG.CNTR Paul with Timothy REL.PL COP Jesus Christ work-worker:PL ART

"I, Paul, and Timothy, the servants of Jesus Christ" (Phil 1:1)

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 with relative meaning. Short demonstrative pronouns are never relatives when non-initial, and long demonstratives are never relatives at all:

```
Wina'am one gaad si'el wusa la

Winà'am śnì gàad sị'əl wūsa lā

God REL.AN pass INDEIN all ART

"God who surpasses everything." (Lk 1:35)

wuu baŋi gban'ad si'el si'em la

wūu bāŋi ø gbāň'ad sị'əl sị'əm lā

like trap:sg NZ seize:IPFV INDEIN INDEADV ART

"like a trap seizes something" (Lk 21:35)
```

```
O pa'al nɛ'ɛnam nyain tis sɔ' wvsa on vv'vg ninkan kumin la zug.

Ò pà'al nɛ̄'-nám nyāe ø tís sɔ̄' wvsa ón vv̄'vg nṣn-kán

3AN show DEM.IN-PL clearly CAT give INDEAN all 3AN:NZ revive person-DEM.SG
kw̄mu-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 tvm tvvmnyalima gaad dau kaŋa tvm si'el laa?

ò nà tv̄m tv̂vm-nyālima ø gàad dàu-kàŋa ø tv̄m sṣ̄'əl láa=ø?

3AN IRR work work-grand:PL CAT pass man-DEMST.SG NZ work INDE.IN ART=PQ?

"Will he do miracles greater than this man has?" (Jn 7:31)
```

21.2.1 With indefinite pronouns

Relative clauses using indefinite pronouns as relatives are **internally headed**. The pronoun may be a head, as clause antecedent, or a dependent after a cb which is then the clause antecedent; in either case it remains *in situ* within the relative clause.

```
Wina'am nodi'esidib n daa yel si'el n sob Wina'am gbauŋin la, ane ameŋa.

Winà'am nó-dị'əsìdib n dāa yél sị'əl n sɔ̄b

God mouth-receiver:PL NZ TNS say INDF.IN CAT write

Winà'am gbáuŋō-n lā á né àmēŋá.

God book:sG-LOC ART COP FOC truly.

"What God's prophets said and wrote in God's book is true." (Mt 26:56, 1996)
```

The indefinite pronoun need not follow the verb directly:

```
... fon yelim fon niŋ li si'el. ... fon yelim fon niŋı lī sṛ'əl. ... 2SG.CNTR say:IMP 2SG:NZ do 3IN.OB INDE.IN. "... that you say where you have put it." (Jn 20:15)
```

The antecedent of a relative clause using an indefinite pronoun cannot be the subject in the relative clause. It is either a verb object or complement, or adverbial, or a predependent in such a constituent. It may belong to a subordinate clause within the relative clause. The fact that the pronoun may be a predependent or appear in a subordinate clause proves that these constructions are internally headed; elements following the pronoun cannot simply be taken as dependents of the relative clause.

If the indefinite pronoun is not compounded with a preceding cb and is not part of an AdvP, it normally retains a specific-indefinite sense (the main exception in KB is a sequence in Rev 2-3 of *man nyɛ sɔ' la* "the one I saw.")

```
Ka ban tvm so' la kv gaad one tvm o la.
Kà bán
           tòm sā'
                       lā kú
                                   aāad
                                            <u>ónì</u>
                                                  tùmo ø
                                                                1\dot{\alpha}a = \alpha
And 3PL:NZ send INDF.AN ART NEG.IRR surpass REL.AN send 3AN.OB ART=NEG.
"One who was sent does not surpass the one who sent him." (In 13:16)
M na tisif fun bood si'el wusa.
M ná tīsi, f
                  fύn
                         bòɔd sī̯'əl wūsa.
1SG IRR give 2SG.OB 2SG:NZ want INDF.IN all.
"I will give you anything you want." (Mk 6:23)
Very often either the relative clause is the complement of a verb of cognition.
```

Very often either the relative clause is the complement of a verb of cognition, reporting, or perception, or the pronoun is the complement of such a verb within the relative clause (or both.) Relative clauses with indefinite pronouns as relatives are strongly preferred in clauses corresponding to English "subordinate interrogative clauses" (CGEL pp1070ff, pp972ff.) Such cases account for most relative clauses with uncompounded indefinite pronouns in KB. (For example, 20/33 examples of relative clause with $s\bar{\mathfrak{d}}$ ' in the 1996 NT are of this type.)

```
m na pa'ali γa on nwεnε sɔ'.
m ná pā'alı, yá
                    óπ
                                     nē
                                          S\bar{\mathcal{I}}^{\dagger}
                          wēn
1SG IRR teach 2PL.OB 3AN:NZ resemble with INDF.AN.
"I will teach you what he is like." (Lk 6:47)
                                       "I know who you are." (Lk 4:34)
M mi' fun an so'.
M mí' fún
               àň sɔ̄'.
1SG know 2SG:NZ COP INDF.AN.
David da tum sɔ' ye o bu'osi baŋ pu'a la an sɔ'.
David dá tòm sɔ̄'
                       νέ ò
                               bū'esi ø bán
                                                    pu'ā
                                                              lá ø àň sɔ̄'.
David TNS send INDF.AN that 3AN ask
                                       CAT discover woman: SG ART NZ COP INDF.AN.
"David sent someone to ask and find out who the woman was." (2 Samuel 11:3)
ya na baŋ man yɛl ye m an sɔ' la.
yà ná bāŋ
                   mán yèl yé mà n sɔ'
                                                 lā.
2PL IRR understand 1SG:NZ say that 1SG COP INDF.AN ART.
"you will understand who I say that I am." (In 8:28)
```

```
Gosim ye fu na ban la'abama an so' bunnee?
                                 lá'-bàmmá ø àň sɔ̄'
         γέ fù ná bān
Gàsım
                                                            bύnn\hat{\epsilon}ε=\emptyset?
Look: IMP that 2SG IRR understand item-DEMST.PL NZ COP INDEAN thing: SG=PO?
"Can you look and find out whose property these things are?" (Genesis 38:25)
Alaa mam me ku yeli ya mam nye noor la so' san'ane.
             mέ
Àláa mām
                  kὺ
                          yēlı, yá
                                      mán ňyē nōɔr
                                                          lā sɔ̄'
                                                                    s\dot{a}'an\bar{\varepsilon}=\emptyset.
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 tumi m Ba' zi'el noor so' yela la tisi ya
M ná tōmí m Bá'
                          ø zì'əl nɔɔr
                                             s\bar{\mathfrak{I}}'
                                                    yélà ø tísì yā.
1SG IRR send 1SG 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)
... baŋi ba yaanamɛ an sieba
              bà yāa-námì, ø àň sīəba
... báŋì
... understand 3PL ancestor-PL NZ COP INDF.PL
"... discover who their ancestors were." (Ezra 2:61)
M mi' man gan sieba la.
M mí' mán
                        sīəba lā.
               gāŋ
1SG know 1SG:NZ choose INDF.PL ART.
"I know those whom I have chosen." (In 13:18)
Man mi' si'el nan anε bi'ela.
Mán mị sị əl nān á nē bị əlá.
1SG:NZ know INDF.IN now COP FOC small.ADV.
"What I know now is small." (1 Cor 13:12)
Źп
      vèl sī'əl lā kā'
                           sid\bar{a}a=\emptyset.
3AN:NZ say INDF.IN ART NEG.BE truth=NEG.
"What he says is not true" SB
Kem yeli Joon yaname wum ka nye si'el.
Kèm ø yēli ø
                      Joon yānámì ø wòm kà ňyē sị əl.
Go:IMP CAT say 2PL.SUB John 2PL
                                    NZ hear and see INDF.IN.
```

"Go and tell John what you have heard and seen." (Mt 11:4)

```
Ya baŋ man niŋ si'el la gbinnɛɛ?

Yà báŋ mán nịŋ s<u>i</u>'əl lā gbinnɛɛ=ø?

2PL understand 1SG:NZ do INDEIN ART meaning:SG=CQ?

"Do you understand the meaning of what I have done?" (Jn 13:12)
```

Most occurrences of $s\bar{\imath}|\partial l^a$ in the 1996 NT are as relatives. 75/130 cases in Matthew, Mark, Luke and John show $s\bar{\imath}|\partial l^a$, the entire relative clause, or both as the complement of a verb of cognition, reporting, or perception. Of the remaining 55 examples, in 33 $s\bar{\imath}|\partial l^a$ consistently has an abstract uncountable meaning, shading into "whatever", often with $w\bar{v}sa$ "all"; in the other 22 $s\bar{\imath}|\partial l^a$ has the locative meaning "where, whither"; neither the pronoun nor the clause have the locative particle.

```
Bozugo ya araza'ase be si'el la, ya potenda me bene anina. Bō zúgó yà àrazà'así \emptyset bè sṛ'əl lā, yà pò-tèňda mé bè né ànṭ nā. Because 2PL treasure NZ EXIST INDE.IN ART, 2PL mind:PL too EXIST FOC there. "For where your treasure is, your mind is too." (Mt 6:21, 1996)
```

```
One keŋ likin zi' on ken si'ela. 

Ònι kēŋ l̄ṭkι-n zī' ón kēn s̄ṭ'əla=ø. 

REL.AN go darkness-LOC NEG.KNOW 3AN:NZ go:IPFV INDF.IN=NEG. 

"He who walks in darkness does not know where he is going." (Jn 12:35, 1996)
```

 $S\bar{i}$ ' ∂m^{m} is the corresponding indefinite adverbial form "somehow." As Kusaal frequently uses manner-adverbs as predicative complements, relative clauses with $s\bar{i}$ ' ∂m are common as objects of verbs of cognition, reporting, and perception:

```
Kristo da kpii ti yɛla la kɛ ka ti baŋ nɔŋilim an si'em. Kristo ø dà kpii tì yɛlá lā kɛ́ kà tì báŋ nòŋılím ø àň sṛ'əm. Christ Nz tns die 1PL about ART cause and 1PL realise love Nz COP INDE.ADV "Christ dying for us makes us understand what love is like." (1 Jn 3:16)
```

The article $l\bar{a}'$ has its usual function with $s\bar{i}'\partial m$ -relative clauses:

```
\dot{M} m\dot{l} m\acute{a}n n\grave{a} n\ddot{l} n\ddot{s} n\ddot{l} m\acute{a}m. "I know what to do." 1SG know 1SG:NZ IRR do INDF.ADV.
```

```
M mí¹ mán nà nīŋ sī̞¹əm lā.
1SG know 1SG:NZ IRR do INDF.ADV ART.
"I know what I'm to do" (WK: "You explained the plan earlier; this is my reply when you ask if I remember it")
```

In the 1976 NT almost all relative clauses with $s\bar{l} = m$ and past tense marking have $l\bar{a}'$; 75% lacking $l\bar{a}'$ have irrealis mood. Cf the two standing expressions

```
\acute{on} b\grave{o}od s\~{\it l}'əm "as he wishes" 3AN:NZ want INDF.ADV '' "as things are" 3IN:NZ COP INDE.ADV ART
```

 $Y\grave{\epsilon}l^{\epsilon}$ "say, tell" tends to take a $s\bar{\imath}$ " θm -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 yèlō ø bán nịŋ sị əm lā.

3PL Say 3AN.OB 3PL:NZ do INDF.ADV ART

"They told him what they'd done"

Bà nà yēlı f fón nà nịŋ sị əm.

3PL IRR tell 2SG.OB 2SG:NZ IRR do INDF.ADV.

"They'll tell you what to do."
```

 $P\dot{a}'al^{\varepsilon}$ "teach, inform" nevertheless takes a relative clause object without $l\bar{a}$:

```
Bà pà'alō ø bán nìn sī'əm.

3PL inform 3AN.OB 3PL:NZ do INDF.ADV.

"They informed him of what they'd done."
```

 $G\grave{a}ad^{\varepsilon}$ "pass, surpass" is used with a $s\bar{i}$ " θ m-clause for comparing actions:

Mam tum bedegu gaad ban tum si'em la.

Mām túm bédugū ø gâad bán tùm sṛ'əm lā.

1SG.CNTR work much CAT pass 3PL:NZ work INDF.ADV ART

"I've worked much harder than (how) they have." (2 Cor 11:23)

 $Gb\bar{a}\bar{n}'e'$ "catch" is used with a $s\bar{i}'\partial m$ -clause for "decide what to do":

```
M gbáň'e mán nà nịŋ sị'əm.

1SG seize 1SG:NZ IRR do INDF.ADV.

"I've decided what to do."
```

With verbs of doing, a $s\bar{i}$ ∂m -relative clause can be a manner-adverb:

```
B\grave{a} n\grave{n}g \acute{o}n y\grave{e}l\imath b\bar{a} s\bar{\imath}'\partial m l\bar{a}. 3PL do 3AN:NZ tell 3PL.OB INDF.ADV ART. "They did as he'd told them."
```

 $S\bar{\imath}$ 'əm-relative clauses occur often as objects of $w\bar{\nu}$ "like", $w\bar{\epsilon}n^{\rm na/}$ "resemble"

```
...ka ya na kɛ ka nidib dɔl man wvv ziiŋgba'adibi gban'ad zimi si'em la. ...kà yà ná kɛ́ kà nṇ̄dıb dōl mān wvv zṇiŋ-gbáň'adìb ø ...and <code>3PL IRR</code> cause and person:PL follow <code>1SG.CNTR</code> like fish-catcher:PL NZ <code>gbāň'ad zṃmí sṇ'əm lā</code>. catch:IPFV fish:PL INDF.ADV 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 $s\bar{i}'\partial m$ -clause for "despite how..." 15.

Relative clauses with an indefinite pronoun dependent on a preceding cb are uncommon compared with preposed relative pronouns. KB has only a few cases with $s\bar{\mathfrak{z}}$ or $s\bar{\mathfrak{z}}ba$; $s\bar{\mathfrak{z}}'a$ is commoner, but mostly follows cbs expressing place or time. Indefinite pronouns used as relatives after cbs are not confined to specific indefinite meanings or complements of verbs of cognition, reporting, or perception.

```
Fun bood ye fu ku dau so' la ya'a kpi...
Fύn bòod yέ fù kū dáu-sō'
                                     lā vá' kpì...
2SG:NZ want that 2SG kill man-INDF.AN ART if die...
"If the man whom you are seeking to kill dies ..." (2 Samuel 17:3)
Nidib la da wum Yesu n tum tuum sieba ...
          lā dá wòm Yesu n tòm tòum-sīəba ...
Nīdıb
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 kō nīn-síəbà
                             dá kā'
                                       b\bar{\imath}' \partial l\acute{a}a = \emptyset.
3PL:NZ TNS kill person-INDF.PL TNS NEG.BE few=NEG.
"Those they had killed were not few." (1 Samuel 4:10)
```

Kem tv'vs Samaria na'abi tvm **ninsieba** la na ...

Kèm ø tv'vs Samaria ná'abí ø tvm nṛn-sṛəbà lā nā ...

Go:IMP CAT meet Samaria king:SG NZ send person-INDE.PL ART hither ...

"Go and meet the men sent by the king of Samaria ..." (2 Kings 1:3)

Tiig walaa bigisid lin an **tisi'a**.

Tùng wélà ø bìgusud lín àň tí-sị-a.

Tree:sg fruit:pl cat show:impf 3in:nz cop tree-indf.in.

"It's the fruit of the tree that shows what tree it is." (Mt 12:33)

Ka bugum dit **teŋ tita'asi'a** la nyɔ'ɔs dvt nε agɔl saŋa dinε ka' bɛnnɛ.

Kà bùgύm ø dìt téŋ-tītá'-sī'a lā ňyɔ̂'əs dùt nέ

And fire NZ eat:IPFV land-big-INDF.IN ART smoke ascend:IPFV FOC

àgól sāná dìnı $k\bar{a}$ ' $b\bar{\epsilon}nn\epsilon=\emptyset$.

ADV:upwards time:SG REL.IN NEG.HAVE end:SG=NEG.

"The smoke of the great city which fire consumes goes up eternally." (Rev 19:3) referring to *Babilon ten tita*'ar *la* "the great city of Babylon" (Rev 18:21)

Nannanna, yaname daa səb **gbauŋ si'a** la ka m səbidi lebisidi ya.

Nānná-nā, yānámì ø dāa sōb gbáuŋ-sī៉a lá kà

Now, 2PL NZ TNS write letter-INDF.IN ART and

m sōbidi ø lébisidī vá.

1SG write:IPFV CAT answer:IPFV 2PL.OB.

"Now, it's the letter you wrote that I'm writing back to you about." (1 Cor 7:1)

Paul n sob **gbaun si'a** n tis Efesus dim la

Paul n sɔ̄b qbáun-sī'a n tís Efesus dím lā

Paul NZ write letter- INDF.IN CAT give Ephesus NULL.PL ART

"the letter which Paul wrote to the Ephesians" (NT heading)

42/56 of relative *sī'a* in the 1996 NT follow cbs referring to times or places:

M Zugsoba, ti zi' fun ken **zin'isi'a** la.

 \dot{M} $Z\bar{u}g$ -s $\dot{b}\bar{a}=\emptyset$, $\dot{t}\dot{t}$ $z\bar{t}'$ fin $k\bar{\epsilon}n$ $z'_1\bar{n}'$ - $s'_1\bar{t}$ $l\acute{a}a=\emptyset$.

1SG Head-NULL.AN=VOC, 1PL NEG.KNOW 2SG:NZ go:IPFV place-INDF.IN ART=NEG.

"My Lord, we don't know where you are going." (Jn 14:5, 1996)

Ka bugum nie on be **doog si'a** la ni.

Kà bùgóm níe ón bè dó-sī'a lā ní.

And fire appear 3SG:NZ EXIST room-INDE.IN ART LOC.

"And fire illuminated the room where he was." (Acts 12:7, 1996)

Abraham da nan kae' saŋsi'a la, ka man pun be.

Abraham dá nàm kā'e sān-sí'a lā, kà mān pún bè.

Abraham TNS still NEG.BE time-INDF.IN ART, and 1SG.CNTR already EXIST.

"When Abraham still did not exist, I already existed." (In 8:58, 1996)

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 zịŋ-sị'a yịigá lā, fūn yâ'am ò nɔ̄ɔr ...
and 2SG:NZ catch fish-INDF.IN 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 sōb gbáun yṣigá dāan n tís Korint dím lā ø nwá.
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)
```

21.2.2 With relative pronouns

The commonest type of relative clause begins with a relative pronoun as NP or NP predependent. In origin, these pronouns are short demonstrative pronouns followed by \grave{n} . When the head is the subject of the relative clause, this produces the forms \grave{oni} \grave{kani} \grave{lini} \grave{bani} (always written one kane line bane in KB) where the final - \imath is due to liaison before the nominaliser, which is itself invariably realised \varnothing in this case.

```
\dot{M} ny\dot{\epsilon} d\dot{a}u-k\dot{a}n\iota \sigma z\dot{a}b n\dot{a}'ab l\bar{a}.

1SG see man-DEM.SG NZ fight chief:SG ART

"I saw the man who fought the chief."
```

When the pronoun is not itself the subject of the relative clause one might expect the \dot{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 "those whom the chief fought" WK

DEM.PL and chief:SG ART fight ART

yikan ka mam Paul be la

vī-kán kà mām Paul bɛ́ lā
```

"the house where I, Paul, am" (Rom 16:23, 1976)

house-dem.sg and 1sg.cntr Paul exist art

However, frequently even in older written materials, and almost invariably in KB, the pre-liaison forms are generalised to these cases too; rarely, the nominaliser may be inserted after the relative clause subject as well.

lā sɔ̄b lā

```
letter-DEM.SG and man:SG ART write ART
"the letter which the man has written"

dau kane yadda niŋiri pv zu'oe
dàu-kànı yàddā-niŋirı ø pv zú'e
man-DEM.SG assent-doing:SG NZ NEG.IND become.great
"a man whose faith is not great..." (Mt 14:31)
```

abaun kane ka dau la sob la

gbàun-kàn kà dāu

for

It is thus best to regard $\partial n k \partial n k \partial n$ synchronically as subordinating relative pronouns rather than demonstrative + nominaliser combinations. Where the historically expected $\partial n k \partial n k \partial n$ appear as heads of relative clauses they will elsewhere be regarded as allomorphs of the relative pronouns in that context:

```
M ňyế dáu-kànı zàb nà'ab lā.
1SG see man-REL.SG fight chief:SG ART
"I saw the man who fought the chief."
bàn kà nà'ab lā záb lā "those whom the chief fought."
REL.PL and chief:SG ART fight ART
```

Toende Kusaal shows the same development (nominaliser- \dot{n} is ne in Toende):

```
N sa nye buraa kanne da da'a gbana la.
"I saw the man who bought the book." (Abubakari 2011)
```

```
N sa nye buraa kanne ka Ayi da nye la.
"I saw the man that Ayi saw." ibid
```

If the antecedent is the subject within a relative clause, or a predependent of the subject, a relative pronoun must be used:

```
b\grave{a}n\imath \ z\grave{a}b \ n\grave{a}'ab \ l\bar{a} "those who fought the chief" REL.PL fight chief:SG ART
```

```
M ňyé dáu-kànı zàb nà'ab lā.
1SG see man-REL.SG fight chief:SG ART
"I saw the man who fought the chief."
```

nimbanε yuda səb Pεbil la gbauŋun linε an nyəvupaal dim gbauŋ la nṣn-bán\(\text{nin}\) yūdá sāb Pē'-bṣl\(\text{la gbáuŋv-n lín\)\(\text{person-REL.PL name:PL write sheep-small:SG ART book:SG-LOC REL.IN\(\text{àň ňyó-vv-pâal}\) dim gbáuŋ lā\(\text{cop breath-alive-new:SG NULL.PL book:SG ART}\)
"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 antecedent extracted from a prepositional phrase or subordinate clause. The antecedent is preposed with $k\dot{a}$ with a resumptive pronoun in any gap left by extraction, for an indirect object, or occasionally for a human-reference direct object. There is no foregrounding sense. Such constructions are commoner than indefinite pronouns as relatives, except with clauses used adverbially or of "subordinate interrogative" type.

Gbauŋ kane ka Jerusalem kpeenmnam daa sob la nwa.

Gbàuŋ-kànı kà Jerusalem kpɛɛňm-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 mor na
m̀ àntù'a lìnι kà bà mōr nā

1SG case REL.IN and 3PL have hither
"the charge they are bringing against me" (Acts 25:11)

yɛltɔɔd ayɔpɔi banɛ ka maliaknama ayɔpɔi mɔr la yɛ̄l-tɔ̂ɔd àyɔ́pɔ̀e bánì kà maliak-námá àyɔ́pɔ̀e mōr lā matter-bitter:Pl Num:seven rel.Pl and angel-pl Num:seven have art "the seven plagues which the seven angels have" (Rev 15:8)

niŋkanε [1996 niŋkan] ka ba gban'e o la
nṣ̄n-kánì kà bà gbán'o ø lā
person-REL.SG and 3PL seize 3AN.OB ART
"a person whom they have seized" (Acts 25:16) (human VP object)

 ${\it One}$ ka ba tis ${\it o}$ ka li zu'oe, ba me mor puten'er ye o na lebis line zu'oe.

 $\grave{\partial}n\imath$ $k\grave{a}$ $b\grave{a}$ $t\acute{i}s\grave{o}$ \varnothing $k\grave{a}$ $l\grave{\imath}$ $z\acute{u}$ 'e, $b\grave{a}$ $m\grave{\varepsilon}$ $m\grave{o}r$ REL.AN and 3PL give 3AN.OB and 3IN become.much, 3PL also have $p\acute{v}$ - $t\grave{\varepsilon}\check{n}$ ' εr $y\acute{\varepsilon}$ \grave{o} $n\grave{a}$ $l\bar{\varepsilon}b\imath s$ $l\acute{i}n\grave{\imath}$ $z\grave{u}$ 'e. inside-mind:sg that 3AN IRR return REL.IN become.much.

"Whom they have given much to, they expect he will return much." (Lk 12:48)

nimbane ka ya ten'es ye ba ane tuongatib la nṛn-bánì kà yà teñ'es yé bà à nē tûen-gātíb lā person-rel.pl and 2pl think that 3pl cop foc ahead-passer:pl art "those whom you consider to be leaders" (Gal 2:6)

linε [1996 lin] ka Kristo bood ye ti pian' la lìnι kà Kristo bôod yέ tì pịāň' lā
REL.IN and Christ want that 1PL speak ART
"what Christ wishes us to say" (2 Cor 12:19)

If the antecedent is a predependent in an NP which is not the subject, that entire NP is preposed, but obviously no resumptive pronoun is needed:

Samaritan nid (**on** buudi ka Jew dim kis)
Samaritan nid, on būudi kà Jew dim kis
Samaritan person:sg rel.an tribe:sg and Jew null.pl hate
"a Samaritan, **whose** tribe the Jews hate" (Lk 10:33, 1996)

bikanɛ [1996 biig kan] pvvg ka o mɔr la
bṛ-kànı pvvg kà ò mɔr 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 $n\bar{\imath}$:

yikan ka mam Paul be la yidaan yṣ-kán kà mām Paul bɛ lā yṣ-dâan 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)

22 Complementised clauses

Complementised clauses are usually introduced by the clause linker $y\bar{\varepsilon}$. They also appear with $k\dot{a}$, but much less often, and never exclusively; constructions which only permit $k\dot{a}$ and never $y\bar{\varepsilon}$ must be coordination or catenation. Complementised clauses follow any catenated clauses. They can be coordinated with $k\dot{a}$:

ka lin ans ye fo ko maali ti be'ede nwene tiname daa po maalif be'ed si'em la asee so'om ma'aa, ka ye fo yim ne sumbogosom la.

```
kà
    līn
              nē γέ fừ kừ
                                 māalí tì bē'edi ø wēn
                                                                 nē
and 3IN.CNTR COP FOC that 2SG NEG.IRR make 1PL bad
                                                   CAT resemble with
tīnámì ø dāa pū
                     máalì, f
                                  bē'εd sī'əm
                                               lá àsέε
                                                          sùm má'àa,
        NZ TNS NEG.IND make 2SG.OB bad INDF.ADV ART except good only
1PI.
kà νέ
       fὺ yīm
                       nē
                            súmbūgusím lā.
and that 2SG emerge: IMP with peace
"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)
```

22.1 Purpose clauses

Purpose clauses lack independency marking and have imperative mood. As there is no -ma flexion, the mood 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 the meaning is sometimes attenuated from "so that" to merely "until."

Purpose clauses may be VP adjuncts:

```
Bà tìsō, ø
                  kû'θm νέ
                               ò nū.
3PL give 3AN.OB water that 3AN drink.
"They gave him water to drink. ("So that he might drink it.")
\dot{M} ná tī, f
                     tîım
                                νέ
                                     fù nīf
                                                 dā
                                                          z\acute{a}b\bar{\varepsilon}=\emptyset.
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."
Ò vùl
                                  nábìr dā
              tîım
                          kà ò
                                                   z\acute{a}b\bar{\varepsilon}=\emptyset.
3AN swallow medicine and 3AN leg:SG NEG.IMP fight=NEG.
"She took medicine so her leg wouldn't hurt." WK
```

```
Ka ba gban'e ba kpɛn'ɛs sanrega ni ye bɛog nie.
```

```
Kà bà gb\acute{a}n'a\_b\bar{a}\_ ø kp\acute{e}n'es s\bar{a}r_{1}g\acute{a} nì y\bar{e} b\bar{e}og níe.
```

And 3PL seize 3PL.OB CAT put.in prison:SG LOC that morning appear.

"They seized them and put them in prison until tomorrow came." (Acts 4:3)

Purpose clauses can be coordinated without repetition of $v\bar{\varepsilon}$:

```
\dot{M} b\hat{\sigma}od y\bar{\epsilon} d\bar{a}u l\bar{a} k\bar{\epsilon}\eta d\hat{a}'a-n, k\dot{a} pu'\bar{a} l\bar{a} d\bar{\nu}g d\bar{\nu}b.

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 $b \partial d^a$ "want"; or $y \dot{\epsilon} l^{\epsilon}$ "tell." Negative raising occurs with $b \partial d^a$ but not with $y \dot{\epsilon} l^{\epsilon}$.

```
\dot{M} b\hat{\sigma}od y\hat{\epsilon} \dot{o} k\bar{u}l. "I want her to go home." 1SG want that 3AN go.home.
```

```
\dot{M} p\bar{v} b\hat{\sigma} d y\hat{\varepsilon} \dot{m} k\bar{u}l\varepsilon=\emptyset.
```

1SG NEG.IND want that 1SG go.home=NEG.

"I don't want [me] to go home."

```
\dot{M} yέl\bar{\iota} f yέ f\dot{\upsilon} d\bar{a} k\bar{u}l\epsilon=\emptyset.
```

1SG tell 2SG.OB that 2SG NEG.IMP go.home=NEG.

"I've told you not to go home."

The verb $g\bar{u}r^{al}$ "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 $y\bar{\varepsilon}$, again with an attenuated sense:

```
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)

```
... gur ye pu'a la du'a ka o ɔnb biig la.
```

```
... gūr yē pu'ā lā du'á kà ò ɔ́n̈b bīig lā
```

...watch that woman:sg art bear and 3AN eat child:sg art.

[&]quot;...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"; $li\ a\ [n\bar{\epsilon}]\ t\bar{\iota}l\acute{a}s$ "it is necessary":

```
Fὺ ρῦ
           n\bar{a}r v\varepsilon f\dot{v} nin \dot{a}l\dot{a}a=\emptyset.
2SG NEGIND must that 2SG do ADV:thus=NEG.
"You're not allowed to do that."
Lì nàr yé/kà
                                        "You must go home."
                  fù kūl.
3IN must that/and 2SG go.home.
In KB there are 258 examples of nar ye to 45 of nar ka.
Yà mór sūer
                 νέ
                     yà kūl.
                                        "You may go home."
2PL have way:sg that 2PL go.home.
Sūer bέ yé/kà
                      tì kūl.
                                        "We may go home."
                                        ("There's a way that we go home.")
Way:SG EXIST that/and 1PL go.home.
Li ane tilas ye m ken Jerusalem.
Lì à nĒ tīlás
                     νέ m kēŋ Jerusalem.
3IN 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 m nínìd àlá.
3IN COP FOC necessity and 1SG do: IPFV ADV: thus.
"I must do that." (1 Cor 9:16, 1996); there are no examples with k\dot{a} in KB
N\bar{a}r^{\mathrm{a}/\mathrm{a}} is occasionally used in a personal construction "deserve that":
babayi' la nar ye ba kuu ba
bà bàyí'
            lā nár vé bà kóu bā
3PL NUM:two art must that 3PL kill 3PL.OB
"both of them must be killed" (Leviticus 20:12)
```

CAT must and IRR prevail CAT unstick glue ART ...?

tītābir lā ...?

Anɔ'ɔnɛ nar ka na nyaŋi lak titabir la ... Ànɔʻɔnì ø nár kà ná ňyāŋı ø lāk

"Who is worthy to open the seal ...?" (Rev 5:2)

Who

22.2 Content clauses

ban mi' ye biig la kpine la zug

Complementised clauses with independency marking <u>16.6</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, such as $y \grave{\epsilon} l^{\epsilon}$ "say", $w \grave{\nu} m^m$ "hear", $n \check{\nu} g \bar{\epsilon}$ "see", $t \bar{\epsilon} n \check{\nu} e s^{\epsilon} l$ "think", $m \bar{\ell}$ "know", $z \bar{\iota}$ "not know", $b \grave{\lambda} \eta^{\epsilon}$ "come to know", $b \grave{\lambda} q \bar{\epsilon}$ "teach, show", $b \grave{\lambda} q \bar{\epsilon}$ "read", $b \hat{\lambda} q \bar{\epsilon}$ "agree." Various main-clause features appear in e.g.

```
bán mị'
             νē 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-n\bar{\epsilon}^{l}
Bùŋ-bāň'ad
                  z\bar{\imath}'
                             νĒ
                                  tēη
                                             t \circ ll \bar{a} = \emptyset.
Donkey-rider:sg NEG.KNOW that ground:sg be.hot=NEG.
"The donkey-rider doesn't know the ground is hot."
Tone overlay: T\bar{\epsilon}\eta t\dot{\nu}l. "The ground is hot." cf t\bar{\nu}l^{la/} "be hot"
Fune siak ye fu ya'a ti kae, o na zin'ini fu na'am gbaun la zugoo?
         ø siák vé fò vá' tì
                                                ò nà zīň'iní, fò nā'am
                                       kā'e,
2SG.CNTR CAT agree that 2SG if after NEG.BE, 3AN IRR sit
                                                                 2SG chieftaincy
gbáun lā zúgóz=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): yá'-clause postlinker adjunct
```

Absolute clauses $\underline{21.1}$ cannot be used as objects of such verbs, but another possibility apart from content clauses is NP + $y\bar{\epsilon}l\acute{a}$ "about" $\underline{13.5}$.

Except in indirect speech (see below), content clauses are usually declarative. There are exceptions, possibly characteristic of verbs of opinion and judgment:

```
Ya tenes ka m aan ano'one?

Yà têň'es kà m áaň ànó'onè=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 $t\bar{\varepsilon}\check{n}'\varepsilon s^{\varepsilon/}$ "think." KB has 219 examples of $t\varepsilon n\varepsilon s$ ye to 31 of $t\varepsilon n\varepsilon s$ 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)
```

 $K\grave{a}$ + content clause is the only context where $k\grave{a}$ is followed by independency marking, and where $k\grave{a}$ does not delete a following subject pronoun with the same reference as the preceding subject:

```
\dot{M} t\hat{\epsilon}\check{n}'\epsilon s \,k\grave{a} \dot{m} l\acute{u} y\bar{a}. "I think I've fallen" WK 1SG think and 1SG fall PFV.
```

There are a few examples in KB of $n\varepsilon$ for $y\varepsilon$ $y\bar{\varepsilon}$ "that" (cf Mampruli ni id):

```
Man bɔɔdin nɛ yanamɛ naan aan ma'asiga bɛɛ yanamɛ naan aan tvvliga.

Mān bɔɔdī-n nē yānámì ø nāan âa-n mā'asigā bēɛ

1SG.CNTR want-DP that 2PL NZ then COP-DP cold:ADV or
yānámì ø nāan âa-n tvvlígā.

2PL NZ then COP-DP hot:ADV.

"I might wish you had been cold or you had been hot." (Rev 3:15)
```

The verb $v \ge l$ is frequently ellipted before $v \ge l$:

```
Ka Zugsəb la ye ... "And the Lord said: ..." (Genesis 18:28) 

Kà Zūg-sɔ́b lā yē ... 

And head-NULLAN 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 gèeňm nē ... kà Paul lébìs Festus shout Paul that 3AN go.mad Foc ... and Paul reply yē \bar{o}n p\bar{v} géeňmm=\emptyset. 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

```
O yèl yē \bar{o}n ná kúv b\bar{a}.

3AN say that 3AN.CNTR IRR kill 3PL.OB.
```

Ò dāa yél yé bà dāa kūl.

It is possible to say \grave{O} $y\grave{\epsilon}l$ $y\acute{\epsilon}$ \grave{o} $n\grave{a}$ $k\acute{v}v$ $b\bar{a}$, 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:

```
3AN TNS say that 3PL TNS go.home.

"She said that they had gone home."

Tì dāa tēň'ɛs yé ò nà zāb nâ'ab lā.

1PL TNS think that 3AN IRR fight chief:sG ART.

"We thought he was going to fight the chief."
```

22.2.1 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'osó 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{e} \check{n}' ò s \bar{u} u \check{n} r \check{i} - n ...?

enter 3an heart:sg-loc ...?

"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.

Indirect speech is an alternative to catenation with $k\bar{\varepsilon}$ 19.2 for expressing third/first person commands; main clause and linker may again be ellipted informally:

```
1SG say that 3AN look:IMP ground:SG-LOC.

"[I said] she should look down."

[M têň'ɛs kà] tì pú'vsìm Wínà'am.

1SG think and 1PL greet:IMP God.

"[I think] we should praise God."
```

 $[\dot{M} \ v \dot{\epsilon} l \ v \dot{\epsilon}] \dot{o}$

A main clause with no VP can also appear in indirect speech:

```
O \hat{y} \hat{z} \hat{z} \hat{z} \hat{z} \hat{z} \hat{z} \hat{z} "She said \hat{z}" "She said \hat{z} "She said \hat{z}" "She said \hat{
```

gòsim tēŋi-n.

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 m̀ wóm Wínà'am kókór kà lì ȳ áràzánà ní nā yē, And 1sg hear God voice:sg and 3IN emerge heaven loc hither that ò n̄talbá=ø, yɛ bà yṛmī 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** $y\bar{\varepsilon}$ at intervals of roughly every third clause, after any prelinker adjuncts but before clause-linker $k\dot{a}$:

```
amaa ye ba yaanam da pu bood ye ba siak o noore àmáa yé bà yāa-nám dá p\bar{v} bôɔd yé bà siákò ø nōɔré=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.
```

```
Yế kà Paul yếl yế ò bòod yế 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 yế kà 5n yếlì 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 yế kà 5n kế kà bà m5ró 🛒 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 $y\bar{\varepsilon}$ 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 y $\acute{\epsilon}$ ò nìn $\ddot{\imath}$ bá Wínà'am n $\acute{\epsilon}$ ò p $\grave{\upsilon}$ -pì \eth lım And now-hither that 3AN do 3PL.OB God with 3AN inside-whiteness pi \mathring{a} n \acute{u} 'us $\ddot{\imath}$ -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 kèlisim!
3AN friend-PL with 3AN father-PL=VOC that 3PL listen:IMP!
"His friends and his fathers should listen." (Acts 7:2, 1976)
```

23 Negation

Negation is marked in the VP $\underline{16.5}$, inducing a clause-final negative clitic $\underline{4.1}$. The negative prosodic clitic follows all subordinate clauses:

```
Ti pv bood ye dau kaŋa aan ti na'aba.

Ti p\bar{v} bôod yē dáu-kàŋā áaň tì nà'abā=ø.

1PL NEG.IND want that man-DEMST.SG COP 1PL king:SG=NEG.

"We don't want this man to be our king." (Lk 19:14)
```

I have no unequivocal examples of negative clitics preceding subordinate clauses to exclude them from the scope of negation. Thus the adjunct $y\bar{\varepsilon}$ -clause has probably been dislocated in:

```
Nidib be ka pu tum si'ela ye ba a popielim dim...
```

```
N\bar{i}dib b\acute{\epsilon} k\grave{a} p\bar{v} t\acute{v}m s\bar{i}'əla=\emptyset y\acute{\epsilon} b\grave{a} a\check{n} p\acute{v}-p\grave{i}əlim d\acute{i}m person:PL EXIST and NEG.IND Work:IPFV INDF.IN=NEG that 3PL COP holiness NULL.PL. "There are people who haven't done anything that they become blessed" (Rom 4:5, 1976); revised completely in the 1996 version.
```

Here the $k\dot{a}$ -clause can be taken as coordinate, carrying on the narrative:

```
Ka li pv yuugɛ ka o pu'a mɛ kena.

Kà lì pv̄ yúugɛ̄=ø, kà ò pu̯'ā mɛ́ kɛ̄ nā.

And 3IN NEG.IND delay=NEG, and 3AN wife:sG also come hither.

"Not much later, his wife came too." (Acts 5:7)
```

Negative clitics are omitted after \dot{n} -clauses containing a negative unless they both lack articles and are clause-final within the main clause, and likewise with VPs nominalised by the personifier particle:

```
N\bar{\imath}n-b\acute{a}n\grave{\imath} p\bar{v} d\acute{\imath}t n\acute{a} kp\bar{\imath}.
Person-Rel.PL NEG.IND eat:IPFV IRR die.
"People who don't eat will die." WK \dot{M} n\acute{\gamma}\acute{e} n\bar{\imath}n-b\acute{a}n\grave{\imath} p\bar{v} d\acute{\imath}t\bar{a}=\not{e}.
1SG see person-Rel.PL NEG.IND eat:IPFV=NEG.
```

"I've seen some people who don't eat." WK

Apozotyel da ane o saam biig ma'aa.

À-Pū-zót-yēl dá à né ò sàam bậig 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

Clauses with $y\dot{a}'$ "if" keep their own negative clitics:

Ba ya'a **pv** niŋ **si'ela**, o pv'vsim dəəg la na lieb zaalim.

Bà yá' $p\bar{v}$ $nín si' ə la = \emptyset$, ò $p\dot{v}'vsim$ dôog $l\bar{a}$ ná $l\bar{i}$ = b $z\bar{a}alím$.

3PL if NEG.IND do INDF.IN=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)

Negative raising takes place with complement clauses after verbs expressing opinions or judgments, but not verbs of knowing or informing:

Li pu nar ye fu di fu ba'abiig po'a Herodiase.

Lì $p\bar{v}$ $n\bar{a}r$ $y\acute{\varepsilon}$ $f\grave{v}$ $d\acute{\iota}$ $f\grave{v}$ $b\bar{a}'$ - $b\hat{\iota}ig$ $p\underline{v}'\acute{a}$ $Herodias\varepsilon=\varnothing$.

3IN 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 pu bood ye dau kana aan ti na'aba.

Tì $p\bar{v}$ $b\hat{o}$ $d\hat{u}$ $d\hat{u}$ d

1PL NEG.IND want that man-demst.sg cop 1PL king:sg=neg.

"We don't want this man to be our king." (Lk 19:14)

mam pv ten'es ye o na keligi m pian'ade.

 $M\bar{a}m\ p\bar{v}$ $t\bar{\epsilon}\check{n}'\epsilon s\ y\dot{\epsilon}$ \grave{o} $n\grave{a}$ $k\bar{\epsilon}l\imath g\imath(\hat{m})$ $p\imath\grave{a}\check{n}'ad\bar{\epsilon}=\emptyset$.

1SG NEG.IND think that 3AN IRR listen 1SG word:PL=NEG.

"I do not think that he will listen to my words." (Job 9:16)

vs linzug ka ti baŋ ye o pv yi Wina'am san'an naa.

Lìn-zúg kà tì báŋ y $\dot{\varepsilon}$ ò $p\bar{v}$ y \bar{i} Wínà'am sâ'an náa= ϕ .

Therefore and 1PL realise that 3AN NEG.IND emerge God with hither=NEG.

"Therefore we realise he has not come from God." (In 9:16)

ka o lεε pv baŋ ye li anε onε.

kà ὸ lέε pū báŋ yέ lì à nĒ ɔ̄nε=ø.

And SAN but NEG.IND realise that SIN COP FOC SAN.CNTR=NEG.

"but she didn't realise it was him." (In 20:14)

Constituent negation can be achieved by clefting, using $Li\ k\bar{a}'\ X\ k\dot{a}/n\ ...$ "It's not X that ..." or X $k\dot{a}'e\ k\dot{a}/n\ ...$ "There's no X that ...", or with relative clauses:

```
Sogia so' kae' n tum ka yood o meŋa.
```

```
S \acute{g} \dot{a} \dot{a} \dot{s} \dot{b} k \ddot{a} \dot{e} n t \acute{v} m k \grave{a} y \ddot{b} \dot{b} o m \ddot{e} \eta \acute{a} = \rlap/e g.
```

Soldier-INDE.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 k\bar{a}' fún yèl s\bar{i}'əl lā zúg k\dot{a} tì nin\dot{o} \emptyset yáddáa=\emptyset.

3IN again NEG.BE 2SG:NZ say INDF.IN 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)
```

... ka zan'as banε ka' Kristo nidib la sυŋir.

```
... kà zâň'as bánì kā' Kristo nídìb lā súŋìr.
```

... and refuse REL.PL NEG.BE Christ person:PL ART help:GER.

The AdvP $b\acute{a}a$ $b\bar{i}$ "not at all" and the NP postdependent $b\acute{a}a$ $y\bar{\imath}nn\acute{\imath}$ "not one" (Hausa $b\^{a}a$ "not exist") are used along with negative VPs:

Da tumi si'el baa bi'elaa.

```
Dā túmī ø sīˈəl báa bī̞ˈəláa=ø.
```

NEG.IMP work 2PL.SUB INDEIN at.all=NEG.

Amaa ba pv nyaŋi nyɛ linɛ tu'al baa yinne.

```
Àmáa bà pō ňyānı ø ňyē línì tò'al báa yīnní.
```

But 3PL NEG.IND prevail CAT find REL.IN condemn [NEG] not one.

Ka nid baa yinne pv yɛl ye ...

```
Kà n\bar{i}d báa y\bar{i}nni p\bar{v} y\acute{\epsilon}l y\bar{\epsilon}... and person:sg not one NEG.IND say that ... "Not one person said ..." (Acts 4:32)
```

Fv du'adib baa yinne kae ka o yv'vr buon alaa.

```
Fù dō'adıb báa yīnní ká'e kà ò yō'vr bûen 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)
```

[&]quot;... and refused the help of non-Christians." (3 Jn 1:7)

[&]quot;Do no work at all." (Leviticus 23:31)

[&]quot;But they couldn't find anything condemning, not one thing." (Mt 26:60)

24 Information packaging

24.1 Focus

According to 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 further distinction will be made between **ordinary** and **contrastive focus**. Main clauses without any special syntactic marking of focus have ordinary focus on the predicate by default.

Focus is distinct from **foregrounding**, the usual function of it-clefting in English; foregrounded elements need not be focussed (CGEL p1424.)

24.1.1 Subjects

In subject focussing the subject stands first, with the rest of the clause introduced by catenator-n. The clause lacks independency marking but has independent tense marking. The construction presumably arose by ellipsis from n-clefting 24.2, but the meaning is *focus* rather than foregrounding:

```
Wáafò ø dúmō 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- $n\bar{\varepsilon}'$ in all its roles is excluded from clauses which are n-focussed, with the corresponding VP aspect distinctions present but unmarked:

```
\dot{M} z\bar{u}gv \varnothing z\acute{a}b\grave{\iota}d. "My head is hurting." (Reply to "Where is the pain?") cf \dot{M} z\bar{u}g l\bar{a} p\acute{v}'al\grave{\iota}m n\bar{\varepsilon}. "My head is hurting." 1SG head ART damage:IPFV FOC. (Reply to "What's the matter with you?")
```

Interrogative pronouns as subjects are always *n*-focussed:

```
Ànɔʻɔnì ø kābırídà=ø?
Who cat ask.for.entry:IPFV=CQ?
"Who is asking permission to enter?"
```

As clauses containing interrogative pronouns may not contain focus- $n\bar{\epsilon}'$, this is most readily explained by taking interrogative pronouns as intrinsically focussed, though this is only syntactically manifested when they are subjects.

24.1.2 Verb phrases

Preceding a VP constituent, the particle $n\bar{\varepsilon}^I$ focusses that constituent, while VP-final $n\bar{\varepsilon}^I$ focusses the entire VP contrastively.

On distinguishing constituent-focus $n\bar{\epsilon}'$ from the preposition $n\bar{\epsilon}$ "with, and" see 16.9.4. Confusion with the $n\bar{\epsilon}$ following objects of comparison is unlikely 15.

The aspect particle $n\bar{\epsilon}'$ bound to the verb <u>16.2.1</u> represents a specialised use of the same particle for temporal focus. The aspectual interpretation normally prevails over constituent focus. When $n\bar{\epsilon}'$ is excluded by formal constraints, or is present but separated from the verb by free words, the different aspectual meanings still appear if the verb meaning permits it, but are unmarked.

 $N\bar{\epsilon}^{\prime}$ 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. Fù pō má' n tìs nṇn-sáalā=ø, àmáa fù má' 2SG NEG.IND lie CAT give person-smooth:SG=NEG but 2SG lie n tís nē Wínà'am Sí-sùŋ. CAT give FOC God Spirit-good:SG. "You have not lied to a human being, but you have lied to the Holy Spirit." (Acts 5:4, 1996)
```

 $N\bar{\epsilon}^{\prime}$ cannot appear in either constituent-focus or aspectual senses if the subject is focussed, or in nominalised clauses, or in content questions.

N-focussing of the subject:

```
\dot{M} z\bar{u}gv \varnothing z\acute{a}b\grave{\iota}d. "My head is hurting/hurts." (No aspectual n\bar{\varepsilon}') 1SG head CAT fight:IPFV. Reply to "Where is the pain?" \dot{A}n\acute{o}'on \dot{\omega} \dot{\omega
```

Nominalised clauses:

```
\dot{O} d\bar{a}a \acute{a} n\bar{\epsilon} b\bar{\imath}ig. "She was a child."

3AN TNS COP FOC child:SG.

but \acute{o}n \grave{a}\breve{n} b\bar{\imath}ig l\bar{a} z\acute{u}g "because she's a child"

3AN:NZ COP child:SG ART upon
```

 \dot{M} $y\dot{i}$ $n\bar{\varepsilon}$ $B\acute{o}k$. "I come from Bawku." SB 1SG emerge FOC Bawku.

but Meeri one yi Magdala "Mary who came from Magdala"

Meeri ɔ́nì ȳ Magdala (Mk 16:9, 1996)

Mary REL.AN emerge Magdala

Focus- $n\bar{\varepsilon}^{\prime}$ can occur in complementised clauses, including purpose clauses:

Pian'am ka m bood ye fo nye $\mathbf{n}\varepsilon$ bood. Pian'am kà m bôod yé fò ny $\bar{\varepsilon}$ n $\bar{\varepsilon}$ bōod. Speak:IMP and 1SG want that 2SG see FOC innocence. "Speak, for I want you to be vindicated." (Job 33:32)

Content questions:

B5 $k\grave{a}$ $f\grave{v}$ $k\acute{v}mm\grave{a}=\varnothing$? "Why are you crying/do you cry? What and 2sG cry:IPFV=CQ?

Fù níŋìd $b \acute{o} = \varnothing$? "What are you doing/do you do?" 2SG do:IPFV what=co?

 $F\dot{v}$ $w\dot{a}'e$ $y\dot{a}a=\varnothing$? "Where are you going/do you go?" 2SG go where=cQ?

Bùgóm lā yít yáa ní ná=ø? Fire ART emerge:IPFV where LOC hither=CQ? "Where is the light coming from?" SB

 \dot{M} á $n\bar{\varepsilon}$ dā μ . "I am a man."

but $M\bar{a}m$ $\acute{a}\breve{n}$ $b\acute{o}=\varnothing$? "What am I?" 1SG.CNTR COP what=cQ?

 $F\dot{v}$ áaň \dot{a} nó'ɔn $\dot{\varepsilon}$ = \emptyset ? "Who are you?" 2SG COP who=CQ?

Fù bôɔd bó= \emptyset ? "What do you want?" 2SG want what=co?

```
but F\dot{v} b\hat{\sigma}od n\bar{\varepsilon} b\hat{\sigma}=\emptyset? "What do you want it with?" 2SG want with what=cQ? N\bar{\varepsilon} must be interpreted as preposition (WK)
```

Certain words do not prevent focus- $n\bar{\epsilon}'$ from being used in the clause but cannot themselves be focussed. They include $s\dot{v}\eta\bar{a}'$ "good", $s\dot{v}m^{\rm m}$ "good", $b\bar{\epsilon}'\epsilon d^{\epsilon}$ "bad", $s\dot{\imath}da$ "truth" when used as adverbs, and the "two, three exactly" quantifier forms $\dot{a}y\dot{\eta}\bar{a}'$ $\dot{a}t\dot{a}\eta\bar{a}'$. AdvPs formed by coordinating such words and NPs with these quantifiers as dependents share the same property.

```
Lì àň súŋā.

"It's good."

Lì àň bē'ɛd.

"It's bad."

3IN COP bad:ABSTR.

[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>16.2.3</u>.

VP constituent focus with $n\bar{\varepsilon}^I$, as opposed to focus on the entire VP, is possible only in statements and polar questions. The aspectual sense of $n\bar{\varepsilon}^I$ must be impossible and the constituent in question must permit $n\bar{\varepsilon}^I$ -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:

```
\dot{M} d\dot{a}' b\dot{v}g.

"I've bought a donkey."

("What have you done?")

\dot{M} d\dot{a}' n\bar{\varepsilon} b\dot{v}g.

"I've bought a donkey."

1SG buy FOC donkey:SG.

"I've bought a donkey."

("What have you bought?")

N\bar{i}ig\dot{i} \partial \tilde{n}bid n\bar{\varepsilon} m\bar{\partial} od.

"Cows eat grass."

Cow:PL chew:IPFV FOC grass:PL.

("What do [generic] cows eat?")
```

However, under the scope of a negative, focus is likely to be **contrastive**:

```
\dot{M} p\bar{v} d\acute{a}' b\grave{v}\eta\bar{a}=\varnothing. "I haven't bought a donkey." 1SG NEG.IND buy donkey:SG=NEG.
```

```
\dot{M} p\bar{v} d\dot{a}' n\bar{\varepsilon} b\dot{v}\eta\bar{a}=\emptyset. "I haven't bought a donkey." 1SG NEG.IND buy FOC donkey:SG=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:

```
N\bar{i}igi l\bar{a} \acute{o}nbid n\bar{\epsilon} m\bar{o}od l\bar{a}. Cow:PL ART chew:IPFV FOC grass:PL ART. "The cows are eating the grass."
```

If focus does occur with old-information arguments, it is **contrastive**.

Line ka ba'amaannib maanne tisid bada la, ba maanne tisid $n\varepsilon$ kikiris, ka pu maanne tisid Wina'am.

Lìni kà bà'-māannib mâanni ø tísìd bádà lā, bà màanni rel.in and idol-sacrifice:pl sacrifice:ipfv cat give:ipfv idol:pl art 3pl sacrifice:ipfv ø tísìd nē kíkṣrıs kà pō mâanni ø tísìd Wínā'amm=ø. cat give:ipfv foc fairy:pl and neg.ind sacrifice:ipfv cat give:ipfv 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 $\grave{a} \not\in \breve{n}^a$ "be something/somehow" in its ascriptive sense $\underline{16.12.2}$ is non-referring and prototypically "unpredictable or pragmatically non-recoverable", and therefore is naturally preceded by $n\bar{\epsilon}^l$ for **ordinary** focus:

```
\dot{O} à n\bar{\varepsilon} b\bar{\imath}ig. "She is a child."

3AN COP FOC child:SG.

\dot{O} d\bar{a}a á n\bar{\varepsilon} b\bar{\imath}ig. "She was a child."

3AN TNS COP FOC child:SG.

D\bar{\imath}ib á n\bar{\varepsilon} b\bar{\nu}n-s\dot{\nu}\eta. "Food is a good thing."
```

Food COP FOC thing-good:SG.

```
\grave{O} \grave{a} n\bar{\varepsilon} b\bar{a}a\breve{n}l\acute{t}m. "She is quiet." 3AN COP FOC quiet: ABSTR. Lì \grave{a} n\bar{\varepsilon} b\bar{v}gvs\acute{t}g\bar{a}. "It's soft." 3IN COP FOC soft: ADV.
```

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 ... Kà būn-búudà bànı lù gòň'os súugū-n lā á nē And thing-planting:Pl rel.Pl fall thorn:Pl among-loc art cop foc bánì wùm piàň'ad lā ... rel.Pl hear speech art ... "And the seeds which fell among thorns are those who heard the word ..." (Lk 8:14, explaining the meaning of the parable)
```

Biis la diemid nɛ dua gbinin. Ba zamisid nɛ bula wa'ab. Ba anɛ Apam biis. B̄iis lā dí'əmìd nē dúaň gbínnī-n. Bà zàmisid nē Child:PL ART play:IPFV FOC dawadawa:SG base:SG-LOC. 3PL learn:IPFV FOC būla wâ'ab. Bà à nɛ 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

In this context proper names are not referential:

(The *relationship* between Apam and the children is new information.)

```
O yv'vr na anɛ Joon. "His name will be John." (Lk 1:60) 
Ò y\bar{v}'vr ná \bar{a} n\bar{\epsilon} Joon. 
3AN name:sg irr cop foc John.
```

Focus under the scope of a negative is again usually **contrastive**:

```
\dot{M} k\bar{a}^{!} d\dot{v}^{!}at\bar{a}a=\emptyset. "I'm not a doctor."

1SG NEG.BE doctor:SG=NEG.

\dot{M} k\bar{a}^{!} n\bar{\varepsilon} d\dot{v}^{!}at\bar{a}a=\emptyset. "I'm not a doctor." ("I'm a nurse.")

1SG NEG.BE FOC doctor:SG=NEG.
```

Focus on a **locative complement** typically involves either a place name or a definite predependent with a postposition. The fact that a referent is at a known place is new information.

```
D\bar{a}\mu l\bar{a} b\dot{\epsilon} n\bar{\epsilon} d\acute{o}-k\grave{a}n\bar{a} l\bar{a} p\acute{v}vg\bar{v}-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 p8 $M\bar{a}m$ $b\dot{\epsilon}$ $n\bar{\epsilon}$ $m\bar{\rho} g v$ -n. 1SG.CNTR EXIST FOC grass:SG-LOC.

 \dot{M} $y\dot{i}$ $n\bar{\varepsilon}$ $B\acute{o}k$. "I come from Bawku." SB 1SG emerge FOC Bawku.

Yadda niŋir yitnɛ labaar la wvmmvg ni. Yàddā-niŋir yit nē lábāar lā wvmmvg ni. Assent-doing emerge:IPFV FOC news ART hearing LOC. "Faith comes from hearing the news." (Rom 10:17)

Contrast the existential use of $b\dot{\varepsilon}$, where the locative is an adjunct:

```
D\grave{a}\underline{u}-s\bar{o}' b\acute{\epsilon} d\acute{o}-k\grave{a}\eta\bar{a} l\bar{a} p\acute{v}vg\bar{v}-n.

Man-indean 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

```
Ti dit s\bar{a}'ab n\bar{\varepsilon} z\hat{a}am. "We eat millet porridge in the evening." 1PL eat:IPFV porridge FOC evening. ("When do you eat porridge?")
```

Focus on the entire VP, which uses VP-final $n\bar{\varepsilon}^I$, is always contrastive, because non-contrastive focus on the VP is the default. It may occur in statements, polar questions and direct commands. Aspectual interpretation must be impossible. Aspectual sense ruled out by the position of $n\bar{\varepsilon}^I$:

```
\dot{O} k\dot{u}esid s\bar{u}mma l\bar{a} n\bar{\epsilon}. "She sells/is selling the groundnuts." 3AN sell:IPFV groundnut:PL ART FOC. ("They're not free.")
```

Aspectual sense ruled out by mood:

Gòsim $n\bar{\varepsilon}$. "Look!" ("Don't touch." WK)

Look: IMP FOC.

Stative verbs without an explicit time indicator:

O gim $n\bar{\epsilon}$. "He's short." ("I was expecting someone taller.")

3AN be.short FOC.

 \dot{M} bɔʻɔdī f $n\bar{\varepsilon}$. "I really love you." WK

1SG want 2SG.OB FOC.

Imperfective passives:

 $D\bar{a}am\ l\bar{a}$ $n\hat{u}ud$ $n\bar{\varepsilon}$. "The beer is for drinking."

Beer ART drink: IPFV FOC. ("Not washing with!")

Lì $m\grave{a}'an$ $n\bar{\varepsilon}$. "It gets *cooled*." (ipfv of $m\bar{a}'al^{\varepsilon/}$ "make cool")

3IN get.cool:IPFV FOC. ("Not heated!")

 $D\bar{a}k\acute{a}$ $l\bar{a}$ $z\acute{a}nl$ $n\bar{\epsilon}$. "The box gets carried in the hands."

Box:sg art carry.in.hands Foc. ("Not on your head.")

 $D\bar{a}k\acute{a}$ $l\bar{a}$ $z\hat{i}id$ $n\bar{\epsilon}$. "The box is for carrying on the head."

Box:sg art carry.on.head:IPFV Foc. ("Not carrying in the hands.")

Perfectives which cannot be interpreted as resultative:

 \dot{O} dìgil $n\bar{\varepsilon}$. "He's laid it down." ("I thought he'd pick it up.")

3AN lay.down FOC.

 $K\grave{a}$ lì $b\acute{o}d\grave{i}g$ $n\bar{\epsilon}$. "It's lost."

And 3IN get.lost Foc. Contradicting "someone hid it." 16.3.4

O digin $n\bar{\varepsilon}$. "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."
WK: "You've said: the child looks filthy. I'm

replying: He's been lying down."

 \dot{O} $z\dot{i}$ 'ən $n\bar{\epsilon}$. "She's pregnant." (Not "She has stood still.")

3AN stand.still Foc. An idiomatic use.

24.2 Clefting

Clefting uses a main clause like Li à $n\bar{\epsilon}$ "It is ..." or a verbless identificational clause 18.4 followed by a n-catenation when it is the subject of the catenated clause which appears in the main clause, adnominal $k\dot{a}$ -catenation otherwise. The sense resembles English "it-clefting" (CGEL p1416), foregrounding the clefted element and backgrounding the rest, with an implicature of exhaustiveness and exclusiveness:

```
Ka dau mɛ pv sv'oe o mɛŋ niŋgbinaa. Li anɛ o pu'a sv'oe li.

Kà dāu mɛ́ pv̄ sv'v ò mɛ̄ŋ nín-gb̄ṇáa=ø.

And man:sg also neg.ind own 3AN self body-skin:pl=neg.

Lì á nɛ́ ò pu'ā ø sv'v lī.
```

3IN COP FOC 3AN wife CAT own 3IN.OB.

"And a husband, too, does not own his own body. It is his wife who owns it." (1 Cor 7:4)

Ano'on nwaa yisid nidib tvvmbɛ'ɛdi basida? Ànô'on ø ňwáa ø ȳsɪd n̄tdıb tv̂vm-bɛ̄'ɛdı ø básɪdà=ø? Who cat this cat expel:IPFV person:PL deed-bad:PL cat throw.out:IPFV=co? "Who is this who drives people's sins out?" (Lk 7:49)

 $\bar{\mathcal{D}}$ nı \mathcal{O} $\mathcal{$

Bōɔ ø lá kà m nyētá=ø?
What car that and 1sg see:IPFV=cq?
"What is that that I can see?"

With $k\grave{a}$, the foregrounded element may be extracted from a subordinate clause or prepositional phrase; direct objects leave a null-anaphora gap:

```
Li ane ya taaba bane pu'usid Wina'am ka li nar ka ya kad saria.

Lì à né yà tāaba bánì pù'usid Winà'am kà lì nár

3IN COP FOC 2PL fellow REL.PL greet:IPFV God and 3IN must

kà yà kád sàríyà.

and 2PL drive judgment.

"It is your fellow-worshippers of God whom you must judge." (1 Cor 5:12)
```

24.3 Preposing

A preposed clause element is followed a $k\grave{a}$ -catenation with independent tense marking. Preposed elements cannot be clause subjects. Unlike the formally similar n-focus, the default meaning is foregrounding, not focus, and the construction is compatible both with n-focus and with focus- $n\bar{\epsilon}'$:

```
Asee line an be'ed ma'aa ka m na tun'e niŋ. Àsée línì àn bē'ed má'àa kà m ná tūn'e ø níŋ. Only RELIN COP bad only and 1SG IRR be.able CAT do. "It's only that which is bad that I can do." (Rom 7:21)
```

Dinzug ka mam Paul n be sarega ni Yesu Kiristo zug yanam buudbane ka' Jew dim la yela.

```
Dìn-zúg kà mām Paul n b\dot{\epsilon} sār_{1}gá nì Yesu Kiristo zúg yānám That-upon and 1SG.CNTR Paul CAT EXIST prison:SG LOC Jesus Christ upon 2PL.CNTR b\dot{u}ud-b\dot{a}nı kā' Jew dím lā y\dot{\epsilon}là.
```

tribe-rel.pl neg.be Jew null.pl art about.

"Therefore, I, Paul, am in prison for Jesus Christ because of you whose tribe is not Jewish." (Eph 3:1, 1996)

There is no syntactic movement rule for interrogative pronouns/proforms:

```
Bùgóm l\bar{a} yít yáa ní ná=\emptyset?
Fire ART emerge:IPFV where LOC hither=CQ?
"Where is the light coming from?" SB
```

However, preposing of objects containing interrogative pronouns is common; if they are extracted from prepositional phrases, resumptive pronouns are used.

```
Bo ka ti na niŋɛ? "What are we going to do?" (Acts 21:22)
Bó kà tì ná nịŋɛ=ø?
What and iplir do=cq?

Nū'-bíbisá àlá kà fò ňyētá=ø?
Hand-small:pl num:how.many and 2sg see:ipfv=cq?
"How many fingers can you see?" SB
```

cf

but

1SG.CNTR COP what=cq?

And 2SG COP who=co?

Kà fù áaň ànó onè=ø?

```
Ka anɔ'ɔnam ka Wina'am svnf da pɛlig nε ba yvma piisnaasi la?
      Kà ànô'ən-nàm kà Wínà'am súňf
                                                dá pèlia né bà
                                       heart:sg TNS whiten with 3PL
      And who-PL
                        and God
      yùma pīs nāasí lá=ø?
      vear:PL fortv
                        ART=CO?
      "And who was God angry with for forty years?" (Heb 3:17)
      Preposing is required for b\bar{b} in the sense "why?":
      Bó kà fù kúmmà?
                                        "Why are you crying?"
                                        *"What are you crying?"
      *Fù kúm bó?
      B<sup>5</sup> kα<sup>2</sup>... is much the most frequent way of rendering "Why?"
      Complements of single-aspect verbs usually remain in situ, perhaps necessarily
so in the case of àeňa "be something":
      Ningbin bo buudi ka ba na ti mora?
                     bó-būudí kà bà ná tī
      nìn-qbīn
                                                       m\bar{n}r\dot{a}=\emptyset?
      Body-skin:SG what-sort and 3PL IRR afterwards have=CQ?
      "What kind of body will they have?" (1 Cor 15:35)
      F\dot{v} b\hat{z} b\hat{z} b\hat{z}=\emptyset?
                                        "What do you want?"
      2SG want what=co?
               áň b\dot{0} = \emptyset?
                                        "What am I?"
      Mām
```

VP adjuncts are often preposed; there is probably a contrast between foregrounding by preposing and focussing with $n\bar{\varepsilon}'$:

"Then who are you?"

```
Ňwādīsá atáň
                    kà fù ná lēb
                                      nā.
Month:PL NUM:three and 2SG IRR return hither.
"You're to come back in three months." (Instructions, not a reply.)
Tì dít
                   nē zâam.
          sā'ab
1PL eat: IPFV porridge FOC evening.
"We eat millet porridge in the evening." ("When do you eat porridge?")
```

The only structure other than a NP (including \dot{n} -clauses) or AdvP that I have found preposed is $w\bar{v}v$ "like" + object:

```
Like donkey:SG like and 3AN run:IPFV.

"It's like a donkey that he runs."

*N\(\int\) \(\bar{m}\) \(n\hat{u}'ug\) \(k\at{a}\) \(\bar{m}\) \(s\tau^{\chi}\) is.

*With 1SG hand:SG and 1SG touch.

attempted for "With my hand, I touched it."
```

nέ kà ò zót.

Preposing has **no implication of foregrounding** in relative clauses $\underline{21.2.2}$, with manner, place and reason adjuncts (which may *only* precede the subject by preposing), and when absolute clauses in adjuncts precede the main clause because of the requirement for constituent order to parallel event order $\underline{21.1}$:

```
Mán ňwè' dāu lā zúg kà pɔlıs gbáň'a_m.

1SG:NZ hit man:SG ART upon and police seize 1SG.OB
"The police arrested me because I hit the man." ILK
```

24.4 Dislocation

Wūυ bún

A clause element placed after a distinctively phrase-final verb form has been dislocated. Manner-adverbs are thereby intensified:

```
Ya yidigya bɛdegv. "You are very much mistaken." (Mk 12:27)
Yà yidìg yā bɛdvg\bar{v}.

2PL go.astray PFV much.

\hat{M} p\hat{v}'vs yā bɛdvg\bar{v}. "Thank you very much."

1SG greet PFV much.
```

Non-pronoun objects can be dislocated; the sense is "against expectation":

```
    O dà' yā múi.
        3AN buy PFV rice.

    VS O dà' nē múi.
        3AN buy FOC rice.

    "She's bought rice." ("What did she buy?")
```

```
Lì à n\bar{\varepsilon} m\acute{u}_{\dot{i}} k\grave{a} \grave{o} d\acute{a}'. "It's rice that she's bought." ("not millet.") 3IN COP FOC rice and 3AN buy.
```

On right-dislocation of $y\grave{a}$ '-clauses see 20.1; of other clauses, 17.1. Left-dislocation of objects and complements may occur on the basis of **weight**, without preposing $k\grave{a}$ or foregrounding. A resumptive pronoun must appear.

```
Wilkanε bεε m ni ka pv wanna, m Ba' nwaadi li nε [sic: 1996 n] basid.
Wìl-kànı
              bèe m ní kà pū
                                        w \varepsilon n n \bar{a} = \emptyset,
Branch-rel.sg exist 1sg loc and neg.ind bear.fruit:ipvf=neg.
                             n básìd.
m Bā'
             ňwá'adī lí
1SG father:SG cut:IPFV 3IN.OB CAT throw.out:IPFV.
"A branch which is in me and does not bear fruit, my father cuts it 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.
      kà bà tísò ø
                          kà lì zú'e,
                                                  bà mè mòr
REL.AN and 3PL give 3AN.OB and 3IN become.much, 3PL also have
               γέ ò nà lēbis línì zù'e.
pύ-tèň'εr
inside-mind:sg that 3AN IRR return REL.IN become.much.
```

"Whom they have given much to, they expect he will return much." (Lk 12:48)

24.5 Presentational constructions

Presentational constructions introduce new entities into discourse using indefinite NPs; here, absence of $l\bar{a}^l$ implies *indefinite specific* reference, not generic 12.8.5. Dependent indefinite pronouns or quantifiers are possible but not required.

 $B\dot{\varepsilon}$ "be somewhere/exist" is frequent in presentational clauses, often with a following n-catenation or adnominal $k\dot{a}$ -catenation 19.

```
Farisee dim nid yinne da b\varepsilon

Farisee dim nid yīnni dà b\varepsilon ...

Pharisee NULL.PL person:SG one TNS EXIST ...

"There was one man of the Pharisees ..." (Jn 3:1)

Dapa atan' n da be. "There were once three men." KSS p16

D\bar{a}p\dot{a}_\dot{a}t\dot{a}n' n dá b\dot{\varepsilon}.

Man:PL NUM:three CATINS EXIST.
```

```
Dau da be mori o po'a yimmir
```

```
Dāu dá bè ø mōrí ò pu'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 bε mɔr o bipuŋ ka kikirig dɔl o.

```
Kà pu'à-sō' dá bὲ Ø mór ò bị-púŋ kà kìkịrιg dōlló Ø.

And woman-INDEAN 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)

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 pū 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 nye dau ka o yv'vr buon Aneas.

```
Àníná kà ò ňyē dáu kà ò yū'vr bûen 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)

24.6 Free personal pronouns

Only free pronoun forms are possible in isolation, apposition, coordination, before relative pronouns, and (for some speakers) with 2nd persons before direct commands after a $y\dot{a}$ '-clause 20:

```
Mánè?"Me?"m\bar{a}n Paul"I, Paul"t\bar{\imath}n\acute{a}m n\bar{\epsilon} f\bar{\upsilon}n"us and you"f\bar{\upsilon}n-kánì ..."you, who ..."
```

Where a bound pronoun is permitted, the choice of a free pronoun implies *contrast*. For the special case of **logophoric** use see <u>22.2</u>.

Focussed pronouns must be contrastive, and contrastive pronouns are normally focussed if syntactically permissible:

```
Mane an konbkem sun la.
```

```
Mānı ø áň kóňb-kìm-sòŋ lā.
```

1SG.CNTR CAT COP animal-tender-good:SG ART.

"I am the good shepherd." (Jn 10:11)

24.7 Emphatics

I have borrowed the term "emphatic" from Jeffrey Heath's Songhay grammars (Heath pp202ff.) Emphatics relate NPs or AdvPs to the discourse context. They follow top-level NPs/AdvPs, except for $h\bar{a}li$, which precedes.

 $m\grave{\epsilon}$ DK KT SB NT $m\grave{\epsilon}n$ WK; clause finally (all sources) $m\grave{\epsilon}n^{\epsilon}$ "also, too." The particle may follow $k\grave{a}$ + ellipted subject pronoun 17.3.

```
bozugo o ane fo biig men.
      bō zúgó ò à né fò bīig
                                        mέn.
      Because 3AN COP FOC 2SG child:SG also.
      "Because he is your child too." (Genesis 21:13)
                                        "His wife also came." (Acts 5:7)
      O pu'a mε kena.
      Ò pu'ā
                  mέ kὲ
                              nā.
      3AN wife:sg also come hither.
nɔ̄ɔ "just, exactly"
      dàa-kàn lā nɔɔ
                                        "that very day"
      Fv ya'a mər ya'am, fvn nəə na dii li malisim.
      Fù yá' mōr yā'am, fūn
                                   กวิว
                                            ná díu, lì mālisím.
      2SG if have sense, 2SG.CNTR exactly IRR eat 3IN joy.
      "If you have wisdom, it is you who will have joy of it." (Proverbs 9:12)
mà'aa (LF mà'anε) "only"
      Asee line an be'ed ma'aa ka m na tun'e nin.
      Àsέε línì àň bē'εd má'àa kà m̀ ná tūň'e, ø níη.
      Only REL.IN COP bad only and 1SG IRR be.able CAT do.
      "It's only that which is bad that I can do." (Rom 7:21)
qùllīmm (LF qùllιmnε) "only"
      Li ka'anɛ Wina'am gvllim nɛ?
                n\bar{\varepsilon} Winà'am gillìmn\varepsilon\varepsilon=\emptyset=\emptyset?
      3IN NEG.BE FOC God
                              only=NEG=PQ?
      "Is it not God alone?" (Lk 5:21)
```

```
kàtàa<sup>nε</sup> "at all":
```

```
Áyù kòtàa. "Not at all."
```

hālí can be used as an emphatic, preceding a NP or AdvP with the meaning "even":

```
Hali tvvmbɛˈɛd dim niŋid ala.

Hālí tv̀vm-bɛ̄ˈɛd dím ni̞ŋid àlá.

Even deed-bad:Pl Null.Pl do:IPFV ADV:thus.

"Even sinners do that." (Lk 6:33)
```

Before a manner-adverb it means "very"; the adverb itself may be ellipted.

```
Lì t \grave{o} \varrho = h \bar{a} l i [b \acute{e} d \upsilon g \bar{\upsilon}]. "It's very difficult." 31N be bitter until much.
```

Hāl \acute{i} can be preposed with $k\grave{a}$:

```
Hali ka nidib mər ban'adnam na.

Hālí kà nīdib mər bâň'ad-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 làmpō-dí'əsìdıb mɛ niŋıd àlá.

Even tax-receiver:PL also do:IPFV ADV:thus.

"Even tax-collectors do that." (Mt 5:46)

Hali baa bama wvsa ya'a na zɔ ka basif, man kv basi fɔ.

Hālí báa bàmmā wvsa yá' nà zó kà básì f,

Even demst.PL all if irr run and abandon 2sg.ob,

mān kv bāsı fɔʻ=ø.

1sg.cntr neg.irr abandon 2sg.ob=neg.
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"If even they all run away and leave you, I will not leave you." (Mt 26:33)

25 Greetings and other formulae

(a) Enquiries after health.

Gbís wēlá?"How did you sleep?" orDúo wēlá?"How did you get up?"

(morning greetings at first meeting)

Nīntāŋ á wēlá? "How is the day/afternoon?"

 $Y\dot{v}'v\eta$ \acute{a} $w\bar{\varepsilon}l\acute{a}$? "How is the evening?" literally "night"

Fù yṣ-dímàa? "[How are] your household?"

Nìn-gbịnáa? "[How is your] body?" i.e. "How are you?"

Fù sìdaa? "[How is] your husband?"

 $Pu'\bar{a} \ n\bar{\epsilon} \ b''_i is \hat{\epsilon} \hat{\epsilon}$ "[How are your] wife and children?"

... and so on, often at great length. Replies may be

Àláaf \dot{v} b $\dot{\varepsilon}$. literally "There is health."

(Also a general purpose greeting in itself.)

 $\dot{A}l\acute{a}af\grave{v}$ $b\acute{\varepsilon}o$ for him/her. $\dot{A}l\acute{a}af\grave{v}$ $b\acute{\varepsilon}\varepsilon$ $b\acute{a}$ for them.

(b) Blessings follow the pattern $B\acute{a}r_{i}k\grave{a}$ $n\acute{\epsilon}$ $f\grave{v}/y\grave{a}$... "Blessing with your ..." with the introductory words usually ellipted; the reply to all of these is $N\acute{a}a$.

 $K\bar{\epsilon}n \ k\bar{\epsilon}n$. "Welcome!" $K\bar{\epsilon}n$, gerund of $k\bar{\epsilon}n$ "come"

cf Hausa: Barkà dà zuwàa.

 $N\bar{\varepsilon}$ zâam zâam. "Good evening."

Tōvma! or Tōvma tōvma! "(Blessing on your) work!"; includes practically

anything which could be regarded as work, making this the commonest daytime greeting.

 $N\bar{\varepsilon}$ sónsigā. "(Blessing on your) conversation"; greeting a

group of people talking; also greeting a person sitting quietly alone, assumed to be conversing

with his or her own $w\bar{\imath}n^{n\varepsilon/}$.

 $N \dot{\varepsilon} \ f \dot{\upsilon} \ b \bar{\upsilon} r_i y \dot{a} - s \dot{\upsilon} \eta.$ "Merry Christmas." $N \dot{\varepsilon} \ f \dot{\upsilon} \ y \dot{\upsilon} \upsilon m - p \bar{a} a l i g.$ "Happy New Year."

(c) Prayers. Reply Amí! "Amen!"

 $W\bar{\imath}n$ $n\acute{a}$ $l\bar{\epsilon}b\imath s\imath$ f $n\bar{\epsilon}$ $l\acute{a}af\imath ya$. "Safe journey!" literally "[I pray that]

God will bring you back in health."

Wīn ná sōṇi f. "God will help you"; usually expresses thanks Wīn ná tā'así f. "Safe journey!" ("God will help you travel.")

(d) Statements of fact and commands. Reply *Tò* "OK", or as appropriate.

Bε̄ogυ lā. "See you tomorrow!" ("That's tomorrow.")

Àtínì dáarì lā. "See you on Monday."

Gbjsιm sύηā. "Sleep well."

 $Kp\grave{\epsilon}lim\bar{\imath}~s\acute{v}m.$ "Remain well"; Goodbye, to those remaining. $P\grave{\upsilon}'\upsilon sim~y\acute{i}n.$ "Greet (those) at home"; Goodbye, to leaver.

Reply Tò "OK", or Bà nà wōm "They will hear."

(e) Miscellaneous formulae

 $\dot{M} \ p\hat{v}'vs \ y\bar{a} \ [b\acute{\epsilon}dvg\bar{v}].$ "Thankyou [very much]." Reply $T\dot{\rho}$, or $P\dot{v}'vsvg$

kā'e. "No thanks [needed]."

Gáafàra. "Sorry." Like Ghanaian English "sorry", may be

just an expression of sympathy.

Kābır kābırí! Formula asking admission to a dwelling. Twi

agoo is also used. (Knocking is for robbers trying to find out if anyone is at home.)

Dim sūgυrύ. "Please forgive me."

 \dot{M} bélim nē. "I beg you." Not "please"; Kusaasi etiquette

needs no spoken equivalent of "please."

X lábāar á wēlá? "What is the news of X?" A common initial reply

is *Dīīb má'àa*. "Only food." i.e. "good."

M mɔr kû'em náa? "Shall I bring water?" Traditional first words to

guest. "No, thank you" is Kù'θm á sύm.

("Water is good.")

Wīn yếl sídà. "Bless you!" Literally "God speaks truth"; WK

explained: "If you sneeze, it means someone

elsewhere is praising you."

Fὺ wớm Kūsáalὲε? "Do you understand ['hear'] Kusaal?"

 $\bar{\mathcal{E}}$ \bar

26 Selected lexical fields

26.1 Kinship terms

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Pervading the whole system is the importance of birth order among same-sex siblings, and its irrelevance between siblings of opposite sex. Many basic terms do not in themselves distinguish sex. 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.

sàam^{ma} or less formally bā' My father is my sàam-kpēɛňm^m father's elder brother sàam-pīta/ father's younger brother pùgudıb^a father's sister My mother is my mà

mother's elder sister

or senior co-wife mà-kpēεňm^m

mother's younger sister

or junior co-wife mà-b<u>ī</u>la or mà-p<u>ī</u>ta/

mother's co-wives mà náma are my mother's brother áňsìba is my

I am my mother's brother's $\bar{a}nsin^a$; to all the other relatives above I am $b\bar{i}ig^a$ "child" or specifically $d\dot{a}$ - $k\dot{>}$) \check{n} r^{ε} "son" or $pu'\dot{a}$ - $y\dot{u}a$ "daughter." Although the Kusaasi are not matrilineal, the mother's brother is felt to be a particularly close relation with a traditionally benevolent role towards his sister's child.

There are no special terms for aunts or uncles by marriage.

My grandparent yáab^a (♂ yāa-dáu, ♀ yāa-pu'á^a) is my grandchild yáaŋa

These words are also used for ancestor/descendant.

My elder sibling of my own sex is my bīər^{ε/} younger sibling of my own sex is my pįtύ tāuň/ sibling of opposite sex is my

These words are also used for cousins, with seniority, as always, going by family branch.

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My wife is my y\bar{\imath}-p\underline{\nu}'\dot{a}^a or simply p\underline{\nu}'\bar{a}^a wife's parent d\hat{\imath}\partial m^{ma} (\sigma'd\hat{\imath}\partial m-d\bar{a}\underline{\nu}, \Omega'\partial m-p\bar{\nu}\partial m) wife's sibling d\hat{a}k\bar{\imath}ig^a (\sigma'd\hat{a}k\hat{\imath}-d\bar{a}\underline{\nu}, \Omega'\partial m)
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Diəm $^{\rm ma}$ 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} $m\dot{a}$ "my mother" or \dot{m} $b\bar{a}$ ' "my father." Parents-in-law are greatly respected, but with siblings-in-law there is a traditional reciprocal joking relationship; certain whole ethnic groups are said to bear this relationship to each other, called "playmate" in local English. At $B\dot{u}g\acute{v}m$ - $t\bar{o}$ \check{v} \bar{v} \bar{v} , the Fire Festival, one throws eggs at one's brothers-in-law.

I am my wife's parents' $b\bar{i}ig^a$ "child" and my wife's siblings' $dak\bar{i}ig^a$.

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My husband is my s\bar{\imath}d^a husband's parent d\grave{a}y\acute{a}am^{ma} (\sigma'd\grave{a}y\bar{a}am-d\acute{a}u, Q d\grave{a}y\bar{a}am-pu\acute{a}k^a) husband's elder brother s\grave{\imath}d-kp\bar{\epsilon}\epsilon\breve{n}m^m husband's younger brother s\grave{\imath}d-b\bar{\imath}l^a
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I am my husband's parents' $b\bar{i}ig^a$ "child"; all my husband's siblings (of both sexes) call me $pu'\bar{a}^a$ "wife."

My co-wife is my $n n - t \bar{a}a$, "rival" in Ghanaian English. In traditional stories the role of the "wicked stepmother" in European folklore is assumed by one of the father's other wives.

sìd-puāka

Two men married to sisters are $d\dot{a}k\dot{l}$ - $t\dot{u}es^{\epsilon}$; two women married to brothers are $n\dot{l}$ - $t\bar{a}as^{\epsilon}$, "co-wives." "Fiancée" is $p\underline{u}$ ' \dot{a} - $t\bar{e}li$

26.2 Personal names

husband's sister

See Haaf pp87ff for a detailed account of Kusaasi personal naming practices. Personal names are preceded by the personifier particle, \grave{A} - by default but \grave{N} -before adjective stems, where \grave{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 Kusaal personal names in English-language contexts see 1.1.

The Kusaasi do not use surnames traditionally. Christians use English (or French) baptismal names in speaking European languages, and in official contexts use their Kusaal personal names as "surnames."

Many names allude to a guardian spirit $(s\bar{\imath}g\imath r^{\varepsilon/})$ assigned to a newborn child through the father's consultation with a diviner $(b\bar{a}'a)$; this may be the $w\bar{\imath}n^{n\varepsilon/}$ 1.1 of an ancestor, or of a spiritually powerful tree:

\dot{A} - W i $n^{\mathrm{n}\varepsilon/}$	Awini	person with a $s\bar{\imath}g\imath r^{\varepsilon/}$ from father's family
\grave{A} - $Bar{v}gvr^{arepsilon}$	Abugri	person with a $s\bar{\imath}g\imath r^{arepsilon/}$ from mother's family
À-Tì1g ^a	Atiga	"tree" as $sar{\imath}g\imath r^{arepsilon \prime}$
À-Kūdvg ^o	Akudugu	"piece of iron" (sc. as a marker on a tree-
		$s\bar{\imath}g\imath r^{\varepsilon\prime}$); displaced as a common noun by
		the pl-as-sg $k\bar{u}t^{\epsilon}$

A younger sibling of \grave{A} - $W\bar{\imath}n^{n\epsilon/}$ with the same $s\bar{\imath}g\imath r^{\epsilon/}$ is called \grave{A} - $W\bar{\imath}n$ - $b\acute{\imath}l^a$ "Awimbillah", of \grave{A} - $K\bar{\imath}ud\upsilon g^{\circ}$, \grave{A} - $K\grave{\imath}ud$ - $b\bar{\imath}l^a$ "Akudibillah" etc. Names for girls may follow the pattern \grave{A} - $W\bar{\imath}n$ - $pu\acute{a}k^a$ "Awimpoaka."

Other names refer to birth circumstances:

À-Nà'ab ^a	Anaba	"chief" but in the sense "afterbirth"	
		(because a chief leaves his house after	
		his retainers): sole survivor of twins	
À-Fūug ^{o/}	Afugu	"clothing": child born with a caul	
\grave{A} - $Tar{u}l^{\mathrm{l}\epsilon}$	Atuli	$(tù lig^{\epsilon}$ "invert"): breech-delivered child	

A whole clause is seen as a birth-circumstance personal name in

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À-Tìum\ b\acute{o}d\grave{i}g\ y\bar{a} "The medicine has got lost."
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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; the next surviving child may then be called e.g.

A-Tàmp $ar{v}$ v $r^{arepsilon}$	Tampuri	"ashpit, rubbish tip"
\dot{A} - $D\bar{v}k^{\circ/}$	Aruk	"pot"

Another strategy is pretended adoption by an outsider, resulting in names like *Jambeedu* "Fulani", or

À-Sāan ^{a/}	Asana	"guest, stranger"
À-Sāan-dύ	Sandow	"guest" + $d\bar{a}u$ "man"
À-Zàngbèog ^o	Azangbego	"Hausa person"
À-Nàsà-pụāk ^a	Anasapoaka	"European woman"; also "child delivered
		by a European midwife"

Names based on adjectives:

Ň-Dāυg ^o	Ndago	"male"
Ň-Рµāk ^а	Mpoaka	"female"
<i>N-Bīl</i> a	Mbillah	"little"

Muslims often use day-of-the-week names depending on birth. The system does not cover all weekdays; examples are \grave{A} -T(n) "Girl born on Monday", \grave{A} - $T\grave{a}l\acute{a}at\grave{a}$ "Girl born on Tuesday", \grave{A} rz $\acute{u}m\grave{a}$ "Boy born on Friday", \grave{A} -S(b) "Boy born on Saturday."

Muslims also have formal Arabic names, sometimes adapted into Kusaal, like Dàhamáanì/Dàsmáanì {Abdu-r-Raħma:n. KKY p6 has the interesting girl's name Amɔryam, ? Arabic Maryam "Mary", interpreted as À-Mɔ̄r Yām "Has Common Sense."

26.3 Places

For Kusaal place names in English-language contexts see 1.1.

This section has been improved by consultation with John Turl, who maintains an extensive website dedicated to Ghanaian toponymy (see References.)

Many Kusaal place names have transparent meanings.

Place names include:

Bòk ^o	Bawku	"pit, geographical depression"
$Kar{ u}k^{\mathrm{a}/}$	Koka	"mahogany tree"
Kùkpàrıg ^a	Kokpariga	"palm tree"
Τὲmpáan ^{nε}	Tempane	perhaps "new villages"
Mμ'à-nɔ̄ɔr ^{ε/}	Mogonori	"lakeside" ("lake-mouth")
Bàs-ȳɔn ^{nε/}	Basyonde	"abandon sacks" ?reason for name
Kūgυr ^{ε/}	Kugri	"stone"
$Bar{v}gvr^{arepsilon}$	Bugri	$b\bar{v}gvr^{\epsilon}$, object housing a $w\bar{\imath}n^{\mathrm{n}\epsilon/2}$
Wìdì-ňyá'aŋª	Woriyanga	archaic for wìd-ňyá'aŋª "mare"
B <u>ì</u> -nà'ab ^a	Binaba	"prince"
Gàarv	Garu	Hausa <i>gàaruu</i> "wall around a town
		or compound"
W <u>ì</u> id-nà'ab ^a	Widinaba	"chief of the clan <i>Wiid</i> a"
Pūsīg ^{a/}	Pusiga	"tamarind"
$Tar{\imath}l^{\mathrm{l}arepsilon/}$	Tilli	"tree trunk" cf Toende Kusaal <i>tíl id</i>
		(Hasiyatu Abubakari, p.c.)
Dènug ^o	Denugu	No known meaning
Pùlıma Kû'əm ^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>nō-dị̂'əs</i> ^a "linguist."
Mį̀'isıg ^a	Missiga	Explained locally as "mission", i.e.
		of the Assemblies of God; perhaps
		influenced by m_i^{l} ' $isvg^{\text{o}}$ "baptism"
Sā-bį́l ^a	Zebilla	"small grass"?
Sā-pį́əlìg ^a	Sapeliga	"Isoberlinia Doka"
Kòl-tā'amίs ^ε	Kultamse	"dog almonds"

The meanings for "Sapeliga" and "Kultamse" are based on a 1935 agricultural report which lists for the Farefare/Nabit area sapelaga " $Isoberlinia\ doka$ ", ta-anga " $Butyrospermum\ parkii$ " (Kusaal $t\acute{a}$ ' $a\eta^a$), and kulta-anga " $Andira\ inermis$ " (p.c. Turl.)

WK thought that the $s\bar{a}$ - of $S\bar{a}$ - $b\hat{\jmath}l^a$ and $S\bar{a}$ - $p\hat{\jmath}\partial l^a g^a$ was a plant used in making brooms. No * $s\bar{a}a^l$ occurs in my data (only $s\bar{a}a$ "rain"), but Farefare $s\hat{a}ag\hat{a}$ is "a kind of grass used for making brooms", and Blench 2006 identifies Mampruli/Dagbani saa as $Sporobolus\ subglobosus\ A.\ Chev$, used for binding in making mats and traps.

For $K\grave{v}lvg\acute{v}\eta^{\circ}$ "Kulungungu", Turl cites a Bisa-speaking informant who suggests Bisa Kuurgongu, "Crooked Sheanut Tree."

Àgòl ^{lɛ}	Agolle	cf <i>àgɔ́l</i> lɛ "upwards"	
Tùθn ^{nε}	Toende	cf <i>tùen</i> ^{nɛ} "in front", "West"	
Bārvg ^{o/}	North	"Bisa country"	
Ňyá'aŋª	East	"behind"	
Zuēya	South	"hills", i.e. the Gambaga Escarpment	
Tùθn ^{nε}	West	"in front"	

The forms above were given by WK; KB has ya-dagəbəg ya dagəbəg ("your left hand") for "south" and ya-datiu η ya dati η ("your right hand") for "north," along with ya- η "east", ya-tuona "west."

Words referring to ethnic groups and clans create place names by adding the suffix $-g_D$ to the stem. These need not refer to established political entities or permanent settlements: $K\dot{v}t\bar{a}\mu\eta^{O}$ "any place inhabited by the clan Kotamba"; $K\bar{v}s\hat{a}vg^{O}$ "Kusaasiland"; $M\dot{o}Og^{O}$ "Mossi country."

Places outside $K\bar{v}s\hat{a}vg^{\circ}$ generally do not have Kusaal names (an exception is $S\bar{a}nk\hat{a}a\check{n}s^{\varepsilon}$ "Sankanse" in Burkina Faso.) For "Accra" the Twi-derived Ankara is usual. Toende has Wa'arvk for "Ouagadougou", but I could not elicit any Agolle equivalent; Mooré Waogdgo apparently does not have a transparent meaning.

There seems to be no Agolle Kusaal proper name for the White Volta river, which is simply $k\bar{o}lvg^a$ "river"; presumably this is because it is the only real river within $K\bar{v}s\hat{a}vg^o$.

26.4 Ethnic groups and clans

The great majority of ethnic group names are $ga|s\varepsilon$ or a|ba. The corresponding languages belong to the $l\varepsilon$ subgroup of $r\varepsilon|aa$, and the place inhabited has sg go.

Ethnic group (pl)	Language	Place	
$K \bar{v} s \hat{a} a s^{\epsilon}$	Kūsâal ^ɛ	Kūsâvg ^o	Kusaasi
Ňwāmpūrιs ^{ε/}	Ňwāmpūrıl ^{ɛ/}	Ňwāmpūrvg ^{ɔ/}	Mamprussi
Bārıs ^ε /	$B\bar{a}t^{arepsilon/}$	Bārvg ^{ɔ/}	Bisa
M 3 c	M òɔ l^{ϵ}	Màɔgɔ	Mossi
Dàgbām ^{ma/}	Dàgbān ^{nε/}	Dàgbāṇŋɔ/	Dagomba
<i>B</i> ìm ^{ma}	B i $n^{n\varepsilon}$	B ὶμ $η$ $^{\circ}$	Moba
$Sìmar{\imath}is^{arepsilon}$	$Sìmar{\imath}il^{arepsilon}$	Sìm <u>ī</u> ug ^o	Fulße
Yàaňs [€]	Yàan ^{nɛ}		Yansi
Gūrís ^ε	Gūrín ^{ne}		Farefare
Yārıs ^{ε/}	$Y\bar{a}t^{arepsilon/}$		Yarsi
Zàngbὲεd ^ε	Zàngbὲεl ^ε		Hausa
$Bùlıs^{\epsilon}$	$B\grave{u}l^{\mathrm{l}\epsilon}$		Bulsa
Tàlıs ^ɛ	Tàlın ^{nɛ}		Tallensi
Nàbıdıb ^a	Nàbır ^ɛ		Nabdema
Bὺsâaňs ^ε	Bùsâaĭl ^ɛ		Bisa
Nàsàa(r)-nàm ^a	Nàsāal ^ε		European
Kàmbùmıs ^ɛ	Kàmbùnır ^ɛ		Ashanti

 $B\bar{a}r\iota s^{\epsilon/}$ means "Bisa", not just Bareka; $B\iota m^{\mathrm{ma}}$ is "Moba", not just Bemba (WK.) Note $T\dot{u}en^{\mathrm{n}\epsilon}$ "Toende area", $T\dot{u}enn\iota r^{\epsilon}$ "Toende dialect of Kusaal", $A\dot{g}\dot{o}l^{\mathrm{l}\epsilon}$ "Agolle area", $A\dot{g}\dot{o}l^{\mathrm{l}\epsilon}$ "Agolle dialect of Kusaal": $O\dot{p}\dot{a}\check{n}'ad\dot{A}\dot{g}\dot{o}l$. "She speaks Agolle Kusaal." Kusaasi clan names include, among many others:

Clan (pl)	Place	
Kùtām ^{ma/}	Kùtāṇŋ ^{ɔ/}	WK's clan
$Z\grave{u}\Theta s^{arepsilon}$		
Wìid-nam ^a	Wìidvg ^o	
Nàbıdıb ^a	Nàbıdvg ^o	
$G\grave{o}os^{arepsilon}$	<i>Gòɔg</i> ɔ	
Sà'dàbùes ^ɛ -bùeb ^a	Sà'dàbɔ̀ɔgɔ	
Nà'dàm ^{ma}	Nà'dauŋº	
Gùm-dìm ^a	$G\grave{v}m^{\mathrm{m}arepsilon}$	

Subclans of $Z\dot{u}es^{\varepsilon}$ include $Z\dot{u}\dot{a}$ - $s\bar{a}b\imath lis^{\varepsilon}$ "Black Zoose" and $Z\dot{u}\dot{a}$ - $w\dot{\imath}ib^{a}$ or $Z\dot{u}\dot{a}$ - $w\dot{\imath}is^{\varepsilon}$ "Red Zoose." Clan $N\dot{a}b\imath d\imath b^{a}$ is distinct from the ethnic group "Nabdema" (WK.)

26.5 Trees and fruits

Tree names are almost all $ga|s\varepsilon$ class, like $tiig^a$ "tree"; their fruits belong to classes $r\varepsilon|aa$ or $go|d\varepsilon$.

Tree	Fruit	
āaňdıg ^a	āaňdır [£]	Vitex doniana
dùaň	dòɔňgº	dawadawa
gāaĭ [/]	gāňr ^{ε/}	Nigerian ebony
$g\grave{v}\eta^{\mathrm{a}}$	$g\grave{v}m^{\mathrm{m}arepsilon}$	kapok
kìkàŋ ^a	kìkàm ^{mɛ}	fig tree
kpùkpàrıg ^a	kpùkpàr ^ɛ	palm
lį́'əŋ ^a	lį́'əm ^{mε}	Ximenia americana
pūsıg ^{a/}	pūsır ^{ɛ/}	tamarind
sīsį́bìg ^a	sīsį́bìr ^ɛ	neem
tá'aŋ ^a	tá'am ^{mɛ}	shea butter
tὲ'εg ^a	tè'og°	baobab
νúθη ^a	vúer ^e	red kapok

The stems for "red kapok" and its fruit are slightly different: tree *vuegm- fruit *vueg-

26.6 Colours

Kusaal, like many local languages, has a basic three-colour system: $z \grave{\epsilon} \check{n}' o g^{\circ}$ "red", for all reddish shades, $s \check{a}b\imath l i g^a$ "black" for all darker shades, and $p \grave{\imath} o l \iota g^a$ "white" for all lighter shades. $W \grave{\imath} u g^{\circ}$ is synonymous with $z \grave{\epsilon} \check{n}' o g^{\circ}$. Kusaal has many other standard expressions for colour (e.g. $w \bar{\nu} \upsilon t \acute{a} m p \bar{\nu} \upsilon r n \bar{\epsilon}$ "like ash", i.e. "grey"), often with parallels in other West African languages: "three-colour" means that any colour can be allocated to one of only three terms, not that only three colour terms exist.

26.7 Time

The day begins at sunrise. Answers to *bò-wìn*^{nε} "what time of day?" may be

bēogυ-n ^{ε/}	"morning"	bèkèkèoňg ^o	"very early morning"
zàam ^m	"evening"	àsùbá	"dawn" (← Arabic)
wịn-l <u>ī</u> ir ^ɛ	"sunset"	yύ'υη ^ο	"night"
wịn-kòoň $r^arepsilon$	"sunset"	n <u>ī</u> ntāŋ ^{a/}	"heat of the day"

 $Win^{n\varepsilon}$ "time of day" (cf $winnig^a$ "sun") always has a predependent.

Clock times are calqued from Hausa: $k \acute{\epsilon} r i f \grave{a} \grave{a} t \acute{a} \breve{n}'$ "three o'clock" = $\hat{k} a r f \grave{e} e u k \grave{u}$.

The deictic particle nwa "this" is commonly attached to time words, e.g. zaam nwa [za:ma] "this evening", ybun nwa [yo:n:a] "tonight."

Answers to $b\bar{v}n$ - $d\hat{a}ar^{\epsilon}$ "which day?" may be

z <u>ī</u> ná	"today"	sù'øs ^a	"yesterday"
bēog ^o	"tomorrow"	$dar{a}ar^{arepsilon}$	"day after tomorrow/
			day before yesterday"

Weekday names are of Arabic origin. Many older speakers count in days, not weeks; the traditional "week" is a three day market cycle, differing from village to village and carrying on regardless of any weekdays or festivals.

Àláasìd dâar ^ɛ	"Sunday"	Àtínì dâar ^ɛ	"Monday"
Àtàláatà dâar ^ɛ	"Tuesday"	Àlárıbà dâar ^ɛ	"Wednesday"
Àlàmí̞isì dâar ^ɛ	"Thursday"	À(r)zúmà dâar ^ɛ	"Friday"
Àsíbıtì dâar ^ɛ	"Saturdav"		

 $D\bar{a}ar^{\epsilon}$ "day" is "twenty-four hour period" ($n\bar{i}nt\bar{a}\eta$ "day as opposed to night") and is used with predependents to specify a particular day; the word $d\bar{a}bisir^{\epsilon}$ is also used for "day" in counting periods of time, occurring usually in the plural:

Dābá àyópòẹ dâar kà fù ná lēb nā.	"You'll come back in a week."
Dābá àyớpòẹ kà fù ná lēb nā.	"You'll come back for a week."
Àláasìd dâar kà fò ná lēb nā.	"You'll come back on Sunday."
Tì kpélìm àníṇā dábısà bị̄ˈəlá.	"We stayed there a few days."

Longer periods of time:

dābá àyɔ́pɔ̀e̯	"week"	bákpàe	"week"
ňwādıg ^{a/}	"moon, month"		
sēoňg ^o	"rainy season"	ύυn ^{nε}	"dry season"
sāpál ^{lɛ}	"Harmattan"	dàwàl1g ^a	"hot humid time just
			before the rains"
yὺυm ^{mε}	"year"	dūnná	"this year"

Nwad-kan gàad $l\bar{a}$ "last month", nwad-kan $k\bar{\epsilon}n$ $n\bar{a}$ $l\bar{a}$ "next month." "Time" in general is $s\bar{a}n$ pl $s\bar{a}ns$ cb $s\bar{a}n$ -:

sān-kánè?	"when?"	sān-kán lā	"at that time"
sāŋá kám	"all the time"	sāŋá bὲdυgῦ	"a long time"
sānsá bèdvgū	"many times"	sāŋá b <u>ī</u> 'əlá	"for/in a short time"

27 Texts

27.1 Balaam's Donkey

Numbers 22:21-35, KB.

Balaam da duoe beogun loo o buyu dol Moab na'ayikpem la key. Amaa Wina'am sunf da duoe ne on key la, ka Zugsob maliak kidigi zi'en suor la zug ye o gey o. Balaam da ban'adne o buy, ka o yammis ayi' dol o. Buy la da nye Zugsob maliak la ka o zi'e suor la zug ka fuoe su'ugu zanl o nu'ugin, ka o buyi kpen' moogi gaad. Ka Balaam pin'ili bu'ud buy la ye o leb suor puug.

Zugsəb maliak la da təlisi zi'en ləmbən'əd ayi' banɛ ka ba mɛ' zaŋguoma ayi' bɛŋ, ka suobaanlig bɛɛ li teŋsvk la. Bvŋ la n da nyɛ Zugsəb maliak la, o da miee labin zaŋguom la urig Balaam nəbir. Ka o lɛm bv' o ya'as.

Zugsəb maliak la da lɛn vurigi təlis zi'en tuon zin'ikanɛ ka sə' ku nyaŋi fɛndig datiuŋ bɛɛ dagəbuga. Buŋ la da lɛn nyɛ Zugsəb maliak la, o da digin nɛ Balaam wusa teŋin, ka Balaam sunf duoe hali ka o vəb buŋ la nɛ o dansaar. Ka Zugsəb kɛ ka buŋ la ya'ae o nəəri pian' Balaam ye, "Bə kimm ka m maalif ka li kɛ ka fu bu'um nəər atan' sa?" Balaam da lɛbis o ye, "Fu mərim nɛ maan galim! M ya'a mərin su'ugu m nu'ugin m naan kuunif nannanna." Buŋ 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 fəɔ?" Ka o lɛbis ye, "Ayei!"

Ka Zugsəb yə'əg Balaam nini ka o nyɛ maliak la zi'e suor la teŋsuk ka fuoe su'ugu zanl. Ka o igin ka vanbin teŋin. Zugsəb maliak la da bu'os o ye, "Bɔ ka fu bu' buŋ la nəər atan' sa? M kena ye m giŋif bəzugə ken la ka' su'um m nini nii. Nəər atan' ka buŋ la nyɛɛm ka yuk. Buŋ la ya'a pu yukinɛ, anwaa m kuunif ka basin buŋ la." Balaam da lɛbisi yɛl Zugsəb maliak la ye, "M tum taal, m pa'a pu baŋ ye fu zi'enɛ suorin la ye fu geŋi ma. Nannanna li ya'a pu malisi fə m na lɛbi kul." Ka maliak la lɛbisi yɛl Balaam ye, "Dəl nidib la keŋ, amaa yɛlim nɛ man ye fu yɛl si'el ma'aa." Ka Balaam dəl Balak na'ayikpɛm la keŋ.

Balaam dá dùe b $\bar{\epsilon}$ ogv-n ø lớɔ ò bùŋv ø d $\bar{\delta}$ l Moab Balaam tns rise morning-loc cat tie 3an donkey:sg cat accompany Moab ná'-y $\bar{\imath}$ -kpém lā ø kéŋ. chief-house-elder:plart cat go.

"Balaam got up in the morning, saddled his donkey and went with the courtiers of the king of Moab." $\,$

Àmáa Wínà'am súňf dà dùe $n\bar{\varepsilon}$ ón $k\bar{\varepsilon}\eta$ $l\bar{a}$, kà $Z\bar{u}g$ -sób máliāk But God heart:sg tns rise with 3AN:NZ go ART, and Head-NULL.AN angel:sg $k\bar{\iota}_l d_l g_l = \bar{\iota}_l d_l g_l = \bar{\iota}_$

"But God was angry that he went, and an angel of the Lord met him and stood in the road to obstruct him."

Balaam dá bàň'ad né ò bùŋ, kà ò yàmmıs àyí' dɔɔ̃lló ø. Balaam tns 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."

Bùŋ lā dá ňyὲ Zūg-sób máliāk lá kà ò zí'e sūer lā zúg Donkey:sg art tns see Head-null.an angel:sg art and 3an be.standing road:sg art upon kà fúe sù'vgv ø záňl ò nú'ugī-n, kà ò búŋì ø kpèň' and draw knife:sg cat have.in.hand 3an hand:sg-loc, and 3an cut.across cat enter mɔ̄ɔgı ø gâad. 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."

Kà Balaam pṛn'ilu \emptyset bū'vd búŋ lā yé ò léb sūer pûvg. 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."

 $Z\bar{u}g$ -sób máliāk lā dá tòlisi ø zî'ən lòmbò'ɔd àyí' bánì kà bà m ε Head-NULL.AN angel:sg art this do.next cat stand orchard:pl num:two rel.pl and 3pl build zàngùema àyí' ø b ε n, kà s μ ā-báa μ lìg b ε e lì t ε n-s ν k lā. wall:pl num:two cat demarcate, and road-narrow:sg exist 3in middle:sg art. "The angel of the Lord then stood where dividing walls had been built between two orchards and there was a narrow path between them."

Bùŋ lá ǹ dà n̈yē Zūg-sób máliāk lā, ò dà mìe ø làbın Donkey:sg art nz tns see Head-null.an angel:sg art, san tns squeeze cat hide.behind zàngùem lā ø ūrıg Balaam nóbìr. Kà ò lém bú'o ø yâ'as. wall:sg art cat scrape Balaam leg:sg. And san again beat san.ob again. "When the donkey saw the angel of the Lord, it squeezed against the wall and scraped Balaam's leg. And he beat it again."

 $Z\bar{u}g$ - $s\acute{o}b$ $m\acute{a}li\bar{a}k$ $l\bar{a}$ $d\acute{a}$ $l\grave{e}m$ $v\bar{u}r_{l}g_{l}$ \varnothing $t\~{o}l_{l}s_{l}$ \varnothing $z\^{l}$ e $t\~{u}en$ Head-Null.an angel:sg art tns again shift.along cat do.next cat stand in.front $z\'{i}n'$ - $k\`{a}n_{l}$ $k\`{a}$ $s\~{o}'$ $k\'{v}$ $n\~{y}a\~{n}_{l}$ \varnothing $f\~{e}n\~{d}lg$ $d\acute{a}t\~{l}u\~{n}$ $b\~{e}e$ $d\acute{a}g\`{o}blg\~{a}=\varnothing$. place-Rel.sg and INDEAN 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."

Bùŋ lá ø dà lèm ňyē Zūg-sób máliāk lā, ò dà dìgın nē Donkey:sg art nz tns again see Head-null.an angel:sg art, 3an tns lie.down with Balaam wūsa tēŋı-n, kà Balaam súňf dūe hālí kà ò vōb Balaam all ground:sg-loc, and Balaam heart:sg rise so.far and 3an strike búŋ lā né ò dànsàar. donkey:sg art with 3an 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."

Kà $Z\bar{u}g$ -sób $k\acute{\epsilon}$ kà $b\grave{v}\eta$ $l\bar{a}$ yá'e ò $n\bar{o}$ orı \emptyset pịāň' Balaam yē, And Head-NULL.AN let and donkey:SG ART open 3AN mouth:SG CAT speak Balaam that $B\bar{o}$ $k\acute{\epsilon}$ m máalì f kà $l\grave{v}$ ké kà $f\grave{v}$ bú'v m $n\bar{o}$ or átáň' $s\acute{a}$ = \emptyset ? what IDEO and 1SG make 2SG and 3IN let and 2SG beat 1SG time:SG NUM:three hence=CQ? "Then the Lord caused the donkey to open its mouth to speak to Balaam: 'Just what have I done to you to make you beat me these three times?'"

Balaam dá lèbisō ø yē, Fù mórī m nē ø mâan ø gálìm! M yá' Balaam tns reply 3an.ob that, 2sg have 1sg foc cat make:IPFV cat joke:IPFV! 1sg if mōrī-n sú'vgù m nú'ugī-n, m nāan kūv-ní f nānná-nā. 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 right now.'"

Bùŋ lā dá lèbis Balaam yē, Mān kā' nế fừ mēŋ búŋ ónì kà Donkey:sg art tns reply Balaam that, 1sg.cntr neg.be foc 2sg self donkey:sg rel.an and fừ bāň'ad sāŋá wūsa ø tí pāe z̄ṇáa=ø=ø? Fừ nám mṛ' ø ňyế kà 2sg ride:IPFV time all cat after reach today=neg=pQ? 2sg already know cat see and m mâal àňwá ø tísì fò=ø? Kà ò lébìs yē, Áyìı! 1sg make thus cat give 2sg=cQ? And 3an reply that No.

"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 to you?' He replied, 'No.'"

Κà Zūa-sób yɔ̂'ɔa Balaam nínì kà ò ňyē máliāk lā ø zí'e sūer And Head-NULL.AN open Balaam eye:PL and 3AN see angel:SG ART CAT be.standing road:SG lā téŋ-sūk, kà fúe sờ'vgv ø zāňl. Kà ò ígìn kà vábìn ART centre:sg and draw knife:sg cat hold. And 3AN kneel and lie.prone ground:sg-loc. "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, and he knelt and lay face down."

Zūa-sób máliāk lā dá bù'esō ø νε, Βό kà fù bū' lā Head-NULL.AN angel:SG ART TNS ask 3AN.OB that, What and 2SG beat donkey:SG ART $s\acute{a}=\emptyset$? Ň nāar átáň' kέ nā yé m gịni f bɔ̄ zúgɔ̄ kēn time:sg num:three hence=cq? 1sg come hither that 1sg obstruct 2sg because go:ger art \dot{m} $n\bar{i}ni$ $n\bar{i}i=\emptyset$. $N\bar{j}$ átáň' kà bùn lā ňγέε m NEG.BE good:ABSTR 1SG eye:PL LOC=NEG. Time:SG NUM:three and donkey:SG ART see 1SG kà yūk. Bùn lā yá' pū $y\bar{u}ki-ni$, $a\bar{n}wa=\phi \hat{m} k\bar{v}v-ni$, f kaand deviate. Donkey:sg art if NEG.IND deviate-DP thus=NEG 1SG kill-DP 2SG and básī-n bύŋ lā.

release-DP 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."

Balaam dá lèbisi ø yél Zūg-sób máljāk lā yē, M tύm tâal, Balaam TNS reply CAT say Head-NULL.AN angel:SG ART that, 1SG work fault:SG, 1SG TNS $v\bar{v}$ νέ fù zí'e nē sūerí-n lā yé fù gịní NEG.IND realise that 2SG be.standing FOC road:SG-LOC ART that 2SG obstruct 1SG=NEG. Nānná-nā, lì yá' pū mālisí $f\bar{\mathfrak{z}}=\emptyset$ m ná lēbī, ø kūl. 3IN 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 standing in the road to obstruct me. Now, if it is not pleasing to you, I will return home."

Kà màliāk lā lébisì, ø yèl Balaam yē, Dòl nīdıb $l\bar{a}$, ø $k\bar{\epsilon}\eta$, And angel:sg art reply cat say Balaam that, Accompany person:PL ART CAT go, àmáa yèlim nē mán yé fò yél sī'əl má'àa.

but say: IMP FOC 1SG:NZ that 2SG say INDF.IN only.

"But the angel replied to Balaam: 'Go with the people, but say only what I tell you.'"

Kà Balaam dɔl Balak ná'-γ<u>ī</u>-kpέm lā ø kén. And Balaam accompany Balak chief-house-elder:PL ART CAT go.

"So Balaam went with Balak's courtiers."

27.2 Three Murderers

From *Kusaal Solima ne Siilima* p16. The story is clearly related to Chaucer's *Pardoner's Tale*; the fable is familiar throughout Europe, Asia and Africa, and is probably ultimately derived from a Buddhist *Jātaka* story. (Hamel and Merrill 1991.)

The style is much less formal than in the passage from KB above.

NING KUUDIBA ATAN'

Dapa atan' n da be. Ba da ane dap kanda su'unga. 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. 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.

Ba giligi ala ne nwadisa atan' ne dabisa atan' ba po nye nidii na kuu. Ka kpelim mor ken ne ken ne ken. 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. 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. Ka ba ye, Ato, ka nannanna nwa, ti ye ti ning ligidi nwa walla? 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. Ka yis ligidi la bi'ela ye biig la kem da' yoor na ka ba nu.

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. Ka sid da' daam la ka bo tikuudim n los.

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. 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.

Din ka Kusaas ye fu ya'a ten'es bee tumbe'ed ye fu tisi fu tiraan, fu maane fu meng ya'as la.

Nṛn-kúvdìbá àtáň'. "Three murderers." Person-kill:AGT:PL NUM:three.

 $D\bar{a}p\dot{a}$ _ $\dot{a}t\dot{a}n'$ n $d\dot{a}$ $b\dot{\epsilon}$. $B\dot{a}$ $d\dot{a}$ $\dot{n}\bar{\epsilon}$ $d\dot{a}p$ - $k\bar{a}nda$ $s\dot{v}\eta\bar{a}$. 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."

Kà dāar yīnní kà bà lá'asì ø zíň'inì ø gbāň'e yế bà dûem ø iā búdàalım And day:sg one and 3PL gather CAT sit CAT grab that 3PL rise:IMP CAT seek courage lâ'ad n gīnnı ø kō nīdıb má'àa kà dā lém tòm sī'əla=ø. goods:PL CAT roam:IPFV CAT kill person:PL only and NEG.IMP again work INDF.IN=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."

Bà sìd dùe ø jā $s\hat{v}$ 'vs nē záň'anà nē tí-dāad nē nē pīmá 3PL truly rise CAT seek knife:PL with bludgeon:PL with bow:PL with arrow:PL with málì súṇā n pịn'ilı ø gịnnı lû'ad. nē kpāna $nar{arepsilon}$ quiver:PL with spear:PL with gun:PL well cat begin cat wander:IPFV cat seek:IPFV $y\dot{\varepsilon}$ $b\dot{a}$ $y\dot{a}$ \ddot{n} $y\bar{\varepsilon}$ $s\bar{\sigma}$ bān kō. person:PL that 3PL if find INDEAN 3PL.CNTR kill.

"So indeed they went and sought lots of swords, bludgeons, bows, arrows, quivers, spears and guns and began looking round for people to find someone to kill."

Bà gịl gí àlá nẽ ňwād sá àtáň' nẽ dáb sà àtáň'. Bà pō ňyē 3PL go.round thus with month: PL NUM: three with day: PL NUM: three. 3PL NEG.IND find nịd \emptyset ná $k\bar{v}v=\emptyset$. Kà $kp\acute{e}l$ $m\bar{o}r$ $k\bar{e}n$ $n\bar{e}$ $k\bar{e}n$ $n\bar{e}$ $k\bar{e}n$. 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."

Dābá, ànū dâar bà ňyē nē lāllí sà kà sī'əl zí'e sābilli ø Day:PL NUM:five day:SG 3PL find with far hence and INDF.IN stand black:SG CAT พบิบ ทเิป nē, kà bà kpēεňm lā yέ bà kém, ø kύο, ø, νέ ò sāb like person:sg like, and 3PL elder:sg art that 3PL go:IMP CAT kill 3AN.OB, that 3AN NULL.AN túň'e kà mōr nē láuk-sī'a wūsa, bà nà ňyāŋι ø kύο ø. yá' pùn if already be able and have FOC item-INDE IN all, 3PL IRR prevail CAT kill "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."

Kà $\partial\eta\bar{a}$ $g\bar{i}\eta id$ $kp\bar{\epsilon}$, $k\dot{a}$ $\partial\eta\bar{a}$ $g\bar{i}\eta id$ $kp\bar{\epsilon}$, $b\dot{a}$ $t\dot{i}$ $k\bar{\epsilon}\eta$ \emptyset And DEMST.AN intercept:IPFV there, and DEMST.AN intercept:IPFV there, 3PL after go CAT $p\bar{a}e$ \emptyset n'' n''

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." Kà bà yē, Àtò, kà nānná-nā ňwá, tì yế tì nín lịgươi ňwá wālá= \emptyset ? And 3PL say, So.then, and now this, 1PL that after do money this how=co? "They said: 'Well, now! What are we going to do with this money?'"

Kà bà yē, bà nà pōdig nē. Àmáa bà yé lì nár kà bà yṣs lṣgidi lā n And 3PL say, 3PL IRR share Foc. But 3PL that 3IN must and 3PL extract money ART CAT $k\bar{\epsilon}\eta$ ø dá' dāam ø ná nū yṣigá kà nyāan pōdig lṣgidi 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."

Kà ȳs l̄gudu lā b̄j'əlá ȳɛ b̄jig lā kɛ́m 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."

ò tèň'ɛsıd nē ón Bīig lā, nà nịŋ sị'əm ø kū bánì kpèlim Child:sg art nz qo:ipfv art, 3an think:ipfv foc 3an:nz irr do indf.adv cat kill rel.pl remain àní nā lā, kà váe līgidi lā wūsa wūsa n sū'e, ò yèli ò mēŋ yē, there ART, and gather money ART all CAT own, 3AN say 3AN self that, all ò nà dā' nē dāam, kà bó tì-kūvdím n lós dāamí-n lā 3AN IRR buy FOC beer, and seek medicine-killing CAT immerse beer-LOC ART n pāe, ø tíi, bá kà bà nūu, ø kpí kà ò sū'e līgidi 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."

 $K\grave{a}$ síd d \grave{a} ' d \bar{a} am l \bar{a} , k \grave{a} b \acute{o} tì- $k\bar{v}v$ dím n l \acute{o} s. And truly buy beer ART, and seek medicine-killing CAT immerse. "And indeed he bought the beer and sought poison to put in it."

 Z_1^{μ} 'isí $g_{\bar{\epsilon}}=\emptyset$, $k\dot{a}$ $b\dot{a}$ $b\dot{a}$ y'_1^{μ} $l\dot{a}$ \emptyset $kp\dot{\epsilon}lm$ $l\bar{a}$ $m\dot{\epsilon}$ $gb\bar{a}$ n'e $n\bar{\epsilon}$ $y\dot{\epsilon}$ $b\dot{a}$ $k\bar{\nu}$ Neg.know=neg, and 3Pl num:two art nz remain art also grab foc that 3Pl kill $b\bar{i}ig$ $l\dot{a}$ \emptyset $k\bar{\epsilon}\eta$ $d\bar{a}am$ $l\bar{a}$ $d\hat{a}'ab$ $l\bar{a}$, $k\dot{a}$ $m\dot{\epsilon}$ $s\bar{\nu}'e$ $l\bar{i}g_1d_1$ $l\bar{a}$. 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."

Bīiq lá n mōr dāam lā ø pāa nā lā. kà ànā kiá kpε̄, Child:sg art nz have beer art cat reach hither art, and DEMST.AN cut here, kiá kpē, n kio ø ø kū, kà yū'un zán dāam lā ø and SAN, CNTR cut here, CAT cut SAN, OB CAT kill, and then take beer ART CAT yúugē=ø, kà bà wūsa wūsa mé kpélìm wán wán, lì pū kpì drink ideo ideo, 3in neg.ind delay=neg and 3pl all all also immediately die zìň-kàn lā nóo kà bà sɔ̄' $s\bar{\mathfrak{I}}'$ $p\bar{v}$ ňyāŋı ø pâam lā'af lā place-DEM.SG ART exactly and 3PL INDF.AN INDF.AN NEG.IND prevail CAT receive cowry:SG ART bà váa-n $\bar{\varepsilon}$ = \emptyset . báa yīnní ø mōrı ø kūlí CAT have CAT go.home 3PL house:PL-LOC=NEG. not.one

"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."

Dìn kà Kūsâas yế fừ yá' tẽň'ɛs bēɛ tứm bē'ɛd yế fừ tísì

3IN.CNTR and Kusaasi:PL that 2SG if think or act bad that 2SG give
fừ tīrâan, fừ mâanní fừ mēŋ yâ'as 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

"That's why the Kusaasi say: if you think or do evil toward your neighbour, you're doing it to yourself in return."

27.3 Proverbs

Kusaal Solima ne Siilima pp38ff.; other proverbs appear in the grammar above.

Ku'om kaadi lebisne m geegun.

Kù'θm káadì σ lέbìs nέ m̀ gēogυ-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'em zót nē biāň'ar zúg.

Water run: IPFV FOC riverbed: SG upon.

"Water runs on mud." (i.e. 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.

 \dot{A} -wiāk sēong $z\bar{\imath}$ ' sínn $\bar{\varepsilon}$ = \emptyset .

PERS-hatch rainy.season NEG.KNOW hawk:PL=NEG.

"One hatched in the rainy season doesn't know about hawks." (Fool's paradise.)

Po nye saa kuubo, ka nye saa niib.

 $P\bar{v}$ $\bar{n}y\bar{\varepsilon}$ $s\bar{a}a$ $k\acute{v}vb\bar{z}=\emptyset$, $k\grave{a}$ $\bar{n}y\bar{\varepsilon}$ $s\bar{a}a$ $n\hat{i}ib$.

NEG.IND see rain threaten: GER=NEG, and see rain rain: GER.

"Didn't see the rain coming, but did see the rain." (Wise after the event.)

Ba pu nokid na'ambinni lobigid naafo.

 $B\grave{a}\ p\bar{v}$ $n\bar{b}k\acute{i}d$ $n\bar{a}'-b\acute{i}nn\grave{i}$ \emptyset $l\bar{b}lig\acute{i}d$ $n\acute{a}af\bar{b}=\emptyset$.

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." (Coals to Newcastle.)

Zu'om ya'a ye o na lobug, bangim ka o none kugir.

Zū'θm yá' yέ ò nà lɔ̄big, bàŋım kà ò nò nē kūgir.

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."

Nong daan fuug tigidne gum ka li po tigid ki'ibo.

 $N\bar{\jmath}\eta$ -dâan fûug tìgid n $\bar{\varepsilon}$ góm, kà lì p $\bar{\upsilon}$ t $\bar{\iota}$ gid k $\bar{\iota}$ ' ι b $\acute{\jmath}$ = \varnothing .

Poverty-owner:sg shirt:sg sate:ipfv foc cotton, and 3in neg.ind sate:ipfv soap=neg.

"A poor man's shirt has a lot of material but not a lot of soap." (Waste not, want not.)

Balerigu zi' ye o a balerigu, ka tadim mi' ye o [a] tadim.

 $B\bar{a}l\bar{\epsilon}r\upsilon g\upsilon = g$, $k\dot{a}$ $t\bar{a}d\iota m$ $m\bar{t}$ $y\dot{\epsilon}$ \dot{a} $t\bar{a}d\iota m$.

Ugly:sg CAT NEG.KNOW that 3AN COP ugly:sg=NEG, 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."

(i.e. self-delusion about poverty is not possible.)

Fu ya'a bood tampiing siind, fu po lem zot lieng daug nyoogo.

 $F\dot{v}$ yá' bōɔd támpìing sîind, $f\dot{v}$ $p\bar{v}$ $l\acute{\epsilon}m$ $z\grave{o}t$ $l\acute{\epsilon}\eta$ dâvg nyōɔgɔ=ø.

2SG if want rock:SG honey, 2SG NEG.IND again run:IPFV axe:SG wood:SG sympathy=NEG.

"If you want honey out of a stone, you don't feel sorry for the axeshaft."

Moodi pilig ka yu'ada be.

Mɔɔdı ø pilìg kà yū'ada bɛ́.

Grass:PL CAT strip.off and rafter:PL EXIST.

"The thatch has come off but the rafters remain." (Where there's life there's hope.)

Buribig kunni o ba' yirne nobkoog daar.

Bù-dìbig kúnní ò bā' yír nē nōb-kôɔg dâar.

Goat-young.male:sg go.home:ipfv 3AN father:sg house:sg with leg-break:ger day: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.

 \dot{A} - $d\bar{l}$ 'e $b\bar{v}$ vd $p\bar{v}$ z $(\check{n}$ 'i $n\dot{a}$ '-y $(\check{l}$ $r\dot{\epsilon}$ = \emptyset .

PERS-receive innocence NEG.IND be.sitting chief-house:SG=NEG.

"He who has been declared innocent doesn't hang around the courthouse."

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.)

Bungdaug po kaasidi o tiraan tengine.

 $B \dot{v} \eta - d \bar{a} v g$ $p \bar{v}$ $k \bar{a} a s i d i$ \dot{o} $t \bar{i} r \hat{a} a n$ $t \dot{\varepsilon} \eta \bar{i} - n \dot{\varepsilon} = \emptyset$.

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.

 $Kp\bar{\varepsilon}\tilde{\varepsilon}\tilde{n}m$ á $n\bar{\varepsilon}$ $t\hat{\varepsilon}'\varepsilon q$, \tilde{o} tiqid $n\bar{\varepsilon}$ $b\acute{a}l\grave{a}va$.

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 ...)

A proverb related to me by KT:

Sāan-sún á nē yī-dâan áňsìb.

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.)

28 Vocabulary

Words are ordered by Short Forms. Vowel glottalisation and the distinctions n/\tilde{n} , $\partial/\partial/\partial i$, i/i/i, $\partial/\partial/\partial i$ and i/i/i are ignored in the ordering; i/i/i follows i/i/i.

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 $ga|s\varepsilon$ class form if extant; if not, $g_2|d\varepsilon$ or $r\varepsilon|aa$. 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 26.2 26.3 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.

Α

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à- personifier particle (default allomorph) 12.6
\bar{a}a\bar{n}dig^a pl \bar{a}a\bar{n}dis^\epsilon cb \dot{a}a\bar{n}d- n. black plum tree, Vitex doniana
āandır<sup>e</sup> pl āanda n. black plum fruit
\grave{a} a \check{n} s^{\varepsilon} dv. tear
àbòlá q. adv. how many-fold?
àbòyí àbòtáň àbònāasí q. adv. twice, three times etc
à-dàal\acute{v}<sub>0</sub>° pl à-dàal\acute{v}<sup>\varepsilon</sup> à-dàal\acute{v}<sub>\varepsilon</sub> cb à-dàal\acute{v}<sub>\varepsilon</sub> n. stork 12.6
àeňa ger àaňlím<sup>m</sup> sv. be something/somehow 16.12.2 4.3
àeň dv. get torn; resultative adj àaňlύη<sup>3</sup> torn
\dot{a}-g\hat{a}\nu ng^{\circ} pl \dot{a}-g\hat{a}and^{\varepsilon} cb \dot{a}-g\bar{a} n. pied crow 12.6
àgál<sup>le</sup> àgālá adv. upwards
Aa \partial l^{l\epsilon} n. Agolle district of Kusaasi territory; n. Agolle Kusaal dialect
\dot{a}-k\bar{b}ra-d\hat{p}m<sup>ma</sup> pl \dot{a}-k\bar{b}ra-d\hat{p}m-n\dot{a}m<sup>a</sup> n. praying mantis 12.6
àlá adv. thus
àlá q. so many; how many?
àláafò n. health; in greetings 25; cf láafiya \leftarrow Arabic ?al-Sa:fiya
\dot{A}l\acute{a}asid\ d\^{a}ar^{\epsilon} n. Sunday \leftarrow Arabic
Àlàmíisì dâar<sup>\epsilon</sup> n. Thursday ← Arabic
Àlárıbà dâar^{\varepsilon} n. Wednesday \leftarrow Arabic
àlá zùg<sup>5</sup> therefore 17.2.1
àlópìr^{\varepsilon} pl àlópìva n. aeroplane ← English
àmáa but 17.2.1 ← Hausa ← Arabic
àmēná adv. really, truly
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àmí amen ← Arabic ?a:mi:n; in replies to greetings 25
à-mús<sup>E</sup> pl à-mús-nàma n. cat 12.6; cf Hausa mussàa id
ànāasí q. four
àní adv. there
àníi q. eight
àní n\bar{a}^{I} adv. there
ànínà adv. promptly
an\hat{j}'n^{\epsilon} who? 12.4.4
ànrun pl ànrıma cb ànrun n. boat (written aarun in the 1976/1996 NT)
\bar{a}ns^{\varepsilon} dv. pluck (leaves)
áňsìba pl āňs-náma cb āňs- n. mother's brother
\bar{a}n sig^{\epsilon} dv. break at an angle
\bar{a}nsin^a pl \, \bar{a}nsis^\epsilon \, cb \, \bar{a}nsin - n. (man's) sister's child
àntù'a pl àntù'es<sup>ɛ</sup> cb àntu'à- n. lawsuit
ànū q. five
àňwá adv. like this
ānzúrīfà n. silver ← Hausa azùrfaa
àrakóň' q. one
\dot{a}raz\dot{a}k^a pl \dot{a}raz\dot{a}'as^\epsilon cb \dot{a}raz\dot{a}'- generally pl: n. wealth, riches \leftarrow Arabic ?ar-rizq
àrazánà n. heaven ← Arabic ?al-¡anna
Arzúma daar^{\varepsilon} n. Friday \leftarrow Arabic
àsée except, unless 15 17.2.1 ← Hausa sai
Àsíbitì dâar^{\varepsilon} n. Saturday \leftarrow Arabic
àsīda adv. truly
àsùbá n. dawn ← Arabic ?as¹-s¹aba:ħ
àtáň' q. three
Àtàláatà dâar^{\varepsilon} n. Tuesday \leftarrow Arabic
atana^{J}q. three exactly
\dot{A}tinì d\hat{a}ar^{\varepsilon} n. Monday \leftarrow Arabic
àtìuk<sup>o</sup> n. sea ← Hausa tèeku
àwánā<sup>/</sup> adv. like this
àwāe q. nine
àví' q. two
áyìı no 18.4
\grave{a}y\acute{i}\eta \bar{a}^{\prime}q. two exactly
àyớpòe q. seven
àyúθbù q. six
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В

bà they, their (right-bound); ba them (left-bound) 12.4.1 $b\bar{a}^{\prime\prime}$ pl $b\bar{a}^{\prime\prime}$ -nám^a cb $b\bar{a}^{\prime\prime}$ - n. father 5.4 bāa pl bāasε cb bà- n. dog báa (← Hausa bâa "not exist") in constituent negation 23 bā'a pl bā'aba cb bà'- n. traditional diviner; bà'-kòlva pl bà'-kòn^{nɛ} cb bà'-kòl- n. diviner's bag $b\bar{a}'a$ pl $b\bar{a}'as^{\varepsilon}cb$ $b\dot{a}'-n$. peg to hang things on bà'an^{nɛ} pl bà'ana cb bà'an- n. stocks (punishment) bàanlıga pl bàanlıs^ε adj. narrow, slender bāaňlíga adj. quiet *bāaňlím*^m adv. quietly bà'ar^ɛ pl bàda bà'a cb bà'- n. idol $b\bar{a}b\acute{a}$ beside postposition 13.5; cf $b\bar{a}bir^{\varepsilon/}$ sphere of activity bàbi qā^l q. many bákpàe n. week ← Hausa bakwài "seven" bàlàar^ɛ pl bàlàya cb bàlà- n. stick, staff, club bàlànır^E pl bàlàna cb bàlàn- n. hat $b\bar{a}l\bar{\epsilon}rvq^{5/}$ pl $b\bar{a}l\bar{\epsilon}rid^{\epsilon/}$ $b\bar{a}l\bar{\epsilon}ris^{\epsilon/}$ cb $b\bar{a}l\acute{\epsilon}r$ - n. ugly person; cf $l\bar{\epsilon}r^{\epsilon}$ get ugly $b\grave{a}mm\bar{a}^{\prime}$ these, those demonstrative 12.4.2 ban^{ε} these, those demonstrative 12.4.2 bán they (subject of \dot{n} -clause); \dot{ban}^{ϵ} they, them (contrastive) 12.4.1 bāň' dv. ride $b\bar{a}n\bar{a}a$ pl $b\bar{a}n\bar{a}as^{\epsilon}$ cb $b\dot{a}n\dot{a}$ - (tone sic in my materials) n. traditional "fugu" smock bàň'ada pl bàň'ad-nàma n. ill person $b\bar{a}\tilde{n}'al^{\varepsilon}/dv$. make to ride (horse, bicycle) bāň'as^ε cb bàň'- n. pl as sq disease bàn-dāva⁵ pl bàn-dāad^e cb bàn-dà- n. crocodile bān-kúsél^{le} pl bān-kúsēlá cb bān-kúsēl- n. lizard $b\bar{a}\eta^a$ pl $b\bar{a}a\check{n}s^\epsilon$ cb $b\grave{a}\eta$ - n. ring, chain, fetter *bàn*^a *n.* agama lizard $b \dot{a} \eta^{\epsilon} dv$. come to know *báp* wallop! $B\bar{a}r_{1}q^{a/}$ pl $B\bar{a}r_{1}s^{\epsilon/}$ cb $B\bar{a}r_{1}$ n. Bisa person (not only the Bareka, WK) bárıkà n. blessing; in greetings 25 ← Arabic baraka $B\bar{a}rvg^{5/}$ n. Bisa country; North 26.3 $b\grave{a}s^{\varepsilon}dv$. go away; abandon; throw out $B\bar{a}t^{\varepsilon/}$ n. Bisa language bàtáň' q. three (after a personal pronoun) bàuηυ n. found only as in Ò kpὲň' báuηυ. He was circumcised. ← Songhay "pool" $b\dot{a}\gamma\bar{\epsilon}og^{\circ\prime}$ betrayer of secrets (cf $\gamma\bar{\epsilon}\epsilon s^{\epsilon\prime}$)

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bàyí q. two (after a personal pronoun)
bàyópòe q. seven (after a personal pronoun)
bè ger bèlím<sup>m</sup> (sic) sv. exist; be in a place 16.12.1
b\bar{\varepsilon}d\iota g^{\varepsilon}/dv. go rotten
bèdvg<sup>o</sup> bèdir<sup>e</sup> pl bèda cb bèd- adj. great
b \dot{\epsilon} d v g \bar{v}^{\dagger} q. much, a lot
bε̃ε or 17.2.1 18.2
bèkèkèongo or bèkèongo n. very early morning
bèlim<sup>m</sup> dv. beg
b \dot{\epsilon} l i s^{\epsilon} dv. comfort
bēn<sup>nε</sup> pl bēna cb bèn- n. end
b \dot{\epsilon} \ddot{n}' qer b \bar{\epsilon} \ddot{n}' \varepsilon s^{\varepsilon} dv, fall ill
b \dot{\epsilon} n sig^{\epsilon} dv. serve soup
b \dot{\epsilon} \eta^{\epsilon} dv. mark out a boundary
b\bar{\epsilon}\eta id^{\epsilon}cb\ b\bar{\epsilon}\eta- n. pl bean leaves, Vigna unquiculata; b\bar{\epsilon}\eta id\ n\bar{\epsilon}\ k\bar{\imath}^{\prime} n. beanleaf-and-
millet, a traditional snack
b\bar{\varepsilon}\eta ir^{\varepsilon} pl b\bar{\varepsilon}\eta \dot{a} cb b\bar{\varepsilon}\eta- n. brown bean
b\bar{\epsilon}og^{\circ} n. tomorrow 17.2.1; Kà b\bar{\epsilon}og níe kà ... The next day ...
b\bar{\varepsilon}'og^{\circ}b\bar{i}'a pl b\bar{\varepsilon}'\varepsilon d^{\varepsilon}b\bar{i}' \partial s^{\varepsilon}cb b\dot{\varepsilon}'- b\dot{i}\dot{a}'- adj. bad
b\bar{\epsilon}ogv-n^{\epsilon/} n. morning
b \dot{\epsilon} r i \eta^a pl b \dot{\epsilon} r i g i s^{\epsilon} sic n. a plant used for fibre (KED), Hibiscus cannabinus
b\bar{\epsilon}riga cb b\dot{\epsilon}rig- pl leaves of b\dot{\epsilon}rig used for soup (KED)
b\bar{\varepsilon}svg^{\circ} pl b\bar{\varepsilon}sid^{\varepsilon} cb b\dot{\varepsilon}s- n. a kind of wide-mouthed pot
bj\bar{a}\bar{n}'ar^{\epsilon}/pl\ bj\bar{a}\bar{n}'ad\acute{a}\ bj\acute{a}\bar{n}'a\ cb\ bj\bar{a}\bar{n}'-n. wet mud, black mud; riverbed
biāuňk° pl biāň'ad<sup>ɛ</sup> cb biàň'- n. shoulder
bījele pl bījela adj. naked
bi \partial l^{\varepsilon} dv. accompany
bị dá q. a little; bị d bị d q. and adv. a very little; little by little
bį əm pl bì əm-nàma bį əmma LF cb bì əm-n. enemy
bịən<sup>nɛ</sup> pl bịəna cb biən- n. shin
b\bar{\imath}e^{\epsilon} pl bi\bar{e} yá ch bi\bar{a}- n. elder sibling of the same sex
bi' \theta s^{\varepsilon} dv. doubt
bìgis^{\varepsilon} dv. show, teach
b\bar{i}ig^a pl b\bar{i}is^c cb b\dot{i}- b\bar{i}- n. child; b\bar{i}-d(b\dot{i}\eta^a n. boy; b\dot{i}-l\bar{i}a n. baby; b\dot{i}-n\dot{a}'ab^a n. prince;
           b_i^1 - p_i^{\dagger} t^{a/p} pl b_i^1 - p_i^{\dagger} t^{\dagger} t^{b} cb b_i^1 - p_i^{\dagger} t^{-p} n. father's younger brother; b_i^1 - p_i^{\dagger} t^{a} n. girl
bi'ig^{\varepsilon} dv. ripen, become pregnant
bīilífo pl bīilí cb bīil- n. seed
bìilím<sup>m</sup> n. childhood
b\bar{\imath}\imath m^{\mathrm{m}}/cb b\bar{\imath}- n. soup, stew
bì'isím<sup>m</sup> n. milk (human or animal)
bi'isir^{\epsilon} pl bi'isa cb bi'is-n. woman's breast
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bīla pl bībιsε cb bìl- or bì- adj. little, small
bilig^{\varepsilon} dv. roll (transitive)
bìlım<sup>m</sup> dv. roll (intransitive)
bìmbìm<sup>mɛ</sup> pl bìmbìma cb bìmbìm- n. altar NT (KED: mound or pillar of earth)
Bìn<sup>ne</sup> pl Bìm<sup>ma</sup> cb Bìn- n. Moba, Bimoba person (not only Bemba, WK)
Bin^{n\varepsilon} n. Moba language
b\bar{i}n^{n\epsilon} n. excrement
Bìun<sup>o</sup> n. Moba country
bò dv. seek; bòɔda ipfv used for: want, like, love (sexual, romantic); ipfv ger bòɔdım<sup>m</sup>
will 9.2.1.4
b\bar{\jmath} cb b\dot{\jmath}- what? why? \underline{12.4.4}; b\dot{\jmath}-būudi what sort of ..?; b\bar{\jmath}-zúg\bar{\jmath} because \underline{17.2.1},
          why? 13.6; bò-wìn<sup>nε</sup> what time of day?; bō kímm "exactly what?"
b \dot{b} b \iota q^{\varepsilon} dv, wrap round, tie round
b \dot{\partial} d \iota g^{\varepsilon} d v. lose, become lost
b \partial d \partial b \partial d \partial n. bread (? ultimately \leftarrow English)
b \dot{b} k^{\circ} pl \ b \dot{v}' a d^{\varepsilon} c b \ b u' \dot{a} - n. pit
bɔ̃sır<sup>ɛ</sup> pl bɔ̃sa cb bòs- n. puff adder
bɔ̄tυ n. sack
b\bar{v}' dv, beat
buàk^{\varepsilon} dv. split
bù'ar<sup>ε</sup> pl bu'àa cb bu'à- n. hole
b\bar{v}'ar^{\epsilon} pl bu'áa cb bu'ā- n. skin bottle
b\dot{v}d^{\epsilon} ger b\bar{v}d\iota g^{a} b\bar{v}dvg^{o} dv. plant seeds
bùdàalım<sup>m</sup> n. manhood, courage
bùdım<sup>m</sup> dv. get confused
bùdimis^{\epsilon} n. confusion
bù'e dv. pour out
b\dot{v}g^{\varepsilon}dv. get drunk; cf Hausa bùqu id
b\bar{\nu}g\nu d^a n. client of a b\bar{a}'a traditional diviner
bùgulım<sup>m</sup> dv. cast lots
b\bar{\nu}q\nu r^{\epsilon} pl b\bar{\nu}qa cb b\dot{\nu}q- n. dwelling-place of a w\bar{\imath}n^{n\epsilon} localised spirit; also a w\bar{\imath}n^{n\epsilon/} as
          a sign \varepsilon / 26.2 inherited from one's mother's family
bùq\dot{v}m^{m}cb bùq\ddot{v}m- bùq\dot{v}m- n. fire; Bùq\dot{v}m-t\bar{c})\ddot{n}. Fire Festival
b\bar{v}qvs^{a/}sv. be soft
b\bar{\nu}gvsig^a b\bar{\nu}gvsir^{\epsilon} pl b\bar{\nu}gvsa cb b\bar{\nu}gvs- adj. soft, weak
būgusígā<sup>/</sup> adv. softly
būgvsím<sup>m</sup> n. softness, weakness
b\bar{\nu}k^{\epsilon}/dv, weaken
b\dot{v}k^{\varepsilon}dv, cast lots
bul^{\varepsilon} dv. germinate, ooze
b\bar{u}l^{l\epsilon} pl b\bar{u}la n. shoot, sprout
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b\dot{v}l^{\varepsilon}dv, astonish
B\dot{u}l^{l\epsilon} n. Buli language
Bùlig^a pl Bùlis^{\varepsilon} cb Bùl- n. Bulsa person
bùlia<sup>a</sup> pl bùlis<sup>e</sup> cb bùl- n. well, pond
bùmbàrg^a pl bùmbàrs^{\varepsilon} cb bùmbàr- n. ant
bun^{\varepsilon} dv, reap, harvest
b\bar{v}n^{n\varepsilon}/pl\ b\bar{v}n\acute{a}\ b\bar{v}n-náma ch b\bar{v}n-n. thing (concrete or abstract); b\bar{v}n-b\dot{v}v\dot{d}if^{\circ} n.
          plant; b\bar{v}n-gi\eta^a n. short chap (informal, joking); b\bar{v}n-k\acute{o}\check{n}b\grave{v}g^o pl b\bar{v}n-k\acute{o}\check{n}b\grave{v}d^c
          cb \ k \grave{o} \ nb- (sic) n. animal; b \ \bar{v} \ n- k \acute{v} \ d \grave{v} \ g^{\circ} n. old man
b\bar{\nu}n-dâar<sup>\epsilon</sup> which day? 13.6
b\dot{v}\eta^a pl b\dot{v}mis^{\epsilon} cb b\dot{v}\eta- n. donkey
b\dot{v}\eta^{\varepsilon} dv. take a short cut
b\dot{u}el^{\epsilon}dv. call, summon; \dot{O} v\bar{v}'vr b\hat{u}en X. She is called X. 16.9.2
bùer^{\varepsilon} pl buèva cb buà- n. grain store, silo
b\bar{u}'es^{\varepsilon}dv. ask; ger b\bar{u}'es\dot{v}g^{\circ}n. question; bu'oskana this question (In 18:34)
bù-pīiga q. adv. ten times
būráa n. man, male adult (in ILK, but characteristically Toende Kusaal; see dāu)
būrıyá n. Christmas ← Twi/Fante bronya
b\dot{v}rkin^a pl b\dot{v}rkin-nàma ch b\dot{v}rkin-n. free person; honourable person \leftarrow Songhay
B\dot{\nu}s\hat{a}a\check{n}l^{\epsilon} n. Bisa language
B\dot{v}s\dot{a}\eta^a pl B\dot{v}s\dot{a}a\check{n}s^\epsilon cb B\dot{v}s\bar{a}\eta- n. Bisa person
b\bar{v}ti\eta^a pl\ b\bar{v}tiis^\epsilon 3.5; cb b\dot{v}ti\eta- n. cup (in general; originally "seed-planting [cup]")
b\bar{\nu}\nu d^{\epsilon} n. pl as sg innocence
būudı cb bùud- n. kind, sort, ethnic group
b\bar{v}vg^a pl b\bar{v}vs^\epsilon cb b\dot{v}- n. goat; b\dot{v}-dibig^a n. male kid
D
dà before two days ago, tense particle 16.3.1
dā not with imperative mood 16.5
dàa day after tomorrow, tense particle 16.3.1
dāa before yesterday, tense particle 16.3.1
dà' dv. buy
d\dot{a}'a pl d\dot{a}'as^{\varepsilon} cb d\dot{a}'- n. market
d\dot{a}'ab\iota r^{\varepsilon} n. slave
dàalım<sup>m</sup> n. masculinity
d\grave{a}al\acute{m}^{\rm m} pl d\grave{a}al\acute{m}\grave{i}s^{\rm E} n. male organs
d\bar{a}am^{m/}cb\ d\bar{a}- n. millet beer, "pito"; d\bar{a}-n\hat{u}ur^{\epsilon} n. beer-drinking; d\bar{a}-b\acute{i}n^{n\epsilon} cb\ d\bar{a}-b\acute{i}n- n.
          beer residue; NT yeast (cf b\bar{i}n^{n\epsilon})
dàam<sup>m</sup> dv. disturb, trouble (cf Hausa dàamaa id)
dāana pl dàan-nàma cb dàan- n. owner of ... 12.7.2
d\bar{a}ar^{\epsilon} pl d\bar{a}b\acute{a} cb d\grave{a}- n. day (24-hour period); d\grave{a}-p\bar{i}iga n. ten days
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d\bar{a}a-sí'\epsilon r\bar{\epsilon} perhaps 17.2.1
dàbīəm<sup>m</sup> tone sic n. fear
dab\bar{i}og^{\circ} pl dab\bar{i}ed^{\varepsilon} cb dabia- n. coward
d\dot{a}bisir^{\varepsilon} pl d\dot{a}bisa cb d\dot{a}bis- n. day (as one of several)
d\bar{a}d\dot{\nu}k^{\circ} n. a kind of large pot
d\bar{a}'e'dv. push; blow (of wind)
Dàgâad<sup>a</sup> pl Dàgáadìb<sup>a</sup> Dàgâad-nàm<sup>a</sup> cb Dàgâad- n. Dagaaba person (L prefix sic)
Dàgbān<sup>nɛ/</sup> pl Dàgbām<sup>ma/</sup> cb Dàgbān- n. Dagomba person
Dàgbān<sup>nɛ/</sup> n. Dagbani language
Dàgbāun<sup>5</sup>/ n. Dagomba country, Dagbon
dàgòbiga n. left-hand; (yà) dàgòbiga South KB 26.3
dāká pl dāká-nàma cb dāká- n. box ← Hausa àdakàa
d\dot{a}k\bar{i}ig^a pl d\dot{a}k\bar{i}is^\epsilon cb d\dot{a}k\hat{i}- n. wife's sibling; d\dot{a}k\hat{i}-d\bar{a}u n. wife's brother; d\dot{a}k\hat{i}-pu\bar{a}k^a n.
          wife's sister; dàkì-tùa n. wife's sister's husband
d\dot{a}-k\dot{>})\ddot{n}r^{\varepsilon} pl d\dot{a}-k\dot{>}\ddot{n}ya cb d\dot{a}-k\dot{>}\ddot{n}- n. unmarried son 26.1
dàm<sup>m</sup> ipfv dàmmıda dv. shake
dàmà'a n. liar cf mà'
dàmà'am<sup>m</sup> n. lie, untruth, lying
d\grave{a}m\grave{a}'ar^{\varepsilon} n. lie, untruth
d\bar{a}mp\bar{v}s\bar{a}ar^{\varepsilon} n. stick
dànkòn<sup>o</sup> n. measles
dansaar^{\varepsilon} n. staff, club
dà-pāala/ n. young man, son
d\dot{a}-s\bar{a}\eta^a pl d\dot{a}-s\bar{a}a\tilde{n}s^\epsilon d\dot{a}-s\bar{a}m^{ma} cb d\dot{a}-s\dot{a}\eta- 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
dàtìun<sup>o</sup> n. right-hand; (yà) dàtìun<sup>o</sup> North KB 26.3
d\bar{a}u pl d\bar{a}p^a cb d\dot{a}u- d\dot{a}p- 5.2 n. man (as opposed to woman)
d\dot{a}vg^{\circ} pl d\dot{a}ad^{\varepsilon} cb d\dot{a}- n. piece of wood, log; pl also: wood (material); d\dot{a}-k\bar{l}\partial d^{\alpha} n.
          wood-cutter; d\dot{a}-kp\bar{i}'\partial d^a n. carpenter; d\dot{a}-p\bar{v}vd\acute{i}r^{\epsilon} n. cross-piece, pl d\dot{a}-p\bar{v}vd\acute{a} n.
          used as sq cross NT
dāva<sup>o</sup> pl dāad<sup>ε</sup> cb dà- adj. male
dàwàliga n. hot humid season before the rains
dàwān<sup>nɛ/</sup> pl dàwāná cb dàwān- n. pigeon
dàyáam<sup>ma</sup> pl dàyāam-nám<sup>a</sup> cb dàyāam- n. husband's parent; dàyāam-dáu n. husband's
          father; dàyāam-puáka n. husband's mother
day\bar{u}ug^{5} pl day\bar{u}ud^{\epsilon} cb day\bar{u}- n. rat
d\dot{\varepsilon}bir^{\varepsilon} pl d\dot{\varepsilon}ba n. mat, pallet, bed
d\grave{\varepsilon} e^a pl \, d\grave{\varepsilon} e^{\varepsilon} \, n. warthog
d\bar{\epsilon}\epsilon\eta^a pl d\bar{\epsilon}\epsilon\check{n}s^\epsilon d\bar{\epsilon}\epsilon m is^\epsilon d\bar{\epsilon}\epsilon na cb d\dot{\epsilon}\epsilon\eta- q. first
d\bar{\epsilon}l^{la/} ger d\bar{\epsilon}ll\dot{\nu}g^{\circ} d\bar{\epsilon}ll\dot{i}m^{m} sv. be leaning on something (of a person)
dèlim<sup>m</sup> dv. begin to lean on something (of a person)
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d\bar{\epsilon}\eta^a pl d\bar{\epsilon}mis^{\epsilon} cb d\dot{\epsilon}\eta- n. accidental bruise; defect
d \dot{\epsilon} \eta^{\epsilon} dv. go, do first
dènım beforehand, preverb 16.8
di it, its (right-bound) 12.4.1 = li
dì ipfv dìta imp dìma dv. eat, receive; ger d\bar{\iota}\iota b^{\circ} n. food; \dot{O} dì p\mu'\bar{a}. He's married a
         wife. O dì nyán. She's ashamed.
diā'a dv. get dirty
di\bar{a}'ad^{\epsilon}/n. dirt
d\bar{\imath}'e'dv. receive, get
dìəm<sup>ma</sup> pl dìəm-nàm<sup>a</sup>cb dìəm- n. wife's parent; also in polite address to an unrelated
         person of opposite sex and similar or greater age than onself; diem-dau n.
         wife's father; dìəm-puāka n. wife's mother
dì'əm<sup>m</sup> dv. play, not be serious
dì'əma n. festival
d\bar{\imath}' \partial s^{\epsilon}/dv. receive (many things)
digi^{ya} ger dik^{a} KT digir^{\epsilon} WK sv. be lying down
dīgisá n. pl lairs
digil^{\varepsilon}/dv. lay down
digin^{\varepsilon} dv. lie down
digir^{\varepsilon} pl diga cb dig- n. dwarf
diis^{\epsilon} dv. feed; agt diis^{a} n. glutton
dùis\acute{u} pl dùis\acute{u} mà dùis\acute{u} cb dùis\acute{u}, n. spoon
dim^a dummy head pronoun, animate pl; din^{n\epsilon} inanimate sg 12.4.7
din it (subject of \dot{n}-clause) 12.4.1
d\bar{\imath}n^{\varepsilon} it (contrastive) \underline{12.4.1} = l\bar{\imath}n^{\varepsilon}
dind\bar{\epsilon}og^{5/} pl dind\bar{\epsilon}\epsilon d^{\epsilon/} cb dind\bar{\epsilon}- n. chameleon
dindiis<sup>a</sup> n. glutton
dìn zúg<sup>3</sup> therefore 13.6
dit \dot{v} \eta^{\circ} n. right-hand (see dat i u \eta^{\circ})
di-z\bar{z}rvg^{5/} pl di-z\bar{z}r\acute{a} cb di-z\bar{z}r- n. crumb
d\bar{z}l^{la/} ger d\bar{z}ll(m^m) sv. accompany in a subordinate role; An\dot{z}) d\bar{z}ll(m^m) Who has
         come with you? (to an elderly patient.) B\grave{a} d\grave{o}l n\bar{\varepsilon} t\bar{a}aba. They went together.
d\bar{\partial} li a^{\epsilon} dv, make accompany, send along with
d\bar{\rho} lis^{\epsilon} dv. investigate, trace
d\bar{\rho} \tilde{n} lig^{\epsilon} dv. stretch oneself
d\grave{o}\check{n}'os^{\varepsilon}dv. water plants
d\partial g^{\circ} pl d\partial d^{\varepsilon} d\partial t^{\varepsilon} cb d\partial n. house, hut; clan; d\partial g bîig^{\circ} n. housecat
dòɔñg<sup>o</sup> pl dòoñd<sup>ε</sup> cb dòñ- n. dawadawa fruit
d\bar{v} ipfv d\bar{v}t^{a/} imp d\hat{v}m^a dv. go up
du'\dot{a}^a dv. bear, give birth, beget; agt d\bar{\nu}'ad^a n. elder relation
d\dot{v}'al^{\varepsilon} dv, make interest (of a loan)
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d\bar{v}'am^m n. birth
dùaň pl dòɔňs<sup>ɛ</sup> cb dòň- n. dawadawa Parkia clappertoniana [biglobosa]
d\dot{v}'at\grave{a} n. doctor \leftarrow English
d\bar{u}e^{l}dv, raise, rise
d\bar{v}g^{\varepsilon}dv. cook
d\bar{\nu}k^{5/} pl d\bar{\nu}a\nu d^{\epsilon/} cb d\bar{\nu}a- n. cooking pot; d\bar{\nu}a-pé'elà n. full pots; d\bar{\nu}a\nu b d\dot{\nu}t cooking pots
dùm<sup>m</sup> dv. bite
dūm<sup>mɛ</sup> dūm<sup>nɛ</sup> pl dūma cb dùm- n. knee
d\dot{v}nd\dot{u}ug^{\circ} pl d\dot{v}nd\dot{u}ud^{\varepsilon} cb d\dot{v}nd\dot{u}- n. cobra
dūniya cb dūniyá- 5.5 n. world ← Arabic dunya:
dūnná adv. this year
d\bar{u}\eta^a pl d\bar{u}m\iota s^{\epsilon} cb d\dot{u}\eta- n. mosquito
d\bar{u}e^{\epsilon} pl du\bar{e}vá ch du\bar{a}- n. stick
d\bar{u}'es^{\epsilon}/dv. lift up, honour
dùr<sup>a</sup> sv. be many
d\bar{u}'un^{\epsilon}/dv. pass water (ger recorded as d\bar{u}'un\dot{v}g^{\circ})
dū'uním<sup>m</sup> cb dū'un- n. urine
dvvsá n. pl. steps
\mathbf{E}
ε̃εň yes <u>18.4</u>
εξε or εξε tί see ἤγεξε, ἤγεξε tί habitually auxiliary tense marker 16.3.1
\bar{\varepsilon}\varepsilon \bar{n}b^{\varepsilon/}dv. lay a foundation
\bar{\epsilon} \epsilon \tilde{n} b i r^{\epsilon} n, foundation 8.1.2
\grave{\epsilon}\check{n}b\imath s^{\epsilon}dv. scratch
\grave{\epsilon} \check{n} d^{\epsilon} dv. block up, plug up
\grave{\epsilon}\check{n}d\iota g^{\epsilon}dv. unblock, unplug
\bar{\epsilon}\bar{n}r_{i}q^{\epsilon}/dv. shift along (e.g. a bench)
\mathbf{F}
f<sup>o</sup> you sg (left-bound) <u>12.4.1</u>
fāaň q. every
f\bar{a}e\bar{n}^{\prime}dv. save; agt f\bar{a}a\bar{n}d^{a\prime} f\bar{a}a\bar{n}g(d^a n. saviour 11.1
fāň dv. grab, rob
fáss ideo. for pieliga white
f\bar{\varepsilon}\varepsilon g^{\varepsilon/} dv. (of food) get old, cold
f\bar{\epsilon}nd\iota q^{\epsilon}dv. turn round (tone uncertain)
f\bar{\epsilon}\bar{n}'og^{\circ}/pl f\bar{\epsilon}\bar{n}'\epsilon d^{\epsilon}/cb f\bar{\epsilon}\bar{n}'-n. ulcer
\hat{h} = b^{\varepsilon} dv. beat
fi'iq^{\varepsilon} dv. cut off
fịiň q. a little (liquid)
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fitlá n. lamp \leftarrow Hausa fitilàa; in KB adapted to the relaa class: sq fitir pl fita
f\bar{\partial} s^{\epsilon} dv. blow, puff (wind); ger f\bar{\partial} s v g^{\circ} n. hypocrisy NT
f\dot{v} you, your sg (right-bound) 12.4.1
fùe dv. draw out
fūfūm<sup>mε</sup> pl fūfūma cb fūfúm- n. envy; stye (believed to result from envy)
fún you sa (as subject of n-clause); fūn SF fúnè LF you sa (contrastive) 12.4.1
f\bar{u}uq^{\circ} pl f\bar{u}ud^{\varepsilon} f\bar{u}t^{\varepsilon} cb f\bar{u}- n. shirt, clothing; pl also: cloth
G
g\grave{a}ad^{\varepsilon}dv. pass, surpass 19.1
gáafàra sorry formula 25 (Hausa gaafaràa, ultimately ← Arabic)
a\dot{a}'al^{\varepsilon} dv. button up
qà'am<sup>m</sup> dv. grind teeth
g\bar{a}a\bar{n}' pl g\bar{a}a\bar{n}s^{\epsilon}' cb g\bar{a}\bar{n}- n. Nigerian ebony Diospyros mespilliformis
a\grave{a}as^{\epsilon} dv. pass by
g\bar{a}dv g\bar{a}dvg^{5/} pl g\bar{a}dv-náma g\bar{a}t^{\epsilon/} cb g\bar{a}d- g\bar{a}dv- n. bed \leftarrow Hausa gadoo
qàlım<sup>m</sup> dv. joke
g\grave{a}lis^{\varepsilon} dv. exceed, get to be too much
g\bar{a}nr^{\epsilon} pl g\bar{a}ny\dot{a} cb g\bar{a}nr- n. fruit of Nigerian ebony
g \grave{a} \eta^{\varepsilon} dv. step over
g\bar{a}\eta^{\epsilon}/dv. choose
qbāň'e dv. catch
gbáňyà'a n. lazy person 11
gbáňyà'am<sup>m</sup> n. laziness; 1976 NT gonya'am
gbàun<sup>o</sup> pl gbàna cb gbàn- gbàun- n. book WK
gbāuη<sup>5</sup>/ pl gbāná cb gbān- gbāuη- n. animal skin WK; animal skin, book DK
gbε̂εňm<sup>m</sup> cb gbε̄ň- n. sleep
gb\dot{\varepsilon}'og^{\circ} pl gb\dot{\varepsilon}'\varepsilon d^{\varepsilon} gb\dot{\varepsilon}da cb gb\dot{\varepsilon}'- n. forehead; shore of a lake
ab\bar{\epsilon}r^{\epsilon} pl ab\bar{\epsilon}v\dot{a} cb ab\bar{\epsilon}r- n. thigh
gbīgim<sup>nɛ</sup> pl gbīgima cb gbìgim- n. lion
qbìn<sup>nɛ</sup> pl qbìna cb qbìn- n. buttock; base (e.g. of a mountain); postposition 13.5
gbin-v \ni \supset nr^{\epsilon} n. anus
gb\bar{i}s^{\varepsilon}dv. sleep
g\bar{\varepsilon}\epsilon l^{\epsilon}/dv. place between one's legs (Pattern H)
g\bar{\varepsilon}\varepsilon\bar{n}m^{m}/dv. go mad, madden
g\bar{\varepsilon}\varepsilon\bar{n}m(s^{\varepsilon}n. pl as sg madness
g\dot{\varepsilon}\varepsilon n\eta^a pl g\bar{\varepsilon}\varepsilon n\varepsilon^{\epsilon} n. madman
g \dot{\varepsilon} l^{l \varepsilon} pl g \bar{\varepsilon} l \dot{a} cb g \bar{\varepsilon} l- n. egg
g\bar{\epsilon}\tilde{n} dv. get tired; resultative adj g\bar{\epsilon}\epsilon\tilde{n}l\acute{\nu}\eta^{\circ} tired
g\bar{\varepsilon}\check{n}'dv. get angry
g\bar{\epsilon}og^{\circ} n. place between one's legs (Pattern A sic)
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qīiňlím<sup>m</sup> n. shortness
gik^a pl gigis^{\varepsilon} cb giginary n. dumb person
aigulum<sup>m</sup> dv. become dumb
q\bar{l}l_{l}q^{\epsilon l} ipfy q\bar{l}n^{nal} dv. go around 7.1
qīm<sup>ma/</sup> sv. be short
ḡῑη<sup>a</sup> pl ḡῑma cb gīη- adj. short
gin^{\varepsilon} dv. scrimp
q\bar{i}\eta^{\epsilon}/dv. surround, intercept, obstruct
gina adv. shortly
qīnılím<sup>m</sup> n. shortness
g\bar{\rho}d\iota g^{\epsilon}/g\dot{\rho}'on dv. look up
a\bar{b}^{la}/a\bar{b}^{ra}/a\bar{b}^{la}/sv. be looking up
gòň dv. hunt; ipfv gòɔňda wander, ger gòɔňdιm<sup>m</sup> wandering 9.2.1.4
G \grave{>} o g^a pl G \grave{>} o s^{\varepsilon} n. clan name
G \grave{\partial} g^{\circ} n. place of the G \grave{\partial} g^{\varepsilon} Goosi clan
g\dot{\rho}'\partial n^{\varepsilon} dv. look up
q\bar{p}r^{a} sv. be looking up
g\bar{\jmath}s^{\epsilon} ipfv g\bar{\jmath}sid^{a/} g\bar{\jmath}t^{a/} imp g\dot{\jmath}sim^{a} g\dot{\jmath}m^{a} ger g\dot{\jmath}sig^{a} dv. look; agt g\bar{\jmath}t^{a/} n. seer, prophet
g\bar{u}'dv. guard, protect
g\dot{v}l^{\varepsilon} ipfv g\dot{v}n^{\mathrm{na}}dv. suspend
gùl<sup>la</sup> ger gūlib<sup>o</sup> sv. be suspended
gùllīmm SF gùllımnɛ LF only; emphatic 24.7
gỳm<sup>mε</sup> pl gỳma n. kapok fruit; also thread WK
G\dot{v}m^{m\varepsilon} n. place of the clan G\dot{v}m-d\dot{v}m^a
g\bar{\nu}mp\bar{\nu}z\bar{\varepsilon}r^{\varepsilon/} pl g\bar{\nu}mp\bar{\nu}z\bar{\varepsilon}y\acute{a} cb g\bar{\nu}mp\bar{\nu}z\acute{\varepsilon}r- n. duck
gùň'a pl gòň'ɔsɛ cb gòň'- n. thorn; Acacia; gòň'-sābılíga Acacia hockii
g\dot{v}ng\bar{v}m^{m\varepsilon}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
g\bar{u}r^{a/} ger g\bar{u}r(m^m) sv. be on guard, watch for 22.1
Gūrίn<sup>nε</sup> n. Farefare language
G\bar{v}ri\eta^a pl G\bar{v}ris^\epsilon n. Farefare person
g\bar{u}'ul^{\varepsilon}/dv. put on guard
gv'vlım<sup>m</sup> dv. become half-ripe
g\dot{v}vr^{\varepsilon} pl g\dot{v}va cb g\dot{v}- n. upland; bank of river
q\bar{v}vr^{\varepsilon} pl q\bar{v}va cb q\dot{v}- n. ridge of back
g\bar{u}'us^{\varepsilon}/dv. take care, watch out
q\bar{v}'vs^{\varepsilon} n. pl half-ripe fruit
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\mathbf{H}

 $h\bar{a}li$ until, up to and as far as, even 15 17.2.1 19 24.7; ? ← Arabic $\hbar atta$:; $h\bar{a}li$ $b\acute{a}a$ even

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Ι
iā dv. seek
i\bar{a}\check{n}'as^{\epsilon}/dv. leap
i\bar{a}nk^{\epsilon} ger i\bar{a}n'ad^{a} agt i\bar{a}n'ad^{a} dv. leap, fly 7.1
iqι<sup>ya/</sup> qer ik<sup>a/</sup> KT iqιr<sup>ε/</sup> WK sv. be kneeling
igil^{\varepsilon}/dv. make to kneel
iqin^{\varepsilon} dv. kneel down
(il^{l\epsilon} pl \bar{i}ll\acute{a} cb \bar{i}ll-n. horn
\overline{i}sir^{\varepsilon} pl \overline{i}sa cb is- n. scar
isig^{\varepsilon} dv. get up early
\mathbf{K}
k\dot{a} and, that 17.2
k\bar{a} dv. bail (water)
k\bar{a}ab^{\varepsilon}/dv. offer, invite
k\bar{a}al^{\epsilon}/dv. count
k\bar{a}as^{\varepsilon}/dv. cry out, weep; (cock) crow
kà'asıgɛ LF only; sv. not exist 16.5
k\bar{a}b\iota g^{\epsilon}/dv. ladle out (liquid)
k\bar{a}bir^{\epsilon} ger k\bar{a}bir dv. call out asking for admission 25
kàd<sup>ɛ</sup> dv. drive away; kàd sàríyà dv. judge 16.9.1; agt sàríyà-kāt<sup>a</sup> n. judge NT
k\bar{a}'e ger k\bar{a}'alim^m sv. not exist, not be, not have 16.5 4.3
kāl<sup>lε/</sup> pl kālá cb kāl- n. number
kàlıgā<sup>l</sup> q. few
kàma q. every
Kàmbùnir^{\varepsilon} n. Twi language
K\grave{a}mb\grave{v}\eta^a pl K\grave{a}mb\grave{v}m\imath s^\epsilon cb K\grave{a}mb\grave{v}\eta- n. Ashanti person
k \dot{a} n^{\epsilon} this, that demonstrative 12.4.2
k \dot{a} n b^{\epsilon} ger k \bar{a} n b \iota r^{\epsilon} dv. scorch
kāndvg<sup>3</sup> adj. fat, tough (person)
k \dot{a} \eta \bar{a}^{\prime} this, that demonstrative 12.4.2
kàra sv. be few
kàrım<sup>m</sup> dv. read
k\grave{a}s\check{\epsilon}t^{a/} n. witness; testimony (Mooré k\grave{a}s\acute{e}t\grave{o} "proof, testimony"; probably ultimately
           ← French cachet; pl kàsētíba witnesses)
k\bar{\epsilon} ipfv k\bar{\epsilon}t^{a/} imp k\hat{\epsilon}l^a dv. let, cause to ... 7.1 19.2
kèɛkè pl kèɛkè-nàma cb kèɛkè- n. bicycle ← Hausa kèekè
k \grave{\varepsilon} \varepsilon s^{\varepsilon} dv. say farewell to
k \dot{\epsilon} lig^{\epsilon} or k \dot{\epsilon} lis^{\epsilon} dv. listen
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 $k\bar{\epsilon}n$ ipfv $k\bar{\epsilon}n^{a}$ imp $k\dot{\epsilon}m^{a}$ ger $k\bar{\epsilon}n^{n\epsilon}$ dv. come 7.1; always with $n\bar{a}$ 16.11; $k\bar{\epsilon}n$ $k\bar{\epsilon}n$ welcome! 25 $k\bar{\epsilon}\eta^{\epsilon}$ ipfv $k\bar{\epsilon}n^{na}$ imp $k\hat{\epsilon}m^a$ (disambiguated with sà 16.11) dv. go; walk 7.1; agt $k\bar{\varepsilon}n^{\text{na/}}$ n. traveller $k \acute{\epsilon} r i f \grave{a}$ or $k \acute{a} r i f \grave{a}$ \leftarrow Hausa $k \acute{a} r f \grave{e} e$; in telling time, e.g. $k \acute{\epsilon} r i f \grave{a}$ $\grave{a} t \acute{a} n \acute{b}$ three o'clock $k\bar{l}$ cb $k\bar{l}$ - $k\bar{a}$ - n. cereal, millet; $k\hat{l}$ - $d\hat{a}$ ar ℓ pl $k\hat{l}$ - $d\hat{a}$ ada n. purchased millet; $k\bar{a}$ - $w\bar{\epsilon}nnir^{\epsilon}$ pl kā-wēnna cb kā-wén- n. corn kià dv. cut $k\bar{l}dlg^{\epsilon}dv$. cross over, meet; $A-K\bar{l}dlglB\bar{u}$ 'es n. the constellation Orion $k\bar{\imath}'ib^{\circ\prime}$ n. soap; WK has instead the Mampruli loan $k\bar{\imath}ib\dot{\nu}$ cb $k\bar{\imath}ib$ kíiňf^o pl kīiní n. millet seed $k i i s^{\varepsilon} dv$. listen $k\bar{\imath}'\imath s^{\epsilon}/dv$. denv kìkàm^{mɛ} pl kìkàma n. fig $kìkàn^a$ $kìnkàn^a$ pl $kìkàmıs^\epsilon$ cb kìkàn- n. fig tree Ficus capensis $k i k \bar{i} r i g^{a/} p l k i k \bar{i} r i s^{\epsilon/} c b k i k \bar{i} r - n$. "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 $kik\bar{i}ris^{\epsilon/l}$ hostile to man live in the bush: "Their feet are attached backwards to confuse trackers." WK; $k i k \bar{l} r - b \hat{\epsilon}' \epsilon d^{\epsilon} n$. NT evil spirit, demon (KB just uses kikīrīga/) kīlım^{m/} dv. become, change into kìm^m dv. tend flock, herd; agt kònb-kīm^{na} n. herdsman, shepherd $k\bar{i}r^{\varepsilon}$ ger $kikir\dot{v}g^{\circ}$ $k\bar{i}rib^{\circ}$ dv. hurry, tremble kīsa/ ger kísbaa agt kīsa/ kīsıda/ sv. hate *kísòg*^o *adj.* hateful, taboo kò dv. get broken, break (intransitive); resultative adj kòɔlúŋ² broken kòbigā (SF and LF identical) q. one hundred; kòbisí two hundred kābır^ɛ pl kāba cb kàb- n. bone $k\bar{\partial} dig^{\epsilon}/dv$. slaughter (one animal) by cutting its throat kɔ̄dν́ n. banana ← Twi kwadu $k \partial l^{\varepsilon} dv$. put something around the neck $k \partial l \iota b \iota r^{\varepsilon}$ pl $k \partial l \iota b a$ n. bottle $k\bar{\jmath}lig^a$ pl $k\bar{\jmath}lis^\epsilon$ cb $k\dot{\jmath}l$ - n. river; $k\bar{\jmath}lugv$ -n $n\acute{\jmath}$ -dâu g° n. crayfish $k \partial l v g^{\circ} p l k \partial n^{n \varepsilon} c b k \partial l v g - \underline{5.2} n.$ sack, bag $k\bar{\jmath}m^{\mathrm{m}/}$ cb $k\bar{\jmath}m$ - n. hunger $k\bar{\jmath}nb\nu g^{3}$ pl $k\bar{\jmath}nb\nu d^{\epsilon}$ cb $k\dot{\jmath}nb$ - (also used as cb of $b\bar{\nu}n$ - $k\dot{\jmath}nb\dot{\nu}g^{3}$ animal) n. animal hair or human body hair; cf zūobúg³; kòňb-kīm¹na pl kòňb-kīmmıba n. shepherd, herdsman kɔ̃n̆'ɔkɔ adv. alone, by oneself

 $k \grave{o} \breve{n} s^{\epsilon} dv$. cough $k \grave{o} \breve{n} s \imath m^{\mathrm{m}} dv$. cough

 $k\dot{\partial}' \partial g^{\varepsilon} dv$. break (transitive or intransitive) $k\dot{\partial}'\partial s^{\varepsilon} dv$. break several times $k\bar{j}t^{\varepsilon/}dv$. slaughter (several animals) by cutting their throats kòtàa^{nε} at all: emphatic 24.7 $k\acute{o}t\grave{v}$ n. lawcourt \leftarrow English, probably via Hausa kpà'a pl kpà'a-nàm^a n. rich person kpāada/ pl kpāadíba cb kpāad- n. farmer, cultivator kpà'am^m n. riches kpāaňm^{m/} cb kpāň- n. grease, ointment; kpāň-sóň'ɔdìm^m n. anointing oil $kp ak \bar{v}r^{\epsilon}$ pl $kp ak \bar{v}v acb kp ak \bar{v}r$ - n. tortoise kpān^{nɛ} pl kpāna cb kpàn- n. spear $kp a n d r^{\epsilon} p l kp a n d c b kp a n d c$ $kp ar^{\varepsilon} dv$, lock kpār-kêongo pl kpār-kêende cb kpār-ken- n. rag kpá'vη^o pl kpī'iní cb kpā'- n. guinea fowl $kp\bar{\varepsilon}$ adv. here kpēεňm^m pl kpèεňm-nàm^a cb kpèεňm- n. elder $kp\bar{\varepsilon}\varepsilon\bar{n}m^{\text{ma}}$ sv. be older than kpēlá adv. here kpèlim still; immediately after, preverb 16.8 kpèlim^m dv. remain kpèn reduced form of the preverb kpèlim $kp\grave{\varepsilon}\check{n}'dv$. enter $kp\bar{\epsilon}ndir^{\epsilon}$ pl $kp\bar{\epsilon}nda$ cb $kp\bar{\epsilon}nd$ - n. cheek $kp\grave{\varepsilon}\check{n}'\varepsilon s^{\varepsilon}dv$. make enter $kp\grave{\varepsilon}'\eta^{\varepsilon}dv$. strengthen $kp\bar{\epsilon}o\bar{\eta}^{\circ}n$. seniority kpì dv. die; resultative adj kpìilύη³ dead $kpi'a pl kpi'əs^{\varepsilon} cb kpià'- n.$ neighbour *kpià' dv.* shape wood with axe etc *kpì'e dv.* approach $kp\bar{l} = m^{\text{ma}} sv$. be strong, hard kpi big^a pl kpi $ibis^\epsilon$ cb kpiib- n. orphan $kp i g^{\varepsilon} dv$. go out (fire) $kp\bar{\imath}'\imath l\acute{\imath}m^{m}dv$. finish, come to an end $kp\bar{l}'im^{m}/pl\ kp\bar{l}'im(s^{\epsilon}\ cb\ kp\bar{l}'im-n.\ dead\ person,\ corpse$ $kpiis^{\varepsilon} dv$. quench (fire) kpīkpīn^{na/} pl kpīkpīnníb^a cb kpīkpín- n. merchant kpį̇˙oη̇˙ pl kpį̇˙ əma cb kpį̇˙oη- adj. strong, hard kpisınkpil^{le} pl kpisınkpila cb kpisınkpil- n. fist

 $kpisukpil^{l\epsilon} n.$ fist

kpùkpàr^ɛ pl kpùkpàra n. palm tree fruit kpòkpàrıga pl kpòkpàrıs cb kpòkpàr- n. palm tree (Borassus akeassii/aethiopum) kpùkpàuŋ² pl kpùkpàma cb kpùkpàuŋ- n. arm, wing kò not: negates irrealis mood 16.5 $k\bar{v} dv$. kill (= Mooré $k\dot{v}$) $k\bar{\nu} d\nu$, gather, threaten (of rain): $S\bar{a}a k\dot{\nu} \nu\bar{a}$. It looks like rain (= Mooré $k\dot{\nu}\iota$) kuā dv. hoe, farm $k\bar{v}'ali\eta^a pl k\bar{v}'alimis^{\epsilon} k\bar{v}'alis^{\epsilon} cb k\bar{v}'ali\eta$ - n. sleeveless traditional smock $k\dot{u}d^{\varepsilon}dv$. work iron $k\dot{\nu}dig^{\varepsilon}dv$. shrivel up, dry out, age kūdım^m n. the olden days; also for kūlım qv $k\bar{\nu}d\nu g^{\circ} k\bar{\nu}d\iota r^{\varepsilon} pl k\bar{\nu}da k\bar{\nu}t^{\varepsilon} cb k\dot{\nu}d$ - adj. old $k\bar{u}dvg^{\circ}$ pl $k\bar{u}t^{\varepsilon}$ (used as sq 12.2) cb $k\dot{u}t$ - n. iron, nail; sq only in names 26.2 $k\bar{u}gvr^{\varepsilon}$ pl $k\bar{u}g\acute{a}$ cb $k\bar{u}g$ - n. stone $k\bar{\nu}k^a$ pl $k\bar{\nu}a\nu s^{\epsilon}$ cb $k\dot{\nu}a$ - n. chair kùka n. ghost $k\bar{\nu}k^{a/}$ n. mahogany tree, Khaya senegalensis; cf Hausa kuukàa kùkòm^{mɛ} pl kùkòma cb kùkòm- n. leper $k \dot{\nu} k \bar{\nu} r^{\epsilon}$ pl $k \dot{\nu} k \bar{\nu} \gamma \dot{a}$ cb $k \dot{\nu} k \bar{\nu} r$ - n. voice kùkpàrıga see kpùkpàrıga id $k\bar{u}l^{\epsilon}$ ger $k\bar{u}lig^{al}$ dv. return home; transitive marry (woman subject, man object) kūlim always, post-subject particle 17.2.3 $k\dot{\nu}li\eta^a pl k\dot{\nu}limis^{\epsilon} k\dot{\nu}lis^{\epsilon} cb k\dot{\nu}li\eta$ - n. door $k \dot{\nu} m^{\rm m} dv$. crv. weep $k\bar{u}m^{\mathrm{m}}$ cb $k\dot{u}m$ - n. death; $k\dot{u}m$ - $v\bar{v}'vg(ir^{\varepsilon}n$. resurrection NT $k \dot{v} n d \dot{v}' a r^{\epsilon} p l k \dot{v} n d \dot{v}' a da c b k \dot{v} n d u' a - n$. barren woman $k \dot{v} n d \dot{v} \eta^a p l k \dot{v} n d \dot{v} m \iota s^{\epsilon} k \dot{v} n d \dot{v} n a n.$ jackal, hyena $k\dot{u}'em^m cb ku'\dot{a}-n$. water; $ku'\dot{a}-n\bar{u}ud^{\epsilon}/n$. thirst; $ku'\dot{a}-n\bar{w}iig^{a}/pl ku'\dot{a}-n\bar{w}iis^{\epsilon}/n$. current in a river $k\dot{u}es^{\varepsilon}dv$. sell $k \dot{v} r k \bar{v} r^{\epsilon}$ pl $k \dot{v} r k \bar{v} v \dot{a} c b k \dot{v} r k \bar{v} r$ - n. pig *Kūsáa pl Kūsâas*^ɛ *cb Kūsá- n.* Kusaasi person $K\bar{\nu}s\hat{a}al^{\epsilon}$ n. Kusaal language $K\bar{\nu}s\hat{a}\nu q^{\circ}$ n. Kusaasi country Kùtān^{nɛ/} pl Kùtām^{ma/} cb Kùtān- n. member of WK's clan $K \dot{\nu} t \bar{a} u \eta^{5/n}$. country of clan $K \dot{\nu} t \bar{a} m^{\text{ma/}}$ Kutamba $k\bar{\nu}\nu$ or 17.2 18.2 \leftarrow Hausa koo $k\bar{u}ug^{a/}$ $k\bar{u}ug^{o/}$ pl $k\bar{u}us^{\epsilon/}$ cb $k\bar{u}$ - n. mouse $k\dot{\nu}\upsilon l^{\varepsilon}dv$. get drunk

T. $l\bar{a}^{/}$ definite article 12.8.5 là' dv. laugh lā'af' n. cowrie; pl līqıdı n. cowries, money; cb lìq- là'-; là'-bīəlíf' n. small coin láafiya n. health ← Arabic ?al-Sa:fiya; replaced by laafe láafi in 1996 NT and KB là'am together, preverb 16.8 là'am^m dv. associate with; together with 19.1 là'as^E dv. gather together (transitive); Bà là'as tāaba They gathered together. *làbāar*^{ϵ} *cb làbà- n.* news ← Arabic ?*al-*?*axba:r* làby sv. be crouching, hiding behind something (cf Hausa labèe "crouch behind something to eavesdrop" 11.1) $l\dot{a}bil^{\varepsilon}dv$, make crouch behind something $labin^{\varepsilon} dv$, crouch behind something $labis^{\varepsilon} dv$. walk stealthily *lābıs*^{a/} sv. be wide $l\bar{a}bisiq^a l\bar{a}bisir^{\epsilon} pl l\bar{a}bisa' cb l\bar{a}bis- adj.$ wide *lābısím*^m n. width $l\bar{a}k^{\epsilon}/dv$. open (eye, book) $l\bar{a}l^{la/}$ sv. be distant $l\bar{a}lig^{\epsilon}/dv$. get to be far, make far lāllí adv. far off $l\bar{a}lli\eta^a pl l\bar{a}llis^\epsilon cb l\bar{a}lli\eta$ - adj. distant lāllúg³ pl lāllá cb lāl- adj. distant $l\bar{a}m^{m\epsilon}/pl l\bar{a}m\acute{a}cb l\bar{a}m-n$. gum (of tooth); $l\bar{a}m-f\hat{o}g^{\circ}pl l\bar{a}m-f\hat{o}d^{\epsilon}adj$. toothless $làmp\bar{o}$ - $d\hat{i}$ 'əsa n. tax collector 11 ← French l'impôt lān^{nε} pl lāna cb làn- n. testicle làngáuη^o pl làngáam^{mε} làngāamá ch làngāuŋ- n. crab (cf màngáuŋ^o id) $lànnig^a$ pl $lànnis^\epsilon$ cb lànnig- 5.2 n. squirrel $l\bar{a}'\eta^{\varepsilon}/dv$. set alight lāním^m dv. wander around searching $l\bar{a}uk^{\circ}$ pl $l\bar{a}'ad^{\varepsilon}$ cb $l\dot{a}'$ - n. item of goods pl goods là'υη⁵ pl là'ama n. fishing net $l\grave{\epsilon}b^{\epsilon}$ qer $l\bar{\epsilon}b_{1}q^{a}$ dv. return (intrans) $l\grave{\varepsilon}big^{\varepsilon}dv$. turn over; return $l\grave{\epsilon}bis^{\epsilon}dv$. answer; send back; divorce (wife) *lèe* but, VP particle 16.7 lèm again, preverb 16.8 lèm^m ipfv lèmmıd^a dv. sip, taste

 $l\bar{\varepsilon}r^{\varepsilon}dv$, get ugly

lì it, its (right-bound); li it (left-bound) 12.4.1

lì ipfv lìta imp lìma ger līiga dv. fall

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lī dv. block up
lìa where is ...? 18.4
lìdiq^{\varepsilon} dv. turn a shirt WK
lidig^{\varepsilon} dv. astonish, be amazed
li \partial b^{\varepsilon} dv, become
li' \ni l^{\varepsilon} dv, approach, come near
líˈəm<sup>mɛ</sup> pl li̞ˈəmá n. fruit of yellow plum tree
lieta_0^a pl liemis^{\epsilon} cb lien-n. axe
l_i^{\prime} = \eta^a pl l_i^{\prime} = m(s^{\epsilon} n. \text{ yellow plum tree}, Ximenia americana
liq^{\varepsilon} dv. patch
ligil^{\varepsilon} dv. cover
ligin^{\varepsilon} dv. cover oneself
l\bar{\imath}\imath b\imath r^{\varepsilon} pl l\bar{\imath}\imath ba cb l\hat{\imath}\imath b- n. twin
l\bar{i}k^a pl \, l\bar{i}gis^{\epsilon} n. \, darkness
lìlāalí\eta^a pl lìlāalís^{\varepsilon} lìlāalímìs^{\varepsilon} cb lìlāalí\eta- n. swallow
lín it (subject of \dot{n}-clause); lin^{\varepsilon} it (contrastive) 12.4.1
\lim_{\epsilon \to 0} \epsilon that demonstrative 12.4.2
lìná that demonstrative 12.4.2
l5 dv. tie
l\bar{b}b^{\varepsilon} or l\bar{b}lg^{\varepsilon}/dv. throw stones at
l\bar{b}bidig^a pl l\bar{b}bidis^\epsilon n. water drawing vessel
l\bar{b}dia^{a/}pl\ l\bar{b}dis^{\epsilon/}cb\ l\bar{b}d- n. corner; l\bar{b}digin kúg-s\dot{v}g) cornerstone NT
l\bar{b}d\iota g^{\varepsilon/}d\nu. untie
l \partial k^{\circ} p l l \dot{v}' a d^{\varepsilon} c b l u' \dot{a} - n. quiver (for arrows)
lòmbò'ɔgo pl lòmbò'od<sup>ε</sup> cb lòmbò'- n. garden ← Hausa làmbuu
l\bar{\jmath}\eta^a pl l\bar{\jmath}m\iota s^{\epsilon} cb l\dot{\jmath}\eta- n. a kind of frog
l\bar{\mathfrak{I}}'\eta^{\varepsilon}/dv. go across river, road etc
l\acute{o}r^{\epsilon} pl l\acute{o}y\grave{a} l\acute{o}om^{ma} cb l\acute{o}r- n. car, lorry ← English
l \dot{\sigma} s^{\epsilon} dv. dip, immerse in liquid
lù ipfv lùt<sup>a</sup> imp lùm<sup>a</sup> dv. fall
l\bar{u}b^{\varepsilon} ger l\bar{u}bir^{\varepsilon}/dv. buck, kick, struggle, throw off rider
l\bar{u}g^{\varepsilon}dv. swim
l\bar{\nu}g\nu r^{\epsilon} n. organ, member
\mathbf{M}
m I, my (right-bound); ma me (left-bound) 12.4.1
mà cb mà- n. mother; pl mà náma (tone sic) mother's sisters/co-wives; mà-b̄iga n.
          sibling with same mother; m\dot{a}-b\bar{i}l^a n. mother's younger sister or junior co-wife;
          m\grave{a}-kp\bar{\varepsilon}\varepsilon\check{n}m^{\mathrm{m}} n. mother's elder sister or senior co-wife; m\grave{a}-p\bar{\imath}t^{\mathrm{a}/} n. mother's
          younger sister
mà' dv. lie, deceive
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mà'aa SF mà'anε LF only; emphatic 24.7
m\grave{a}al^{\varepsilon} dv. prepare, sacrifice; agt m\grave{a}al-m\bar{a}an^{na} n. sacrificer; priest NT; traditionally
         just a worker who conducts the actual slaying for the t \approx \eta - d\bar{a}an^a earth-priest
m\bar{a}'al^{\epsilon}/dv, make cool, wet
māan<sup>nɛ</sup> pl māana cb màan- n. sacrifice 8.1.2
má'an<sup>nε</sup> pl mā'aná cb mā'an- n. okra
m\bar{a}'as^{a/}sv. be cool, wet
m\bar{a}'asiq^a m\bar{a}'asir^{\epsilon} pl m\bar{a}'asa' cb m\bar{a}'as- adi. cool, wet
m\bar{a}'asig\bar{a}' adv. coolly
m\bar{a}'asim^m n. coolness, wetness
m\bar{a}dig^{\epsilon}/dv. overflow, abound
m\bar{a}'e'dv. cool down
m\grave{a}k^{\epsilon}dv, crumple up
m\bar{a}k^{\epsilon/} dv. measure, judge
m \grave{a} li \bar{a} k^{a/p} l m \grave{a} li \bar{a}' a s^{\epsilon/l} m \grave{a} li \bar{a} k - n \acute{a} m \grave{a} li \bar{a}' - n. angel \leftarrow Arabic m a li \bar{a} k + n \acute{a} m a li \bar{a}' + n.
          written malek in NT versions before 2016
m\grave{a}lif^{\circ} pl m\grave{a}li n. gun, rifle (ultimately \leftarrow Arabic)
màligim again; preverb 16.8
mālis<sup>a/</sup> sv. be sweet, pleasant
m\bar{a}lisig^a m\bar{a}lisir^\epsilon pl m\bar{a}lisa cb m\bar{a}lis- adj. sweet, pleasant
mālisím<sup>m</sup> n. sweetness
m\bar{a}lisi\eta^a pl m\bar{a}lisis^\epsilon cb m\bar{a}lisi\eta- adj. sweet, pleasant
mālvŋ² pl mālıma cb màlvŋ- n. sacrifice
mām I, me 12.4.1
mán I (as subject of 'n-clause); mān SF mánè LF I, me (contrastive) 12.4.1
màngáuη<sup>o</sup> pl màngáam<sup>mε</sup> màngāamá cb màngāuη- n. crab (cf làngáuη<sup>o</sup> id)
màuk<sup>3</sup> pl mà'ad<sup>8</sup> adj. crumpled up
m \hat{\epsilon} dv, build
m \approx m \approx n^{\epsilon} too, also; emphatic <u>24.7</u>; m \approx k \approx n^{\epsilon} too, also; emphatic <u>12.4.3</u>
m\bar{\varepsilon}d^{\varepsilon}dv. mash up
m \grave{\varepsilon} \varepsilon \eta^a pl \ m \grave{\varepsilon} \varepsilon m \iota s^{\varepsilon} cb \ m \grave{\varepsilon} \varepsilon \eta- n. turtle
mèligim<sup>m</sup> n. dew
m\bar{\varepsilon}\eta^{a/} self 12.4.6
m\bar{\varepsilon}\eta ir^{\varepsilon} adj. genuine
m\bar{\varepsilon}t^{\varepsilon/} cb m\bar{\varepsilon}t- n. pl as sq pus
mī' ger mī'ilím<sup>m</sup> sv. know; agt gbàn-mī'id<sup>a/</sup> n. scribe ("book-knower") NT
mìe dv. squeeze(?) 27.1; uncertain meaning and tones
mį́if<sup>o</sup> pl mį̇̃iní n. okra seed
m_i^{\alpha} ig^{\epsilon} dv. become sour
mì'isa sv. be sour
mì'isvg<sup>o</sup> pl mì'isa cb mì'is- adj. sour
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m\bar{\imath}l\iota q^{\epsilon l} dv. get dirty
mìmīilím<sup>m</sup> mìmīilúg<sup>o</sup> n. sweetness
mit see that it doesn't happen that... 16.5; always mid in KB
m\bar{j} dv, strive, struggle
m\bar{o}d^{\varepsilon}dv. swell
m\bar{\rho}d\iota a^{\epsilon}/dv. be patient, endure
mòlif<sup>o</sup> pl mòli cb mòl- n. gazelle
m\bar{p}^{\varepsilon} dv. grind millet to make s\bar{a}'ab^{\circ} porridge
m\bar{\mathfrak{g}}\eta^{\varepsilon}/dv. refuse to lend
m\bar{z}_{2}q^{2} pl m\bar{z}_{2}d^{\epsilon} cb m\dot{z}_{2}- n. grass, "bush"; m\dot{z}_{2}-p\bar{t}_{1}l\epsilon n. grass thatch
M 	imes 2g^3 n. Mossi realm; M 	imes 2g N 	ilde{a}^a ab^a n. the Moro Naba, King of the Mossi
M \hat{\sigma} l^{\epsilon} n. Mooré language
M\bar{\sigma}r^{\epsilon}/pl\ M\acute{\sigma}om^{\mathrm{ma}}\ cb\ M\bar{\sigma}r- n. Muslim
mɔra qer mɔrím sv. have, possess; mɔr nā bring 16.11
Mùa pl Mòɔsɛ cb Mò- n. Mossi person
mu'\dot{a}^a dv. suck (of a baby)
mu\grave{a}k^a pl m\grave{v}'as^{\varepsilon} cb mu'\grave{a}- n. maggot
mờ arε pl mu à a mờ ada ch mu à n. dam; reservoir
m\dot{v}'as^{\varepsilon} dv. give (to baby) to suck
mù'e dv. redden; catch fire/ignite; become intense, severe
mùi cb mùi- n. pl as sa rice
mùl^{\varepsilon}dv. itch
mùm<sup>m</sup> dv. bury
N
n clause nominaliser particle 21
n clause catenator particle 19
n-personifier particle (allomorph used before an adjective) 12.6
n^{\varepsilon} discontinuous-past marker 16.3.2
n^{\epsilon} n^{\bar{i}} locative particle 13.3
nà positive irrealis mood marker 16.4
n\bar{a}^{\prime} hither; VP-final particle 16.11
n\bar{a} dv. join
náa reply to greetings invoking blessings 25
n\dot{a}'ab^a pl n\dot{a}'-n\dot{a}m^a cb n\dot{a}'-n. chief, king; n\dot{a}'-b\bar{i}ig^a n. prince/princess; n\dot{a}'-v\bar{i}r^{\epsilon}/n.
         palace; nà'-yṣ-kpɛ́m<sup>ma</sup> n. pl king/chief's retainers
n\acute{a}af^{\circ} pl n\bar{i}ig\acute{a} cb n\bar{a}'- n. cow; n\bar{a}'-l\acute{\sigma}r^{\varepsilon} n. place in compound for tying up cows;
         n\bar{a}'-d\hat{a}\nu g^{\circ} pl n\bar{a}'-d\hat{a}ad^{\varepsilon} cb n\bar{a}'-d\hat{a}- n. ox; n\bar{a}'-d\hat{a}-k\bar{u}-\theta \ell r^{\varepsilon} n. ox for ploughing
nàam<sup>m</sup> dv. happen
nā'am<sup>m</sup> cb nà'am- n. chieftaincy, kingdom
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n\bar{a}an next, afterwards = n\bar{v}aan
nāan or nāanı then, in that case, being thus/there 20.1
nà'anā' adv. easily
n\dot{a}'as^{\varepsilon} dv, honour: aer n\dot{a}'asi n, honour
Nàbida pl Nàbidiba cb Nàbid- n. Nabdema person
Nàbidua<sup>o</sup> n. Nabdema country
Nàbir<sup>E</sup> n. Nabit language
Nà'dàm<sup>ma</sup> n. clan name
Nà'dàuŋº n. place of clan Nadamba
n\dot{a}'-d\dot{a}w\bar{a}n^{n\epsilon}/n. pigeon KED (= d\dot{a}w\bar{a}n^{n\epsilon}/n)
n\bar{a}e^{l}dv, finish
nàm still, yet; auxiliary tense particle 16.3.1
nàma pluraliser 5.4
n\bar{a}mis^{\epsilon}/dv. persecute, suffer
n\bar{a}n^{\varepsilon}dv, love, respect, appreciate
n\dot{a}'-n\bar{\epsilon}sinn\bar{\epsilon}oq^{5/} n. centipede WK
nānná adv. now
nānná-nā<sup>l</sup> adv. now
n\bar{a}nz\bar{u}'us^{\epsilon}/n, pepper tones uncertain
n\bar{a}\eta^a pl n\bar{a}mis^{\epsilon} cb n\dot{a}\eta- n. scorpion
nāra/ ger nārím<sup>m</sup> sv. be obliged to; impersonal: to be necessary; with following
         purpose clause 22.1; negated: be obliged not to
nàruno pl nàrima cb nàrun- adj. necessary
Nàsāal<sup>ɛ</sup> n. English/French language
Nàsāara pl Nàsàa-nàma Nàsàar-nàma ch Nàsàa- Nàsàar- n. European person
          ← Arabic Nas¹a:ra: "Christians"; Nàsàa-bīiga n. European child
n \dot{a} y \bar{i} i g^a p l n \dot{a} y \dot{i} i g - n \dot{a} m^a n \dot{a} y \dot{i} i s^{\epsilon} n. thief
nàyiigim<sup>m</sup> n. thievery
n\dot{a}'-z\dot{\gamma}m^{\mathrm{m}\varepsilon} n. locust
n\bar{\varepsilon} preposition: with 15; linking NPs and AdvPs: and 12.1
n\bar{\varepsilon} uncommon variant of v\bar{\varepsilon} that 22.2 (cf Mampruli ni id)
n\bar{\epsilon}^{l} focus particle 24.1.2; aspectual marker 16.2.1
n\bar{\epsilon}' meaningless particle after objects of w\bar{\nu}v and w\bar{\epsilon}n^{\rm na/} 15
n\bar{\varepsilon}^{1} this (pronoun) 12.4.2
n \hat{\epsilon} \epsilon l^{\epsilon} dv. reveal
nèem<sup>m</sup> adv. for free
n\bar{\varepsilon}\varepsilon m^{\rm m/}\,dv. grind with a millstone
n\bar{\varepsilon}\varepsilon r^{\varepsilon/} n. millstone
n \grave{\varepsilon} s^{\varepsilon} dv. reveal
nèesim<sup>m</sup> n. light
n\bar{\varepsilon}m-n\hat{\varepsilon}\varepsilon r^{\varepsilon} pl n\bar{\varepsilon}m-n\dot{\varepsilon}\gamma\dot{a} n. someone who grinds
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n\bar{\varepsilon}n^{\mathrm{na/}} qer n\bar{\varepsilon}nn(m^{\mathrm{m}} sv. envy
n\bar{\varepsilon}'\eta\acute{a} this (pronoun) 12.4.2
n \grave{\epsilon} o g^{\circ} n \grave{\epsilon} \epsilon r^{\varepsilon} p l n \grave{\epsilon} \epsilon d^{\varepsilon} n \grave{\epsilon} v a c b n \grave{\epsilon} - a d j. empty
n\bar{\varepsilon}sinn\bar{\varepsilon}og^{3/} pl n\bar{\varepsilon}sinn\bar{\varepsilon}ed^{\varepsilon/} cb n\bar{\varepsilon}sinn\dot{\varepsilon}ed^{\varepsilon} n. envious person WK; others: centipede
nfá! Well done! 18.4
n\bar{\imath}^{\prime} locative particle 13.3 see n^{\epsilon}
nì dv. rain
n\bar{i}d^{a/} pl n\bar{i}dib^{a/} cb n\bar{i}n- n. person; n\bar{i}n-sâala pl n\bar{i}n-sâalb^a cb n\bar{i}n-sâal- n. human being;
                     nīnpūnān<sup>na/</sup> pl nīnpūnānníb<sup>a</sup> cb nīnpūnán- n. disrespectful person; nīn-
                     sábilis^{\epsilon} n. Africans
nìe dv. appear, reveal
n\bar{i}f^{5} pl n\bar{i}ni cb n\bar{i}n-n\bar{i}f-n. eye; n\bar{i}f-gb\dot{a}u\eta^{5} n. eyelid; n\bar{i}f-s\dot{5}b^{a} n. miser; n\bar{i}f-n\dot{i}v\dot{a}uk^{5} adj.
                     one-eyed 12.8.1.1; n\bar{i}n-dáa pl n\bar{i}n-dâas^{\epsilon} cb n\bar{i}n-dá- n. face; n\bar{i}n-q\acute{o}t\grave{i}\eta^a n.
                     mirror pl n\bar{i}n-g\acute{z}tis^{\epsilon} n. spectacles, glasses; n\bar{i}n-k\acute{v}gvdig^{a} pl n\bar{i}n-k\acute{v}gvdis^{\epsilon} n.
                     eyebrow; n\bar{l}n-t\hat{a}'am^m n. tear(s); n\bar{l}n-mua n. concentration ("eye-redness");
                     \dot{m} n\bar{l} \dot{m} \dot{u} \dot{e} n\bar{\epsilon} ... I'm concentrating on ... (KB "zealous for ...")
n_{ij}^{a} pl n_{ij}^{a} míis^{\epsilon} cb n_{ij}^{a}- n. bird
n\bar{l}_{i}m^{n\epsilon} n\bar{l}_{i}m^{n\epsilon} pl n\bar{l}_{i}m\dot{a} cb n\bar{l}_{i}m- n. meat
n\bar{i}n-báalìg^a n. pity; n\bar{i}n-bâal-z\bar{z}or\varepsilon n. pity; O zòt\bar{o} n\bar{i}n-báalìg. He has pity on him.
n\bar{i}\eta^a pl n\bar{i}is^{\epsilon} cb n\dot{i}\eta- n\dot{i}n- n. body (uncommon); n\dot{i}n-t\bar{\nu}ll(m^m n. \text{ fever}; n\dot{i}n-t\bar{a}a pl n\dot{i}n-
                     tāas<sup>ɛ</sup> cb nìn-tà- n. co-wife (Ghanaian English: "rival"); husband's brother's wife;
                     \min -qb\bar{\eta}^{0/2} pl \min -qb\bar{\eta} no \min -qb\bar{\eta} no
n\bar{n}-p\hat{v}ud^{\epsilon} n. pl as sq pus
n\bar{i}nt\bar{a}\eta^{a/} pl n\bar{i}nt\bar{a}a\bar{n}s^{\epsilon/} cb n\bar{i}nt\dot{a}\eta- n. heat of the day, early afternoon
n i \eta^{\varepsilon} dv. do
n lā that is ... 18.4
nnāas q. four, in counting
nníi q. eight, in counting
nnū q. five, in counting
n ňwà this is ...; n ňwà nā this here is ... 18.4
n\bar{j} dv, tread
n\bar{b}^{\varepsilon} dv. get fat
n\bar{b} \log^{\varepsilon} dv. grow (e.g. child, plant)
n\acute{o}b\grave{i}r^{\epsilon} pl n\ddot{o}b\acute{a} cb n\ddot{o}b- n. leg, foot; n\ddot{o}b-b\acute{i}l^a n. toe; n\ddot{o}b-y\acute{\iota}u\eta^o adj. one-legged
                     12.8.1.1; n\bar{b}-i\tilde{n}'a n. toenail; n\bar{b}-p\dot{v}mpàu\eta^{\circ} n. foot
n\bar{j}k^{\varepsilon/}dv. pick up, take up
n \grave{o} \eta^{\epsilon} agt n \grave{o} \eta i d^{a} (irregularly Pattern L) sv. love (family, spiritual); irregularly has
                     the ma-imperative form nonima 7.2
n\bar{\partial}\eta^{5}/cb n\bar{\partial}\eta- n. poverty; n\bar{\partial}\eta-dâan<sup>a</sup> n. poor person
nàŋılím<sup>m</sup> n. love
nɔ̄ɔ exactly, just; emphatic 24.7
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n\bar{z} z^{\epsilon} pl n\bar{z} z^{\epsilon} z
                   a councillor who speaks on a chief's behalf on all official occasions (not only
                   in the region of the old Mossi-Dagomba states 1.1: "linguist" in Ghana typically
                   refers to an Akan chief's herald and spokesman, the okyeame); Winà'am nó-
                   d\hat{i} = s^a ("God's linguist") prophet NT/KB; n\bar{z} = l\hat{z} = r^{\epsilon} n. fasting ("mouth-tying", as
                   throughout West Africa); n\bar{z}-n\hat{a}ar^{\varepsilon} n. covenant; n\bar{z}-p\hat{z}-z n. oath; n\bar{z}-ab\acute{a}u\eta^{\circ} pl
                   nō-qbánà n. lip
n\bar{\sigma} r^{\varepsilon} n\bar{\sigma} r m^{\mathrm{m}} times 12.5.1
npòe q. seven, in counting
ntán' q. three, in counting
nū dv. drink
n\bar{u}a^{\prime} pl n\bar{z} osigns^{\epsilon\prime} cb n\bar{z}- n. hen; n\bar{z}-dâvg^{\circ} n. cock; n\bar{z}-nyâ'a\eta^{\circ} n. (specifically female)
                   hen; Nō-ňyâ'aη-nέ-ò-Bīis the Pleiades
n\bar{u}l_{1}g^{\varepsilon/}dv. make drink
n\bar{u}lis^{\epsilon}/dv. make drink
n\hat{u}'ug^{\circ} pl n\hat{u}'us^{\varepsilon} cb n\bar{u}'- n. hand, arm; n\bar{u}'-b\hat{l}^a pl n\bar{u}'-b\hat{l}^bis^{\varepsilon} n. finger; n\bar{u}'-d\hat{a}vg^{\circ}
                   n. thumb; n\bar{u}'-\gamma i u \eta^{\circ} a d j. one-armed 12.8.1.1; n\bar{u}'-i n' a p l n \bar{u}'-\hat{\epsilon} n' \epsilon s^{\epsilon}
                   cb n\bar{u}'-\epsilon\check{n}'- n. fingernail; n\bar{u}'-w\hat{\epsilon}\check{n}'\epsilon d^a n. mediator
ňwà this 12.8.5
ňwā' dv. smash, break up
n w \bar{a} a \eta^a p l n w \bar{a} a m s^{\epsilon} c b n w \bar{a} a \eta^{-} n. monkey
\check{N}w\bar{a}d-d\acute{a}r^{\varepsilon} n. Venus
ňwà'e dv. cut wood
n w \bar{a}' e' dv. strike, break
nwāe q. nine, in counting
ňwām<sup>mɛ</sup> ňwān<sup>nɛ</sup> pl ňwāma ňwāna cb ňwàm- ňwàn- n. calabash
\check{N}w\bar{a}mp\bar{u}r_{\downarrow}q^{a/} pl \check{N}w\bar{a}mp\bar{u}r_{\downarrow}s^{\epsilon/} cb \check{N}w\bar{a}mp\hat{u}r_{\downarrow} n. Mamprussi person
Ňwāmpūrıl<sup>ɛ/</sup> n. Mampruli language
\check{N}w\bar{a}mp\bar{u}rvg^{5/} n. Mamprussi country
n w \dot{\epsilon}' dv, beat; n w \dot{\epsilon}' X n \hat{u}' u q make an agreement with X; n w \dot{\epsilon}' n v \bar{\rho}' \rho q boast
n w \bar{\imath} - t \epsilon k i r^{\epsilon} p l n w \bar{\imath} - t \epsilon k a n, rope for pulling
n w i i q^{\epsilon} dv. make a rope
n \sqrt{a} a^{|\mathcal{E}|} dv. leave behind
ňyāan next, afterwards; post-subject particle 17.2.3
n v a' a \eta^a p l n v a' a s^{\epsilon} n v a' a m i s^{\epsilon} c b n v a' a \eta - a d j. female (animal)
nya'a\eta^a behind, postposition 13.5; East 26.3; nya'an-d\partial l^{la} nya'an-d\partial l^{le} pl nya'an-d\partial l^{le}
                   dòlla nyà'an-dòllıba cb nyà'an-dòl- n. disciple NT; tones unexpected, Pattern L
n v \bar{a} a^{\epsilon} p l n v \bar{a} a c b n v \bar{a} - n. root
n \sqrt{a}e^{n\varepsilon/a} adv. in the light, brightly, clearly
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ňyālύη<sup>5</sup> pl ňyālımá cb ňyāluη- adj. wonderful
nyàn<sup>nɛ</sup> n. shame; O di nyán. He's ashamed.
n \sqrt{a} n^{\epsilon} dv. overcome 19.1
n \dot{\gamma} \dot{a} u k^{\circ} p l \, n \dot{\gamma} \dot{a}' a d^{\varepsilon} a d j. only (eye) 12.8.1.1
n y \bar{\epsilon} \epsilon r^{\epsilon} pl n y \bar{\epsilon} d \hat{a} c \hat{b} n y \bar{\epsilon} - n. next-younger sibling
nv \in s^a sv. be self-confident
ňγὲεsιm<sup>m</sup> n. self-confidence
ηνὲε s iη<sup>a</sup> pl ηνὲε s is<sup>ε</sup> cb ηνὲε s iη- adj. self-confident
n_{\nu} \approx \sin a^{\prime} adv. self-confidently
n'ví q. two, in counting
n \sqrt{n^{n\epsilon}} pl n \sqrt{n} a cb n \sqrt{n} n. tooth
ňyīríf<sup>9</sup> pl ňyīrí n. a kind of edible seed, egusi: Colocynthis citrullus
n v \bar{\nu} c d^{\epsilon} n. intestines
n \sqrt{2} a^{3} n. chest
\tilde{n}y\bar{\sigma}g^{\sigma} n. sympathy: \hat{O} z\hat{\sigma}t\bar{\sigma} \tilde{n}y\bar{\sigma}g. She sympathises with him.
ny\bar{\rho}οr^{\epsilon} pl ny\bar{\rho}ya cb ny\bar{\rho}- n. nose; breath; ny\bar{\rho}-ν\bar{\nu}rel ny\bar{\rho}-ν\bar{\nu}ya cb ny\bar{\rho}-ν\bar{\nu}r- n. life;
          n \dot{\nu} \dot{\nu} - \nu \bar{\nu} r - p \hat{a} a l^{1\epsilon} n. new life NT
n_{V}\bar{o}'sε' n. smoke
nνûθb q. six, in counting
n v \bar{u} u r^{\epsilon} pl n v \bar{u} v a cb n v \bar{u}- n. vam
O
ò [σ] he, she, his, her (right-bound); ο LF [σ] him, her (left-bound) 12.4.1
5n he, she (subject of n-clause); 5n^{\epsilon} he, she (contrastive) 12.4.1
\partial n^{\varepsilon} this, that (animate sg demonstrative) 12.4.2
\partial \tilde{n}b^{\varepsilon} ger \partial \tilde{n}bir^{\varepsilon} dv. chew
\partial \eta \bar{a}^{\prime} this, that (animate sq demonstrative) 12.4.2
\bar{\partial} s^{\epsilon} dv. warm oneself; \dot{O} \dot{\partial} sid n\bar{\epsilon} b\dot{u}g\dot{v}m l\bar{a}. She's warming herself at the fire.
P
pà' earlier today, tense particle 16.3.1
pà'al<sup>E</sup> dv. teach, inform; agt pā'an<sup>na</sup> pl pā'annıb<sup>a</sup> cb pà'an- n. teacher
p\dot{a}'al^{\varepsilon} dv. put on top of something
p\bar{a}alig^a p\acute{a}al^{l\epsilon} pl p\bar{a}alis^{\epsilon} p\bar{a}al\acute{a} cb p\bar{a}al adj new
pāalím<sup>m</sup> adv. recently
pāalύ adv. openly
pàanl\acute{v}\eta^{\circ} pl pàanl\acute{v}mis n. spider's web
pàam<sup>m</sup> dv. receive a gift
p \dot{a} a s^{\epsilon} dv. add up to, amount to
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p\bar{a}e^{\dagger}dv, reach
p \grave{a} k^{\epsilon} dv. surprise
p \dot{a} k^{\epsilon} dv. take off from the top
pāmm SF pāmnέ LF q. much, a lot
pàň'alım<sup>m</sup> dv. dedicate
p a n s i g^{\epsilon} dv. lack
p \dot{a} \eta^a p l p \dot{a} a n \dot{s}^{\epsilon} c b p \dot{a} \eta- n. power
pà' tì perhaps; post-subject particle 17.2.3
p \grave{\varepsilon} b \imath s^{\varepsilon} dv. blow (of wind)
pèbisim<sup>m</sup> pèbisug<sup>o</sup> n. wind
p \dot{\epsilon}' \epsilon l^{\epsilon} dv. fill; resultative adj p \dot{\epsilon}' \epsilon l \dot{\nu} \eta^{\circ} full
p\varepsilon\varepsilon l v g^{\circ} in z\bar{u}-p\varepsilon\varepsilon l v g^{\circ} bald 12.8.1.1; cf pie "go bald" (Leviticus 13:40), Mooré peogè
p \dot{\varepsilon}' \varepsilon s^{\varepsilon} dv. add up to, amount to
p \dot{\epsilon} l \iota g^{\epsilon} dv, whiten, go white
p \grave{\epsilon} l \imath s^{\epsilon} dv. sharpen
p \approx n^{n \epsilon} n. vagina
p\bar{\varepsilon}'\eta^{\varepsilon}/dv. borrow; knock over WK
p \grave{\epsilon} o g^{\circ} p l p \grave{\epsilon} \epsilon d^{\varepsilon} c b p \grave{\epsilon} - n. basket
p\bar{\varepsilon}'oq^{5} pl p\bar{\varepsilon}'\varepsilon s^{\varepsilon} cb p\bar{\varepsilon}' n. sheep; p\bar{\varepsilon}'-s\dot{a}'a n. ewe lamb
p\bar{\varepsilon}sig^{\varepsilon}/dv. sacrifice
piā dv. dig up
piāň'a dv. speak, praise; ger piàuňk<sup>o</sup> n. word pl piàň'ad<sup>ɛ</sup> language cb piàň'-;
           piàn'-zùna n. foreign language
pibig^{\varepsilon} dv. uncover
pibil^{\varepsilon} dv. cover up
p\bar{l}bin^{n\epsilon} pl p\bar{l}bina cb p\bar{l}bin- n. covering 8.1.2
pid^{\varepsilon} dv. put on (hat, shoes, rings); clothing item as object; with indirect object put
           (hat, shoes, rings) on someone else
p\bar{i}d^{\varepsilon}dv. get bloated
pidig^{\varepsilon} dv. take off (hat, shoes, rings)
p\bar{i}e^{l}dv. wash (part of one's own body)
p \partial b^{\epsilon} dv. blow (e.g. flute)
pìəliq^a pìəl^{l\epsilon} pl pìəla pìəlis^{\epsilon} cb pìəl- adj. white
pìəlim<sup>m</sup> n. whiteness
p i \theta s^{\epsilon} dv, fool someone
p\bar{\imath} \partial s^{\epsilon} dv. wash
p<u>i</u>iga q. ten
pį̃im<sup>m/</sup> pl pį̃má cb pį̃m- n. arrow
píinf<sup>o</sup> pl pīiní cb pīin- n. genet
pīini cb pìin- pl as sq (?) n. qift
pil^{\varepsilon} dv. cover
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piliq^{\varepsilon} dv. uncover
p\bar{i}n'il^{\epsilon}/dv. begin
p\bar{i}p\bar{i}rig^{a/} pl p\bar{i}p\bar{i}ris^{\epsilon/} cb p\bar{i}p\hat{i}r- n. desert
pīsí q. twenty
pītú pl pītíba cb pīt- n. younger sibling of the same sex
p̄ɔ dv. swear
p \stackrel{\circ}{\partial} \vec{n} d^{\epsilon} dv. crouch down
p\bar{\rho}\bar{n}'\rho l^{\epsilon}/dv. cause to rot
pòň'ɔlım<sup>m</sup> dv. cripple, get crippled
pòň'ɔr<sup>ɛ</sup> pl pòňda cb pòň'- n. cripple
pòňr<sup>a</sup> ger pōňrvb<sup>o</sup> sv. be near
pòod<sup>a</sup> sv. be few, small
pòodiga pòodir<sup>e</sup> pl pòoda ch pòod- adj. few, small
pòodim<sup>m</sup> n. fewness
p\bar{z} = g^{2}/pl p\bar{z
p\dot{\sigma}'\sigma q^{\epsilon} dv. diminish, belittle
p\bar{z}or^{\epsilon/} n. "slogan" of a clan, part of its traditional genealogy WK; \leftarrow p\bar{z} swear (cf.
                   Farefare pɔtɛ, pɔrɛ "nom de famille, nom par lequel on jure", also "oath")
p\bar{v} not: negates indicative mood 16.5
p\bar{v} dv. divide
pu'\bar{a}^a pl p\bar{v}'ab^a cb pu'\dot{a}- n. woman, wife; \dot{O} dì pu'\bar{a}. He's married a wife; pu'\dot{a}-dītr^{\varepsilon} n.
                   marriage; p\underline{u}'\dot{a}-\bar{\varepsilon}li\eta^a n. fiancée; p\underline{u}'\dot{a}-g\bar{\eta}nnig^a, p\underline{u}'\dot{a}-g\bar{\sigma}\sigma\bar{n}dir^{\varepsilon} n. prostitute;
                   p\mu'\dot{a}-n\dot{y}\dot{a}'a\eta^a pl p\mu'\dot{a}-n\dot{y}\dot{a}'as^\epsilon n. old woman; p\mu'\dot{a}-p\bar{a}al^{a/n} n. bride; p\mu'\dot{a}-s\bar{a}d\imath r^{\epsilon/n}.
                   young woman; p\underline{u}'\dot{a}-s\bar{a}\check{n}'am^{na} n. adulterer; p\underline{u}'\dot{a}-v\grave{u}a n. daughter
pu\bar{a}k^a pl p\bar{v}'as^{\epsilon} adj. female (human only)
pù'alım<sup>m</sup> dv. cook
pὑ'alım<sup>m</sup> dv. harm, damage; resultative adj pὑ'alúŋ<sup>o</sup> damaged
pὑ'alım<sup>m</sup> n. femininity
p\dot{v}'alim^m pl \quad p\dot{v}'alim\dot{s}^{\varepsilon} cb \quad p\dot{v}'alim-n. female sex organs
p\dot{v}d^{\varepsilon}dv. name
p\bar{\nu}d\iota q^{\varepsilon}/d\nu. divide, share out
pùqudib<sup>a</sup> pl pùqud-nàm<sup>a</sup> cb pùqud- n. father's sister
p\dot{v}-k\dot{z}\partial n^{\epsilon} pl p\dot{v}-k\dot{z}\partial n vidow
pū-kpāada/ pl pū-kpāadíba cb irreg pū-kpá- n. farmer
pùlima n. a species of grass, Imperata cylindrica
pùmpɔ̄ɔgɔ n. housefly
pùn previously, already; preverb 16.8
p\bar{u}\bar{n}'e'dv. rot
p\bar{u}sig^{a/} pl p\bar{u}sis^{\epsilon/} cb p\bar{u}s- n. tamarind
p\bar{u}sir^{\epsilon}/pl p\bar{u}s\acute{a} n. tamarind fruit
p\bar{v}-s\acute{v}k^a pl p\bar{v}-s\acute{v}g\grave{v}s^\epsilon n. half 12.5.1
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p\bar{v}t^{\epsilon/} n. pl as sq contents of stomach WK
pūum<sup>m/</sup> cb pūum- n. flowers
p\bar{v}vg^a cb p\dot{v}- n. inside, belly; P\underline{v}'\bar{a} l\bar{a} m\acute{o}r p\bar{v}vg The woman is pregnant; p\bar{v}vgv-n^{\epsilon/2}
          inside 13.5; p\dot{v}-p\dot{i}-pl-lim^m n. holiness; p\dot{v}-t\dot{\epsilon}\ddot{n}'\epsilon r^{\epsilon} pl p\dot{v}-t\dot{\epsilon}\ddot{n}da cb p\dot{v}-t\dot{\epsilon}\ddot{n}'- mind
p\bar{v}vr^{\varepsilon/} n. stomach
p\dot{v}'vs^{\varepsilon}dv. greet, worship, thank; ger\ p\dot{v}'vsvm^{m}\ n. worship; ger\ p\dot{v}'vsvg^{o}\ n. thanks;
          pὑ'vsvg dôogo NT temple
\mathbf{S}
sà yesterday, tense particle 16.3.1
sà hence, ago, VP-final particle 16.11
s\bar{a}' dv. be in distress
sàa tomorrow, tense particle 16.3.1
s\bar{a}a pl s\bar{a}as^{\epsilon} cb s\dot{a}- n. rain; sky; as subject of i\bar{a}nk^{\epsilon} "leap": lightning; s\bar{a}a dínd\bar{\epsilon}og^{\circ}
          rainbow ("rain chameleon"); sāa zúg<sup>3</sup> n. sky 13.5
s\bar{a}'ab^{\circ}cb \ s\dot{a}'-n. millet porridge, "TZ", the staple food of the Kusaasi
sāafı (?tones) n. lock, key ← Twi safe
s\grave{a}al^a\ pl\ s\grave{a}al\iota b^a\ cb\ s\grave{a}al- n. human (perhaps \leftarrow "hairless" cf b\bar{\nu}n-k\acute{o}\check{n}b\grave{\nu}g^o); s\grave{a}al-b\bar{\iota}ig^a
          pl sàal-b\overline{i}is^{\epsilon} n. human being
sàalina^{\dagger} adv. smoothly
sàam<sup>ma</sup> pl sàam-nàm<sup>a</sup> cb sàam- n. father; sàam-kpēεňm<sup>m</sup> n. father's elder brother;
          sàam-pīta/ pl sàam-pītíba cb sàam-pīt- n. father's younger brother
sāam<sup>m/</sup> dv. mash, crumble
s\bar{a}'an^{\epsilon} in the presence of, in the opinion of; postposition 13.5
sāana/ pl sáamma cb sāan- n. guest, stranger
sáannìm<sup>m</sup> n. strangerhood
sàb\bar{\epsilon}og^{\circ} pl sàb\bar{\epsilon}\epsilon d^{\epsilon} cb sàb\dot{\epsilon}- n. wind, storm
s\bar{a}bilig^a s\bar{a}bil^{l\epsilon} pl s\bar{a}bilis^{\epsilon} s\bar{a}bila cb s\bar{a}bil-adj. black
sàbùa pl sàbùes<sup>e</sup> cb sàbuà- n. lover, girlfriend
Sà'dàbòɔgo n. place of the clan Sarabose
S\dot{a}'d\dot{a}b\dot{u}a pl S\dot{a}'d\dot{a}b\dot{u}es^{\epsilon} S\dot{a}'d\dot{a}b\dot{u}eb^{a} n. clan name
sādīgim since, because 21.1
sāeň or sāeň<sup>a</sup> pl
                            sāaňb<sup>a</sup> cb sàň- n. blacksmith
sākárvg<sup>o</sup> pl sākárvd<sup>e</sup> cb sākár- n. fox
sàlibir^{\varepsilon} n. bridle
sālıma cb sàlım- n. pl as sa gold; sàlım-kùesa n. gold merchant
s\bar{a}m^{n\epsilon} pl s\bar{a}m\acute{a} cb s\bar{a}m- n. debt; s\bar{a}m-kp\hat{a}'as^a n. household servant
s\bar{a}m\acute{a}n^{n\epsilon} pl s\bar{a}m\acute{a}n\grave{a} cb s\bar{a}m\acute{a}n- n. open space in front of a z\grave{a}k^a compound;
          S\bar{a}m\acute{a}n-p\acute{l}er^{\varepsilon} n. traditional New Year ceremony
sàn'am<sup>m</sup> dv. spoil, get spoiled, get broken; destroy
s\bar{a}ng\acute{v}nn\`{r}^{\epsilon} pl s\bar{a}ng\acute{v}nn\grave{a} cb s\bar{a}ng\acute{v}n- n. millipede
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s\bar{a}\eta\acute{a} pl s\bar{a}ns\acute{a} cb s\bar{a}n- n. time 26.7 5.3.2; s\bar{a}n-k\acute{a}n^{\epsilon} adv. then; when?
          s\bar{a}n-s\hat{i}'\theta-n l\bar{a} adv. at one time, once ... 17.2.1
sàn-abàun<sup>o</sup> n. sky, heaven; cf sāa
s\bar{a}p\acute{a}l^{l\epsilon}n. Harmattan part of the dry season \acute{v}vn^{n\epsilon}
sāpī ideo. straight
sārīgá n. prison ← Hausa sarkàa "chain"
sàríyà or sèríyà n. law ← Arabic ſari: Sa; sàríyà-kāta n. judge NT
s\bar{a}vg^{5/} pl s\bar{a}ad^{\epsilon/} cb s\bar{a}- n. broom, brush
s \dot{a} v k^{\circ} pl s \dot{a}' a d^{\varepsilon} n. mote of dust
sάνη<sup>5</sup> n. hospitality
s \approx ip f v s \approx \varepsilon d^a dv. transplant
s\bar{\varepsilon}ong^{\circ} n. rainy season
sì dv. skin, flay
s\bar{i}'a some, any (sq) 12.4.3
s\bar{i}a\ pl\ s\bar{i}\partial s^{\epsilon}\ cb\ s\dot{i}\partial n. waist; s\dot{i}\partial s^{\epsilon} n. belt ("waist-tying-thing"); s\dot{i}\partial s^{\epsilon} n. kidnev
si\bar{a}'al^{\epsilon}/dv. get to be enough
si\dot{a}'ar^{\epsilon} pl si\dot{a}'a cb si\dot{a}'- n. forest (WK), wilderness
siàk<sup>ɛ</sup> dv. agree (Mooré sàke, Buli siagi)
si\bar{a}k^{\epsilon}/dv. suffice (Mooré s\acute{e}k\grave{e}, Buli chaqi)
sībiga/ pl sībí cb sīb- n. a kind of termite
sid truly, post-subject particle 17.2.3
sìda pl sìd- n. pl as sa truth
sīda pl sīdıba cb sìd- n. husband; sìd-bīla n. husband's younger brother;
          sid-kp\bar{\epsilon}\epsilon\check{n}m^m n. husband's elder brother; sid-pu\bar{a}k^a n. husband's sister
sie^{-}dv. descend, be humbled
sīəba some(ones), any (ones) 12.4.3
s\bar{i} \partial l^a something, anything 12.4.3
s\bar{i} \theta m^{\rm m} somehow, anyhow 12.4.3 13.6
sig^{\varepsilon} dv. descend
s\bar{i}gir^{\epsilon} n. guardian spirit, typically but not invariably the w\bar{i}n^{n\epsilon} of an ancestor 26.2
s\bar{i}qis^{\epsilon}/dv. lower
signsir^{\varepsilon} pl signsima n. stopping-place
s\bar{\imath}\iota g^a pl s\bar{\imath}\iota s^\varepsilon cb s\hat{\imath}- 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 kik\bar{l}ris^{\epsilon} (qv); Si-sin^{\circ}n. Holy Spirit NT; cf Buli chiik
s\bar{\imath}ig^a pl s\bar{\imath}is^\epsilon n. African birch, Anogeissus leiocarpa; cf Buli s\bar{\imath}ik
sìilım<sup>m</sup> dv. cite proverbs
siil(\eta^a siil(\eta^a siil(s^{\epsilon} siil(m)s^{\epsilon} siil(m)a cb siil(\eta-n. proverb))
s\bar{i}i\bar{n}d^{\epsilon} n. honey
s\bar{i}i\bar{n}f^{0/}s\bar{i}i\bar{n}g^{a/} pl s\bar{i}i\bar{n}s^{\epsilon/} cb s\bar{i}\bar{n}- n. bee
s\bar{\imath}'\imath s^{\epsilon}/dv. touch
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s\bar{\imath}l\imath ns\hat{\imath}uq^{\circ} pl s\bar{\imath}l\imath ns\hat{\imath}is^{\varepsilon} n. ghost
s\bar{\imath}l\imath ns\hat{\imath}u\check{n}g^{\circ} pl s\bar{\imath}l\imath ns\hat{\imath}i\check{n}d^{\varepsilon} n. spider
sìlog^{\circ} pl sìn^{n\epsilon} sìlis^{\epsilon} cb sìlin n. hawk
sìm^m dv, sink in a liquid
Sìmį̃ig<sup>a</sup> pl Sìmį̃is<sup>ε</sup> cb Sìmį̀- n. Fulbe person, Fulani
Sim\overline{i}l^{\varepsilon} n. Fulfulde language
Sìmīug<sup>o</sup> n. place of the Fulbe
sīn<sup>na/</sup> qer sīnním<sup>m</sup> sv. be silent
sīnsáaň n. a kind of tiny ant
s\bar{\imath}\eta^a pl s\bar{\imath}\iota ns^{\epsilon} cb sin-n. a kind of very big pot
s\bar{\imath}'\eta^{\epsilon}/d\nu. begin
s\bar{\imath}s\underline{\imath}big^a pls\bar{\imath}s\underline{\imath}bis^\epsilon cbs\bar{\imath}s\underline{\imath}b- n. neem tree Azadirachta indica
s\bar{i}sibir^{\varepsilon} pl s\bar{i}siba n. fruit of neem tree
sìsì'əm<sup>m</sup> n. wind, storm
s i s \dot{\nu} \nu q \bar{\nu} - n^{\epsilon} between, postposition 13.5 KB s \nu \nu q \nu n
si^{\dagger}u\eta^{\circ} pl si^{\dagger}imis^{\epsilon}cb si^{\dagger}u\eta- n. a kind of large dish
s\bar{\mathfrak{o}}' some(one), any(one), animate sq 12.4.3
s\bar{b}^a dummy head pronoun, animate sg 12.4.7
s\bar{b}b^{\varepsilon} dv, go/make dark; usually write; s\bar{b}u^{\varepsilon}n, piece of writing
s\bar{b}\iota g^{\varepsilon} dv. blacken
sɔ̃eň or sɔ̃eňa pl sɔ̃ɔňba cb sòň- n. witch
sógiàa n. soldier ← English
sວັໄບຖວ/ pl sວັໄເmá n. story
sōň dv. rub
s\bar{j}\tilde{n}'e^{ya/}sv, be better than; agt s\bar{j}\tilde{n}'d^{a/}pl s\bar{j}\tilde{n}'d^{a/}cb s\bar{j}\tilde{n}'d^{-}
sɔ̄nnır<sup>ɛ</sup> pl sɔ̄nna cb sòn- n. courtyard dividing wall
s\bar{\rho}ns^{\epsilon} ger s\hat{\rho}nsig^{a} dv. converse, talk with
sɔɔn̈go n. witchcraft
sɔɔnrɛ pl sɔnya cb sòn- n. liver
s \grave{o} s^{\epsilon} ger s \check{o} s ig^{a} dv. ask; agt s \grave{o} s^{a} n. beggar
s\dot{v} dv, take a bath
su'\bar{a}^a dv. do secretly, hide
su\bar{a}k^{a/} n. hiding place
s\bar{u}e\bar{n}^{\prime}dv. anoint
s\bar{v}'e^{ya/}sv. own; ger s\bar{v}'vlim^m n. property, country, realm
s\bar{u}g\nu r^{\varepsilon}/d\nu. show forbearance, be patient with; s\bar{u}g\nu r\dot{\nu} n. forbearance
sòm<sup>m</sup> n. goodness; well
sùm<sup>ma</sup> sv. be good
sùmbūgvsím<sup>m</sup> n. peace
s\bar{u}mmir^{\varepsilon} pl s\bar{u}mma cb s\dot{u}m- n. groundnuts; s\bar{u}m-d\acute{v}qvd\grave{a} n. cooked groundnuts
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sùn^{n\varepsilon} ger sùnnvg^{\circ} dv. bow one's head; agt s\bar{u}n^{na} n. ("someone who
          goes about with bowed head") deep thinker, close observer WK
s\bar{u}\bar{n}'e'dv. become better than
s\bar{u}\bar{n}f^{5/} s\bar{u}u\bar{n}r^{\epsilon/} pl s\bar{u}\bar{n}v\acute{a} cb s\bar{u}\check{n}- n. heart; s\bar{u}\check{n}-kp\hat{l}o\eta^{5} n. boldness 12.7.1;
          s\bar{u}\tilde{n}-m\acute{a}'as\grave{n}m^m n. joy (\dot{M} s\bar{u}\check{n}f m\acute{a}'e v\ddot{a}. "My heart has cooled"= I'm joyful);
          s\bar{u}\bar{n}-málism^m cb s\bar{u}\bar{n}-máls- n. joy; s\bar{u}\bar{n}-p\hat{\epsilon}\epsilon n^{n\epsilon} n. anger (\hat{M} s\bar{u}\bar{n}f p\hat{\epsilon}lg n\hat{\epsilon}. "My
          heart is whitened"= I'm angry); s\bar{u}\bar{n}-s\hat{a}\bar{n}'v\eta^{\circ} n. sorrow (\dot{M} s\bar{u}\bar{n}f s\hat{a}\bar{n}'am n\bar{\epsilon}.
          "My heart is spoilt" = I'm sad)
s\dot{v}\eta^{\varepsilon} dv. help
sờη<sup>o</sup> sờm<sup>mε</sup> pl sờma ch sờη- adj. good
s \dot{\nu} \eta \bar{a}^{\prime} a dv. well, much
s\dot{u}'\theta\eta^a pl s\bar{u}'\theta m (s^{\epsilon} cb s\bar{u}'\theta\eta - n. rabbit
s\bar{u}e^{\epsilon l} pl suēvá cb suā- n. road; permission in sūer bɛ, mɔr sūer 22.1
sù'esa n. yesterday
s\dot{u}'es^{\epsilon}dv, trick
sùra sv. have one's head bowed
sờsờm<sup>mε</sup> n. grasshopper
Sūtáanà n. Satan
s\bar{\nu}\nu q^{\epsilon}/d\nu. wither (leaves) WK
s\dot{v}'vg^a s\dot{v}'vg^b pl s\dot{v}'vs^c cb s\dot{v}'-n. knife
\mathbf{T}
t\bar{a}a\ t\bar{a}as^{\epsilon} fellow- as second part of compound 9.2.1.4
tāaba tāab each other 12.4.5
t\bar{a}'adir^{\epsilon} pl t\bar{a}'ada cb t\dot{a}'ad- n. sandal
tàal<sup>le</sup> pl tàala cb tàal- n. fault, sin
tá'am<sup>mɛ</sup> pl tā'amá n. shea tree fruit
t\dot{a}'a\eta^a pl t\bar{a}'am\acute{s}^\epsilon cb t\bar{a}'a\eta- n. shea butter tree Butyrospermum parkii
t\bar{a}'as^{\epsilon}/dv. help someone to walk; in greetings 25
t\grave{a}b^{\varepsilon}dv. get stuck to
tàbiya sv. be stuck to
tabig^{\varepsilon} dv. get unstuck from
t\dot{a}bil^{\varepsilon} dv. stick to (transitive)
t \dot{a} d \iota q^{\varepsilon} n. become weak
tādım<sup>m/</sup> pl tàdım-nàm<sup>a</sup> cb tàdım- n. weak person
t \grave{a} d \iota m \acute{\iota} s^{\epsilon} n. weakness
Tàlın<sup>nε</sup> n. Talni language
Tàli\eta^a pl Tàlis^\epsilon cb Tàli\eta- n. Tallensi person
tàm<sup>m</sup> ipfv tàmmıd<sup>a</sup> dv. forget
tàmpìinga n. rock
tàmpūa pl tàmpɔ̄ɔs^{\varepsilon} cb tàmpò- n. housefly 5.3.2
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t \grave{a} m p \bar{v} v r^{\varepsilon} c b t \grave{a} m p \grave{v} - n. ashpit, rubbish tip
tān<sup>nɛ</sup> pl tāna cb tàn- n. earth; tàn-mɛɛda n. builder
t\bar{a}np^{\circ} n. war; t\dot{a}np-s\bar{b}^{\circ} n. warrior
t a m s^{\epsilon} ger t a m s v g^{\circ} dv. shout; Winnig tá m sid n \bar{\epsilon}. The sun is shining.
tāra/ ger tārím<sup>m</sup> sv. have; more typical of Toende Kusaal; NT/KB always mɔ̄ra/
t \dot{a} s unt \dot{a} l^{l\epsilon} n, palm of hand
t a t a l^{l \epsilon} n. palm of hand
tāuň pl tāňpa ch tāuň tāňp n. sibling of opposite sex
t \dot{\varepsilon} b^{\varepsilon} ger t \bar{\varepsilon} b_1 g^a dv. carry in both hands
t\bar{\varepsilon}b\iota q^{\varepsilon}/dv. get heavy
t\bar{\varepsilon}bis^{a/}sv. be heavy
t\bar{\epsilon}bisig^a t\bar{\epsilon}bisir^{\epsilon} pl t\bar{\epsilon}bisa cb t\bar{\epsilon}bis-adj. heavy
t\bar{\varepsilon}bisim^m n, heaviness
t \in \mathcal{E} b \mathcal{V} l^{\epsilon} p l t \in \mathcal{E} b \mathcal{V} l - n a m^{a} n. table \leftarrow English
t\bar{\epsilon}\epsilon a^{\epsilon}dv. drag, draw; t\bar{\epsilon}\epsilon a \times t\dot{\nu}b\nu r punish X
t\dot{\varepsilon}'\varepsilon q^a pl t\dot{\varepsilon}'\varepsilon s^\varepsilon cb t\dot{\varepsilon}'- n. baobab Adansonia digitata
t\bar{\varepsilon}k^{\varepsilon/}dv. pull
tènb<sup>ε</sup> ger tènbug<sup>o</sup> dv. tremble, struggle
t \grave{\epsilon} \check{n}' \varepsilon s^{\varepsilon} dv, remind
t\bar{\epsilon}\check{n}'\epsilon s^{\epsilon}/dv. think; ger t\bar{\epsilon}\check{n}'\epsilon s\acute{a} n. thought
tèňra ger tēňrībo sv. remember
t\bar{\varepsilon}\eta^a pl t\bar{\varepsilon}\varepsilon\bar{n}s^{\varepsilon} cb t\dot{\varepsilon}\eta- n. land; t\dot{\varepsilon}\eta-bīiq^a n. native; t\dot{\varepsilon}\eta-dāan^a n. traditional earth-
            priest; t \dot{\epsilon} \eta - d\bar{v}' a d \iota g^a n. native land; t \dot{\epsilon} \eta - g b \dot{a} \mu \eta^{\circ} n. earth, land; t \dot{\epsilon} \eta - p \bar{v} v g^{\circ l} p l
            t \dot{\epsilon} \eta - p \bar{\nu} \nu d^{\epsilon} / cb t \dot{\epsilon} \eta - p \bar{\nu} - n. village, town; t \dot{\epsilon} \eta - z \dot{\nu} \eta^{\circ} p l t \dot{\epsilon} \eta - z \dot{\nu} \nu n s^{\epsilon} n. foreign country;
            t \grave{\varepsilon} \eta - s \bar{\upsilon} k^a n. centre
t\bar{\epsilon}\eta i - n^{\epsilon} or t\bar{\epsilon}\eta i r^{\epsilon} downward; as postposition under 13.5
t \grave{\epsilon} o g^{\circ} p l \ t \grave{\epsilon} \varepsilon d^{\varepsilon} n. nest
t\grave{\varepsilon}'og^{\circ} pl t\grave{\varepsilon}'\varepsilon d^{\varepsilon} n. baobab fruit
tì we, our (right-bound); ti us (left-bound) 12.4.1
tì preverb conveying completion or purpose 16.8
ti\dot{a}^{\dagger}al^{\epsilon}dv. come next
ti\grave{a}k^{\varepsilon}dv. change
t\dot{l}^{\dagger}\partial b^{\epsilon} dv. prepare, get ready; heal in this sense perhaps influenced by
            Arabic t^iibb "medicinal art"; t_i^{-1} \partial b^a n. healer
tìeň dv. inform WK (KED remember)
tìeň dv. stretch out
t i \partial \eta^a p l t i \partial m i s^{\epsilon} c b t i \partial \eta - n, beard; t i \partial \eta - q \bar{\nu} v r^{\epsilon} n, chin
t\bar{i}g^{\varepsilon}dv. become sated, have too much/many; ger t\bar{i}gir^{\varepsilon}/n. glut
t\bar{t}'i^{ya} ger t\bar{t}'ib^{o} sv. be leaning (object)
t i i g^a pl t i i s^{\epsilon} cb t i - n. tree; t i - d\bar{a} v g^o pl t i - d\bar{a} a d^{\epsilon} cb t i - d a - n. bow (for arrows)
t\bar{i}'il^{\varepsilon}/dv. lean something
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t i \iota m^m cb t i- n. medicine; t i-k \bar{\nu} \nu d i m^m n. poison (killing-medicine); t i-s \bar{a} b \iota l i m^m n.
          "black medicine" (a particular traditional remedy): ti \cdot v\bar{v}nnim^m n. oral
          medication
ti'in^{\varepsilon} dv, begin to lean
t\bar{\imath}l\acute{a}s^{\epsilon} n. necessity \leftarrow Hausa tiilàs 22.1
tiliq^{\varepsilon} dv. survive, be saved
tīnáma we, us (contrastive); tīnámi we (subject of n-clause) 12.4.1
t\bar{t}nt\bar{j}nrig^a pl t\bar{t}nt\bar{j}nris^\epsilon cb t\bar{t}nt\acute{j}nr n. mole (animal)
tip^a pl tip-nàm^a cb tip-n. healer (see t\bar{t} b^a id)
tīrâana pl tīrâan-nàma ch tīrâan-n. neighbour, peer
tīrâannìm<sup>m</sup> n. neighbourliness
tírigà ideo. for gīŋa short
tìs<sup>E</sup> ipfv tìsid<sup>a</sup> tìt<sup>a</sup> agt tìs<sup>a</sup> dv. give; also tì before bound pronouns: tì f gave you
t\bar{t}t\bar{a}'al^{l\epsilon} n. proud person
tītā'alım<sup>m</sup> n. pride
tītā'am<sup>m</sup> n. multitude
t\bar{t}t\bar{d}'vg^{\circ}t\bar{t}t\bar{d}'ar^{\varepsilon} pl t\bar{t}t\bar{a}da cb t\bar{t}t\dot{a}'- adj. big, great
t \grave{\partial} OK <u>18.4</u> (= Hausa t \hat{o} o)
t \grave{\partial} d^{\varepsilon} dv, give to the poor, share
t\bar{b}e^{a/} sv. be bitter, difficult
tóklàe n. torch ← English "torchlight"
tólib ideo.
t\bar{s}lis^{\epsilon}dv. do next, advance, carry on
tálılılı ideo. for wōk<sup>5/</sup> tall
tòň dv. shoot
t \grave{o} \breve{n}' o s^{\epsilon} dv, hunt
t\bar{z} g^{\circ} pl t\bar{z} d^{\varepsilon} cb t\dot{z} - adj. bitter, difficult
tōɔm<sup>m/</sup> dv. depart, disappear
t\dot{\partial}' \partial t\bar{\partial}' adv. straight away
tuà dv. grind in a mortar; tuà-bīla n. pestle
tu'à dv. speak, plead in court
t\dot{v}'al^{\varepsilon}dv. condemn in court
t\dot{v}'as^{\varepsilon}dv. talk
t\dot{v}bvr^{\varepsilon} pl t\dot{v}ba cb t\dot{v}b- n. ear; t\dot{v}b-kp\dot{r}^{\varepsilon} n. half of jaw; t\dot{v}b-y\bar{\iota}u\eta^{\circ/} adj. one-eared 12.8.1.1
t\bar{\nu}l^{\mathrm{la}/}s\nu. be hot
tù lig^{\varepsilon} dv. invert
t\bar{\nu}liq^{\epsilon}/dv. heat up
t\dot{v}m^{m} dv. work; ger\ t\bar{v}vm^{m\epsilon} n. deed pl t\bar{v}vma n. deeds; work cb\ t\dot{v}vm-; t\dot{v}vm-b\bar{\varepsilon}'\varepsilon d^{\epsilon}
          n. bad deeds; t\dot{v}vm-b\bar{\varepsilon}'\varepsilon d-dim^a n. sinners NT; agt\ t\dot{v}m-t\bar{v}m^{na} n. worker
t\dot{v}m^{m} ger t\dot{t}t\bar{v}mis^{\epsilon} dv. send; compare Hausa àikaa "send", aikàtaa "work"
t\bar{u}n'e sv. be able 19.1
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t\bar{u}edir^{\varepsilon} pl t\bar{u}eda cb t\dot{u}ed- n. mortar
t \dot{u} e n^{n\epsilon} in front; as postposition 13.5; West (KB y \dot{a} t \dot{u} e n a) 26.3; t \dot{u} e n - g \bar{a} t^a n. leader
Tùen<sup>ne</sup> n. Toende, western part of Kusaasiland
Tùennir^{\varepsilon} n. Toende dialect of Kusaal
t\bar{u}sir^{\varepsilon/}n. thousand 12.5.1
tùtūlle n. upside-down thing, cf tùli qe
t\bar{\nu}\nu liq\bar{a}^{\prime} adv. hotly
tvvlúa pl tvvlá ch tvvl- adj. hot
t\bar{v}'vs^{\epsilon}/dv, meet
IJ
\dot{u}dvg^{\circ} pl \dot{u}t^{\varepsilon} cb \dot{u}d- n. (piece of) chaff
\bar{u}qvs^{\varepsilon}/dv. bring up a child
\dot{\mathbf{v}}k^{\varepsilon}dv. vomit
\bar{u}k^{\varepsilon}dv. bloat
vm<sup>m</sup> dv. close eyes
\bar{u}r_{1}g^{\varepsilon/}dv. scrape
ύυη<sup>nε</sup> n. dry season
\mathbf{V}
vābι<sup>ya/</sup> ger vāp<sup>5/</sup> KT vābιr<sup>ε/</sup> WK sv. be lying prone
v\bar{a}bil^{\varepsilon}/dv. make lie prone
v \dot{a} b \iota n^{\varepsilon} dv. lie prone
vàe dv. gather up
v\bar{a}v\bar{n}g^{5/} pl v\bar{a}a\bar{n}d^{\epsilon/} cb v\bar{a}\bar{n}- n. leaf
v\bar{\varepsilon}' dv, lead
v\bar{\varepsilon}'\varepsilon g^{\varepsilon}/dv. drag
v \dot{\varepsilon} n^{\text{na}} or v \dot{\varepsilon} \tilde{n} l^{\text{la}} s v, be beautiful
vèňlliga pl vèňllis vèňlla cb vèňl- adj. beautiful
v \dot{\epsilon} \tilde{n} l l (\eta^a p l v \dot{\epsilon} \tilde{n} l l (s^\epsilon c b v \dot{\epsilon} \tilde{n} l l (\eta - a d j . beautiful
v \approx n n_i q^a v \approx n n_i r^{\epsilon} pl v \approx n n_i s^{\epsilon} v \approx n n_i a cb v \approx n - a dj. beautiful
v \approx n n i m^m n. beauty
v\bar{i} dv. uproot
v\bar{i}k^{\epsilon/}dv. uproot
v\bar{i}ug^{5/} pl v\bar{i}id^{\epsilon/} cb v\bar{i}- n. owl
v\bar{b}^{\varepsilon}dv. thrash (tones uncertain)
v\bar{u} qer v\bar{u}uq^{5/} dv. make a noise; v\bar{u}ud^{\epsilon/} n. noise
v\bar{v}e^{a/}sv. be alive
v\bar{\nu}l^{\varepsilon}dv. swallow
v\dot{\nu}linv\dot{u}u\ddot{n}l^{l\epsilon}n, mason wasp
v\bar{v}m^{\mathrm{m}/} cb v\bar{v}m- n. life; v\bar{v}m-pâal^{\mathrm{l}\epsilon} n. new life
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v\acute{u}e\eta^a pl v\~{u}em\acute{i}s^\epsilon n. red kapok Bombax buonopozense
v\acute{u}e^{\epsilon} pl v\ddot{u}\acute{a}a cb v\ddot{u}e^{\epsilon} n. fruit of red kapok
v\bar{v}r^{\epsilon}/pl v\bar{v}v\acute{a}cb v\bar{v}r- adj. alive
v\bar{u}r_{i}a^{\epsilon}/dv, shift along, move over (tones uncertain)
v\bar{v}'vq^{\epsilon}/dv. come, make alive
v\bar{v}'vs^{\epsilon}/dv. breathe, rest
νῡ'υsίm<sup>m</sup> n. resting
\mathbf{W}
wā' dv. dance
w\bar{a}ad^{\varepsilon/} n. cold weather
wáaf<sup>o</sup> pl wīigí cb wā'- n. snake
w\bar{a}al^{\epsilon}/dv. sow, scatter seed
wā'alím<sup>m</sup> n. length
w\bar{a}'am^{a/}sv. be long, tall
wàbig^a wàbir^{\epsilon} pl wàbis^{\epsilon} wàba ch wàb- n. lame person
wàbilim<sup>m</sup> dv. make, go lame
w\bar{a}bvq^{5/} pl w\bar{a}bid^{\epsilon/} cb w\bar{a}b- n. elephant
w\bar{a}dir^{\varepsilon}/pl\ w\bar{a}d\acute{a}\ cb\ w\bar{a}d- n. law (\leftarrow English "order" via Hausa) plural\ as\ sg: law
          wād-tísa n. lawgiver NT
wà'e<sup>ya</sup> sv. be travelling
w\bar{a}lig^a pl w\bar{a}lis^{\epsilon} w\bar{a}li (tone sic) cb wàl- n. a kind of gazelle
wànım<sup>m</sup> dv. waste away
w\grave{a}sınw\grave{a}l^{l\epsilon} n. a parasitic gall on trees, called "mistletoe" in local English
wàuŋº pl wàna cb wàuŋ- adj. wasted, thin
wὲεda see wìιda
w\bar{\varepsilon}\varepsilon l^{\varepsilon}/dv. be left unsold (KED) but see w\bar{\varepsilon}og^{\circ}/dv
w\bar{\varepsilon}l^{\varepsilon}dv, bear fruit
w\bar{\epsilon}l^{l\epsilon} pl w\bar{\epsilon}l\dot{a} cb w\bar{\epsilon}l- n. fruit
wēlá or wālá how? 13.6; nìn wēlá n/kà how can ...? 19.1
w\bar{\epsilon}n^{\rm na/} sv. resemble; in KB w\bar{\epsilon}n n\bar{\epsilon} appears as nw\epsilon n\epsilon; qer w\bar{\epsilon}nn\tilde{\epsilon}m^{\rm m}
w\bar{\varepsilon}nnir^{\varepsilon} adj. resembling (Pattern A, specifically confirmed with WK)
wèoq<sup>5</sup> n. deep bush
w\bar{\epsilon}og^{5/} pl w\bar{\epsilon}\epsilon d^{\epsilon/} n. cheap thing sold in abundance WK
wi\bar{a}k^{\epsilon}/dv. hatch (from an egg)
widig^{\varepsilon} dv. scatter
wì\partial f^{\circ} pl wìdi cb wìd- n. horse; wìd-\partial r^{\varepsilon} n. place for tying up horses in a compound;
          wid-d\bar{a}vg^{\circ} n. stallion; wid-nya'ana n. mare; wid-z\bar{v}vr^{\varepsilon} n. horsetail
wìida or wèeda pl wìiba ch wìid- n. hunter
Wìida pl Wìid-nàma ch Wìid-n. member of the clan Wiid
Wildvg<sup>o</sup> n. place of the clan Wild
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w\bar{i}ia^{a/}n, whistle
wìim<sup>m</sup> n. sickness, disease ("worse than bāň'as<sup>ε</sup>" WK)
wik^{\varepsilon} ipfy wiid<sup>a</sup> dv. fetch water 7.1
wil^{l\epsilon} pl wila cb wil- n. branch
w\bar{\imath}lis\dot{\imath}\eta^{3} pl w\bar{\imath}lim\dot{\imath}s^{\epsilon} cb w\bar{\imath}lis\dot{\imath}\eta- n. a kind of snail 5.3.2
wím ideo. for zìň'a red
wīn<sup>nɛ/</sup> pl wīná cb wīn- n. God; god; spiritual double, genius; destiny; wīn-tɔ̂ɔgɔ
         n. misfortune
Wínà'am<sup>m</sup> n. God 11.1
wìnn\iota q^a cb wìn- n. sun; talent; wìn-l\bar{\iota}ir^{\epsilon} n. sunset; wìn-k\dot{\jmath}\circ n\bar{r}^{\epsilon} n. sunset
wìug^{\circ} wìir^{\varepsilon} pl wìya wìid^{\varepsilon} cb wì- adj. red
w\bar{b}k^{5/} w\bar{a}'ar^{\epsilon/} pl w\dot{a}'a w\bar{a}'ad^{\epsilon/} cb w\bar{b}k- w\bar{a}'- adj. long, tall
wòm<sup>m</sup> dv. hear; understand (a language); smell
wūsa q. all
wūυ q. all
w\bar{\nu}v like, resembling 15
w\bar{v}'vq^{\epsilon}/dv. get wet
w\bar{\upsilon}'\upsilon l^{\varepsilon/}dv. make wet
\mathbf{Y}
yà you, your pl (right-bound); ya you pl (left-bound) 12.4.1
ya you pl, left-bound subject after imperative 4.2 12.4.1 18.3
vā independent-perfective particle 16.6.2
v\dot{a}' if, when 20
yáa adv. whither?
yáab<sup>a</sup> pl yāa-nám<sup>a</sup> cb yāa- n. grandparent, ancestor; yāa-dáu n. grandfather;
         y\bar{a}a-pu'\dot{a}a n. grandmother
v\dot{a}'ab^{\varepsilon}dv. mould clay
y\bar{a}'ad^{\varepsilon} cb y\dot{a}'-n. clay
v\dot{a}'al^{\varepsilon} dv. hang up; make perch (bird)
v\dot{a}'an^{\varepsilon}dv. perch (of a bird)
Yàan<sup>ne</sup> n. Yansi language (apparently Mooré now)
váa ní adv. where?
yáaŋa pl irr yáasɛ (consistently without nasalisation) cb yāaŋ- n. grandchild,
         descendant 26.1
Yàa\eta^a pl Yàam^{ma} Yàamıs^{\epsilon} Yàas^{\epsilon} cb Yàa\eta- n. Yansi person
v\bar{a}ar^{\varepsilon}/dv. scatter
yàarım<sup>m</sup> cb yàar- n. salt
v\dot{a}'as^a v\dot{a}'as^\epsilon again 19.1
v\bar{a}'as^{\epsilon}/dv. open repeatedly
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vantarrow dada or vant
                v \dot{a} dd \bar{a} - n i \eta \dot{r}^{\varepsilon} n. belief
v\bar{a}dig^{\epsilon}/dv. scatter; agt v\bar{a}t^{a}/irreg. agt: participant in a housebuilding ritual
v\bar{a}'e'dv, widen, open (mouth)
v \dot{a} k^{\varepsilon} dv. unhang, unhook
yàlım<sup>ma</sup> sv. be wide
yālım<sup>m/</sup> pl yālım-nám<sup>a</sup> n. worthless person
valis \dot{v} \eta^{\circ} pl valim (s^{\varepsilon} cb valis \dot{v} \eta^{-} n. quail 5.3.2)
yàluŋº pl yàlıma cb yàluŋ- adj. wide
yām<sup>mε</sup> pl yàma cb yàm- n. hay WK
v\bar{a}m^{m}/cb v\bar{a}m- n. gall; gall bladder; common sense. WK v\bar{a}'am^{m}/c; probably originally
                two distinct words 2.2
yàmmıga yàmmuga yàmmuga pl yàmmıs<sup>ɛ</sup> cb yàm- n. slave
yānám<sup>a</sup> you pl (contrastive); yānámì you pl (subject of n-clause) 12.4.1
Y\bar{a}r_{1}q^{al} pl Y\bar{a}r_{1}s^{\epsilon} cb Y\bar{a}r_{1} n. Yarsi person; also called Kantonsi; said to have been
                originally of Manding/Dyula origin
Y\bar{a}t^{\varepsilon/} n. Yarsi language (no longer Dyula/Bambara, but a Western Oti-Volta language)
y \dot{a} v g^{\circ} p l y \dot{a} a d^{\varepsilon} n. grave, tomb
v\bar{\varepsilon} that 22; be about to ... 16.3.3
y \approx dv. dress oneself; resultative adj y \approx l \sin \eta worn (e.g. of a shirt)
v \approx g^{\epsilon} dv. undress oneself
y \dot{\varepsilon} \varepsilon l^{\varepsilon} dv. dress someone
v\bar{\varepsilon}\varepsilon s^{\varepsilon}/dv. betray a secret
v \geq l^{\epsilon} i p f v v \geq t^{a} g e r v \geq l v g^{o} d v. say, tell
y\bar{\epsilon}l^{1\epsilon}/pl y\bar{\epsilon}l\dot{a} (as postposition: about 13.5) cb y\bar{\epsilon}l- n. matter, affair; y\bar{\epsilon}l-m\dot{\epsilon}\eta ir^{\epsilon}
                n. truth; y\bar{\epsilon}l-nár\dot{\nu}\eta^{\circ} n. necessity; y\bar{\epsilon}l-pák\dot{\epsilon}r^{\varepsilon} n. disaster; y\bar{\epsilon}l-s\dot{\nu}'ad\dot{\epsilon}r^{\varepsilon}
                n. confidential matter; y\bar{\varepsilon}l-s\dot{v}m^{m\varepsilon} n. blessing
v\bar{\varepsilon}\eta im^{\rm m} dv. oscillate (like waves)
v \approx o g^{\circ} pl v \approx e d^{\varepsilon} n. bird's crop; person displaced from family (KED)
γέση q. one, in counting
y\bar{i} ipfv y\bar{i}t^{a/} imp y\dot{i}m^a dv. go, come out
vidig^{\varepsilon} dv. go astray
v\bar{l}dlg^{\epsilon}/dv. untie
y i \theta r^{\varepsilon} n. jaw
vīigá q. firstly; former 12.1; vīig-sóba n. first person 12.4.7
v\bar{i}is^{\epsilon} ger v\bar{i}isib^{\circ} dv. make go/come out, extract
v\bar{i}mmir^{\epsilon} pl v\bar{i}mm\dot{a} cb v\bar{i}m- adj. solitary, lone 12.5.1
yīmmύ q. adv. straight away, at once
yīnní q. one
vìna adv. outside
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v\bar{i}r^{\varepsilon/} pl v\bar{a} cb v\bar{i} n. house; v\bar{i}-dâana n. householder; v\bar{i}-sóba pl v\bar{i}-sób-nàma n.
          householder; v\bar{l}-dim^a n. members of the household; v\bar{l}-p\acute{o}\bar{n}r\grave{v}g^o pl v\bar{l}-p\acute{o}\bar{n}r\grave{a} n.
          neighbouring house; y\bar{i}-sígidir^{\epsilon} n. lodging-house; yin^{n\epsilon} at home pl yáa-n^{\epsilon}
vise dv. make go/come out, extract
\sqrt{i}u\eta^{5/} pl \sqrt{i}n\acute{a} adj. single- 12.8.1.1
yò dv. close; resultative adi yòɔlὑη<sup>o</sup> closed
y\bar{z}^nvv. pay; ger\ y\bar{z}zd^{\varepsilon/} n. pav
y\bar{\nu} lis^{\epsilon} dv. untie
yɔ̃lısím<sup>m</sup> n. freedom
v\bar{b}lvq^{5/} pl v\bar{b}n^{n\epsilon/} cb v\bar{b}l- n. sack, moneybag; (like Hausa jàkaa) £100, ¢200 (cedis)
y\dot{\partial}'\partial g^{\varepsilon} dv. open
y \grave{>} r^{\varepsilon} pl \ y \grave{>} ya \ cb \ y \grave{>} n. soldier ant
yuà dv. bleed; also fornicate WK
y\dot{v}'adur^{\varepsilon} pl y\dot{v}'ada n. rafter
\dot{yub}_1g^a pl \dot{yub}_1s^\epsilon cb \dot{yub}_1 n. small bottle-like pot
yūgvdır<sup>ɛ</sup> pl yūgvda cb yùgvd- n. hedgehog
γυσύm<sup>mε</sup> γυσύm<sup>nε</sup> pl γυσμπά cb γυσμπ- n. camel
vù lig^{\varepsilon} dv. swing (transitive)
v\bar{u}n'e'dv. set alight
y\bar{u}'er^{\varepsilon} pl yu\bar{a}da cb y\dot{u}'er- n. penis
y\dot{u}ug^{\varepsilon}dv. get to be a long time, delay; Ti\ y\hat{u}ug\ n\bar{\varepsilon}\ t\bar{a}aba. It's long since we met.
vuul^{\varepsilon} dv. swing (intransitive)
y\bar{v}'vm^{m/}dv. sing; agt\ y\bar{v}vm-y\hat{v}'vm^{na}\ pl\ y\bar{v}vm-y\hat{v}'vmnib^a\ n. singer
v\dot{v}'vm^{n\epsilon} pl v\bar{v}'vm\acute{a} cb v\bar{v}'vm- or v\bar{v}vm- n. song
yὑυm^{mε} pl yὑma ch yὑυm- n. year; yὑυm-pāalíg^a n. new year
v\bar{v}'vn then, next 17.2.3
v\dot{v} v\eta^{0} pl v\bar{v} vmis^{\varepsilon} cb v\bar{v} v\eta - n. night
y\bar{v}'vr^{\varepsilon}/pl y\bar{v}d\acute{a} cb y\bar{v}'-n. name
y\bar{v}vr^{\varepsilon} pl y\bar{v}ya cb y\dot{v}- n. water pot
Z
z\bar{a}^{\prime} cb z\bar{a}- n. millet
z\bar{a}alig^a z\acute{a}al^{l\epsilon} pl z\bar{a}alis^{\epsilon} z\bar{a}al\acute{a} cb z\bar{a}al- adj. empty
zāalím<sup>m</sup> adv. emptily
z\dot{a}am^{m}cb z\dot{a}- n. evening; z\dot{a}-sis\bar{b}ir^{\varepsilon}/n. evening
zàn'an<sup>ne</sup> pl zàn'ana n. metal hammer, iron-tipped weapon, bludgeon
zàaňsım<sup>m</sup> dv. dream
zāaňsím<sup>m</sup> cb zāaňs- n. soup; soup in general, not "fish soup" despite Mampruli
          zaasim "fish"; cf Toende zãasím "meat soup" (Niggli)
zàaňsύη<sup>ο</sup> pl zàaňsímà cb zàaňsύη- n. dream
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z\dot{a}b^{\varepsilon} ger z\dot{a}bir^{\varepsilon} dv. fight; hurt (of body part); agt z\dot{a}b-z\dot{a}b^{a} n. warrior;
          agt gbān-zába n. leather-beater, leather-worker
z\dot{a}bil^{\varepsilon} dv. cause to fight
z\dot{a}k^a pl z\dot{a}'as^{\varepsilon} cb z\dot{a}'- n. compound; z\dot{a}'-n\bar{z}) z^{\varepsilon} n. gate; z\dot{a}'-n\bar{z}-g
zàkım<sup>m</sup> dv. itch
zàlin^a pl zàlimis^c cb zàlin- n. electric eel
zàm<sup>m</sup> ipfv zàmmıda dv. cheat; agt zàm-zām<sup>na</sup> n. cheat
z a m s^{\epsilon} dv. learn, teach
zāň'a q. every
z \dot{a} \ddot{n}' a s^{\epsilon} dv, refuse
z \tilde{a} \tilde{n} b l^{\epsilon} dv. tattoo, mark skin
z\bar{a}nbin^{n\epsilon} pl z\bar{a}nbina cb z\dot{a}nbin- n. tattoo; NT sign 8.1.2
Zàngb\grave{\varepsilon}el^{\varepsilon} n. Hausa language
Zàngb\grave{\epsilon}og^{\circ} pl Z\grave{a}ngb\grave{\epsilon}\epsilon d^{\varepsilon} n. Hausa person
zàngùem<sup>mɛ</sup> pl zàngùema cb zàngùem- n. wall
zànkù'ar<sup>E</sup> pl zànku'àa zànkù'ada cb zànku'à- n. jackal
zāňl<sup>la/</sup> ger zāňllím<sup>m</sup> sv. be holding, carrying in hands
zàňl<sup>lɛ</sup> n. umbilicus
z a \eta^{\epsilon} dv. pick up, take up
z\bar{\varepsilon}m^{\text{ma}/} ger z\bar{\varepsilon}mm\dot{v}g^{\circ} sv. be equal
z\bar{\varepsilon}m\iota s^{\varepsilon}/dv. make equal
zēmmúg<sup>o</sup> pl zēmmá cb zēm- adj. equal
z\bar{i} ger z\bar{i}id^{\epsilon}dv. carry on one's head; agt z\bar{i}-z\hat{i}id^a n. carrier on the head
z\bar{\imath}' ger z\bar{\imath}'\imath l\acute{\imath}m^m sv. not know 16.5; agt z\bar{\imath}'\imath d^{a/n}. ignorant person
z_i^a e^{ya} ger z_i^a KED; DK KT z_i^a e^{ga} (exceptional phonology 11 8.1.1) sv. be standing
zi = dv. make to stand; zi = n\bar{z} = n\bar{z} promise, command; with n tis X: promise to X
z_i^{i} = \partial n^{\varepsilon} dv. stand still; O(z_i^{i}) = \partial n = 0. She's pregnant.
z\bar{\imath}\iota m^{\mathrm{m}}/cb z\bar{\imath}- n. blood
zíina pl zīmí cb zīm- n. fish; zīm-gbâň'ada n. fisherman
zìlım<sup>mɛ</sup> pl zìlıma cb zìlım- n. tongue
zīlınzîog<sup>o</sup> adj. unknown
zím ideo. for sābilíga black
zīná today
zịň'a zèň'vg<sup>o</sup> pl zèň'\varepsilond<sup>\varepsilon</sup> zèň'\varepsilons<sup>\varepsilon</sup> zèňda cb zèň'- adj. red
zįň'i<sup>ya</sup> sv. be sitting; ger zįň'ig^a pl zįň'is^\varepsilon cb zìň- (also place)
zìň'il^{\varepsilon} dv. make sit, seat
zìn'in^{\varepsilon} dv. sit down
z\bar{\imath}nz\bar{a}u\eta^{5/} pl z\bar{\imath}nz\bar{a}n\acute{a} cb z\bar{\imath}nz\acute{a}u\eta- n. bat
zīrí n. lie, untruth
z \hat{\sigma} i p f v z \hat{\sigma} t^a imp z \hat{\sigma} m^a dv. run; fear; experience emotion; q e r z \bar{u} a z \bar{\sigma} \sigma g^a run;
          ipfv ger z \partial t m^m fear 9.2.1.4 \dot{O} z \partial t \bar{o} n \bar{n} - b \acute{a} d l \dot{g}. He has pity on him
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z\bar{z}l^{\varepsilon}dv. castrate
z\bar{\jmath}limis^{\epsilon}n. foolishness
z\bar{z}lvq^{5/} pl z\bar{z}n^{n\epsilon/} cb z\bar{z}l- n. fool
zɔ̃m<sup>m/</sup> cb zɔ̃m- n. flour
zɔ̄ɔm<sup>mɛ</sup> zɔ̄ɔm<sup>nɛ</sup> pl zɔ̄ɔma cb zòɔm- n. refugee, fugitive
zōrıq<sup>a/</sup> n. small child WK
zōrva<sup>o/</sup> pl zōrá n. piece
z\bar{u} dv. steal
zuà pl zuà-nàma cb zuà- n. friend
Zùa pl Z\dot{u}os^{\varepsilon} n. member of clan Zoose; subclans pl Zu\dot{a}-wiis^{\varepsilon}/-wiib^{a}, pl Zu\dot{a}-sābilís^{\varepsilon}
zù'e dv. get higher, more
zùe dv. perch, get on top (? variant of zù'e)
z\bar{u}q^{5/} pl z\bar{u}t^{\epsilon/} cb z\bar{u}q- z\bar{u}- 5.2 n. head; as postposition 13.5; z\bar{u}q\dot{v}-n<sup>\epsilon</sup> is also used as a
          postposition; z\bar{u}g-dâana n. boss, master (replaces z\bar{u}g-s\acute{o}ba in KB for meanings
          other than "the Lord"); z\bar{u}g-k\bar{v}gvr^{\varepsilon} pl z\bar{u}g-k\bar{v}ga cb z\bar{u}g-k\dot{v}g- n. pillow; z\bar{u}g-
          m\acute{a}uk^{\circ} pl z\ddot{u}g-m\^{a}^{\dagger}ad^{\varepsilon} adj. crushed-headed 12.8.1.1; z\ddot{u}g-s\acute{o}b^{a} n. boss; NT
          Lord; z\bar{u}-péɛl\dot{v}g^{\circ} pl z\bar{u}-péɛl\dot{a} adj. bald 12.8.1.1; z\bar{u}-pí\dot{v}g^{a} n. hat
zùlig^{\varepsilon} dv. deepen
zùlım<sup>ma</sup> sv. be deep
zùlvŋº pl zùlıma cb zùlvŋ- adj. deep
zùlvŋ<sup>o</sup> n. depth
z\dot{v}nz\dot{v}\eta^a z\dot{v}nz\dot{v}\eta^o pl z\dot{v}nz\dot{v}v\ddot{s}^\varepsilon cb z\dot{v}nz\dot{v}\eta- n. blind person
z\bar{u}eb\dot{v}g^{\circ} pl z\bar{u}eb\dot{v}d^{\varepsilon} cb z\bar{u}eb- n. hair (of human head); see k\bar{z}\bar{n}bvg^{\circ}
z \dot{u} \theta d^{\epsilon} n. friendship
z\dot{u}\theta l^{\varepsilon} dv. make to perch
z\bar{u}'em^{m/} pl z\bar{u}'emis^{\epsilon} cb z\bar{u}'em- n. blind person
z\bar{u}'em^{m/}dv. go blind, make blind
z \dot{u} e n^{\epsilon} dv. begin to perch
z\bar{u}e^{\varepsilon} pl zu\bar{e}va cb zu\dot{a}- n. hill
z u e s^{\epsilon} dv. befriend
zūríf<sup>o</sup> pl zūrí cb zūr- n. dawadawa seed
zύ'υňf<sup>o</sup> pl zū'υnί n. dawadawa seed
zùung^{\circ} pl zùuns^{\varepsilon} zùund^{\varepsilon} cb zùn- n. vulture
z\bar{v}vr^{\varepsilon} pl z\bar{v}va cb z\dot{v}- n. tail; z\dot{v}-w\bar{o}k^{\circ/} adj. long-tailed 12.8.1.1
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