## A Grammar of Kusaal

Agolle Dialect
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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. 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.

With the help of four intelligent and extremely 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.

When I lived in Ghana, little linguistic work was available on Kusaal. Happily, the situation has since changed greatly, with the work of Urs Niggli and Hasiyatu Abubakari on Toende Kusaal, and the recent appearance of a full grammar of Agolle Kusaal by Anthony Agoswin Musah.

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 much helped by the staff of the Ghana Institute of Linguistics in Tamale, who among other kindnesses provided me with photocopies of David Spratt's unpublished introductory materials on Kusaal.

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.

## Abbreviations

AdvP adverb phrase
ag agent noun
BNY Bunkonbid ne Niis ne ba ycla
C consonant
$\mathrm{cb} \quad$ 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 Dictionary
KKY Kusaas Kuob ne Yir yela Gbaup
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
$1 \mathrm{sg} 2 \mathrm{pl} . . . \quad$ first person singular, second person plural etc

Books of the Bible are abbreviated using the shorter forms from the Chicago Manual of Style; verses are cited from KB unless stated otherwise.

## Interlinear glossing

| ABSTR | abstract | $\underline{8.2}$ |
| :--- | :--- | :---: |
| ADV | adverbial |  |
| AN | animate gender | $\underline{12.2}$ |

CaT clause catenator (underlyingly $n$ ) $\underline{17.2}$
CN contrastive (personal pronouns) 12.3.1
COP
CQ
DEM
DEMST demonstrative pronoun (spatio-temporal)
DP discontinuous-past marker $n^{\varepsilon} \quad \underline{16.2 .2}$
Exist existence/location verb b̀̀ $\underline{16.10}$
FOC focus particle $n \bar{\varepsilon}{ }^{\prime} \quad$ 19.1.2
GER gerund
IDEO ideophone
IMP independent imperative verb form $\quad \underline{1.1}$

IN
INDF
IPFV
IRR
LOC
NEG
NEG.BE
Neg.have (another use of the same verb)
NEG.IMP negative imperative marker
NEG.IND negative indicative marker
NEG.IRR negative irrealis marker
NEG.KNOW negative verb $z \overline{1}$ '
neg.let negative verb mịt
NULL dummy NP head sōba
12.3.7

NUM number prefix à- bà- ǹ- bù- $\quad$ 12.4.1
NZ
PERS
PFV independent-perfective marker $y \bar{a}$
nominaliser $\grave{n} \quad 17.3$
personifier ( $\grave{a}$ - or $\grave{n}$-) $\quad \underline{12.5 .1}$
independent-perfective marker yā $\underline{16.5}$
plural
PQ polar question prosodic clitic $\underline{4.1}$
REL relative pronoun
17.3.2.2

SG singular
TNS tense marker 16.2.1
voc vocative prosodic clitic $\underline{4.1}$

Personal pronouns:

| 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 |

The linker kà is glossed "and" throughout, though this often does not reflect its meaning in context; similarly yà' is glossed "if" in all cases. The empty particle $n \bar{\varepsilon}$ following objects of comparison 15 is glossed "like."

Mass nouns are not specified as SG or PL in the glossing; single-aspect verbs $\underline{7.2}$ are not labelled for aspect. The perfective of dual-aspect verbs is also unlabelled.
$\varnothing$ represents words with zero surface segmental representation, detectable only from tonal and segmental effects on preceding words. Prosodic clitics 4.1 are represented by $=\varnothing$. Liaison enclitics $\underline{4.2}$ are preceded by $=$ in glossing as in the working orthography. Other bound words which are traditionally written solid with their hosts are joined with hyphens in glossing as in the working orthography 3.1. Liaison before non-enclitic words is marked with $\smile$.

A few common compounds are glossed with single words.

## Transcriptions

Phonetic transcriptions ignore all allophony not immediately under discussion.
For Agolle Kusaal orthography see 2. Symbols have approximately their IPA values, but long vowels are written with double symbols, $e$ ı both represent [r], o v both represent [ $\mho$ ], $\check{n}$ marks nasalisation and ' glottalisation of adjacent vowels, $y$ stands for [j], and $k p g b$ stand for [ $[\mathrm{kp}][\overline{\mathrm{gb}}]$. The symbol $i$ is written with the dot below when it carries a tone mark, e.g. bịig "child" [bi:g]. This colour is reserved for the working orthography of the grammar. Except for a few examples from ILK, written sources are cited in original orthography along with a transliteration, and tone marking supplied by me; tone was checked against the audio NT in the few cases where a tonal point is at issue, but in general should be regarded as illustrating the tonal principles described elsewhere, not as evidence for their validity.

Hausa is cited as in Newman 1979, but with double letters for long vowels; Mooré as in Niggli 2016; Nawdm as in Babakima 2013; Moba as in Kantchoa 2005, but with $y$ for [j]. Arabic transcriptions use IPA, but with $y$ for [j] and double symbols for long vowels; forms are classical, without case endings or the $t$ of taa? marbuut ${ }^{〔} a$.

Words from other languages are given as in the sources, adding the tone marks acute for $H$, grave for $L$, and macron for mid tone where necessary. Written $1 v$ represent IPA I $\circlearrowright$ in all cited sources where they occur.

Internal and external hyperlinks appear like this.

## Sources

All analyses adopted in this grammar are 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." Otherwise, the phonology, morphology and basic syntax are based on elicitation and discussion 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 four. If any would like to see his name included in its rightful place, I would happy to comply. Meanwhile I identify them by abbreviations (not their initials): WK (from Koka), KT (from Tempane), DK (from Kukpariga), and SB (from Bawku.) All are first-language speakers of Agolle Kusaal, with full competence also in English. All are male, and were then around forty years old. I noted examples from many other speakers, but few of the usage of younger speakers specifically; my informants did occasionally comment on the incorrect grammar of the young (surely a cultural universal.) There have been changes in the language over the fifty years covered by my sources, and traditional orthography sometimes preserves obsolete forms. I found no 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.

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 NT, storing up problems to discuss later with my teachers. Twenty years later, access to digitised versions of the 1996 NT and the complete Bible version of 2016 has enabled substantial improvements in my analyses of Kusaal syntax. I have also drawn on the various literacy materials listed in the References. I owe a great debt to the dedicated personnel of the Ghana Institute of Linguistics, Literacy and Bible Translation (GILLBT), without whom these written sources would not exist.

The Bible versions are generally regarded by Kusaal speakers as good and idiomatic Kusaal. The 1996 revision adapted foreign names more closely to 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 Bible makes significant orthographic changes.

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.

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## 1 Introduction

### 1.1 The Kusaasi people

Upper East Region of Ghana (after 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 territory into Toende (French Tondé, Kusaal Tùөn "West", shaded light green above) and Agolle (Kusaal Àgòl "Upper", dark green.)

The land is mostly open savanna with scattered trees. 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 Ful6e 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 $s \bar{a} ' a b$, called "TZ" /ti:'zed/ in local English (Hausa tuwon zaafii, "hot porridge"), and the traditional millet beer, dāam, called "pito" (Hausa fitoo) in English.

The Kusaasi are divided into numerous patrilineal exogamous clans (dòog, "hut") which tend to be associated with particular areas (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 p $\bar{\jmath} o r$ "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 tè $\eta$-dāan "earth-priest", taken to be the descendant and heir of the original first settler. In precolonial times the dominant political structures in this region were the so-called Mossi-Dagomba states, the 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 earth-priests. The founder of these kingdoms is called Naa (King) Gbewaa in Mampruli. His seat was at Pusiga, in what is now Kusaasi territory; he is said to have been swallowed by the earth at that place. In his sons' time the capital was relocated south to the Mamprussi lands. The Dagomba and Mossi kingdoms are cadet branches of this centuries-old military-aristocratic Mamprussi state (Iliasu 1971.) Unlike their Mamprussi neighbours, the Kusaasi were not absorbed into the system, and intermittent conflict has continued to this day, particularly over the chieftaincy of Bawku. Both in colonial times and since independence, wider political issues have complicated the situation.

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

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

Most Kusaasi retain their traditional animist outlook. The creator, Win "God", is invoked in proverbs and greetings but is remote from everyday life, and not approached in prayer or worship. Proverbs say
$\operatorname{Dìm} \quad n \bar{\varepsilon} \quad W i n, \quad d \bar{a} \quad$ t仑̂'as $n \bar{\varepsilon} \quad W i n n \varepsilon ́=\varnothing$.
Eat:ImP with God:sG, NEG.IMP talk with God:sG=NEG.
"Eat with God, don't talk with God."

Wīn ňyé kà sịn. "God sees and is silent."
God:sg see and be.silent.

Everyday religious practice is concerned with local non-anthropomorphic spirits, also called wīn. A wīn resides in a būḡ̄r, an object such as a stone or horn, but it is the wīn 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: nịn-gbị̀ "body"; $\check{n y y}$-vūr "life" as opposed to death, possessed by all living animals; wīn (in this sense) "genius, spirit, a person's own spiritual self"; and kìkịrīs, protective spirits (called "fairies" in local English.) Men have three kikịirīs, 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 kìkịrīs in the bush which are hostile and try to lead travellers astray. Sīıg "life force", used for "spirit" in Christian materials, is in traditional belief identified with a person's tutelary kìkịrīs. Sōon̆b "witches" cause harm by stealing a person's life force; their condition is not always voluntary.

The key term wīn has yet further senses, overlapping with the European concepts of fate or destiny: wīn-tôog, literally "bitterness of wīn" is "misfortune." Most people have a particular sīgīr "guardian spirit" which is often the wīn of an ancestor; the word $b \bar{v} g \bar{v} r$ may also mean "a wīn inherited from one's mother's family." Many Kusaasi personal names refer to an individual's sī $g i ̄ r$.

When speaking English or French, Kusaasi normally cite Kusaal personal and place names without apocope 3.2: $\grave{A}-W i n$ from Widì-n̆yá' $a \eta$ will introduce himself as "Awini" from "Woriyanga." Similarly "Kusaasi" for Kūsâas, "Bawku" for Bòk etc. "Woriyanga" also shows a Mampruli rather than Kusaal form for the initial combining form "horse": Mampruli wuri-, Kusaal wìd-. This reflects the origin of the convention in the use of Mamprussi guides and interpreters by the British in their initial explorations of the area. A parallel development took place earlier in Mamprussi country when the British arrived with Dagomba guides: thus "Gambaga" (Dagbani Gambaya) for the Mampruli place name Gambaa (Naden.)

The 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 $\grave{A}-D \bar{v} k$, and the language name "Kusaal" Kūsâal 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 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 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. About 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, and every district has local peculiarities. The major division is between Agolle and Toende Kusaal: numerous isoglosses coincide to produce a sharp discontinuity, probably attributable to depopulation near the White Volta caused by the river blindness prevalent until recent times.

My informants reported little difficulty communicating with Toende speakers, but they are sophisticated multilinguals; moreover, Agolle speakers may find Toende Kusaal easier than vice versa. Berthelette 2001 suggests that Ghanaian Toende speakers understand Agolle Kusaal significantly better than Burkina Faso Toende speakers do, presumably reflecting greater exposure. The paper also reports that Toende speakers feel their dialect to be "purer", which may affect comprehension. It cites 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 Voltaic (or Gur) subgroup of Volta-Congo, itself traditionally joined to other groups by long-range hypotheses in a Niger-Congo phylum. This chart shows commonly accepted relationships between some of the Volta-Congo languages discussed below:


There is clear evidence for Volta-Congo as a genetic group. Basic lexical items recur: compare Kusaal dì "eat", nū "drink", kūm "death", tìıg "tree", àtán̆' "three", tùbùr "ear", tùm "send" with the Proto-Bantu reconstructions dí- "eat", nú- "drink", kú- "die", -tí "tree", -tátò "three", -tó "ear", tớm- "send." The Potou-Tano languages here show a regular correspondence $t \sim s$ : Twi $\varepsilon s a ̃$ "three", asõ "ear", soma "send."

The most salient morphological feature of Volta-Congo is the presence of noun classes marked by affixes, which appear in sg/pl pairs for count nouns; the affixes of other Volta-Congo languages correspond to the Bantu pronominal/verbal agreement prefixes rather than noun class prefixes when these differ. Thus, the Kusaal humanplural noun suffix -ba seen in nịdī̀b "people" (sg nị̀d) matches the prefix of Lingala bato "people" (sg moto); the Proto-Bantu verb agreement prefix pair li|gá are cognate to the suffixes $r \varepsilon \mid a a$ seen in Kusaal tùbùr "ear", pl tùbà, where Lingala litói "ear", pl matói shows the corresponding Bantu noun prefixes.

Similarities also appear in verb derivation by suffixes, but good matches of form and function are less evident than in noun flexion.

The Voltaic languages (after Davius)
Green: Oti-Volta; blue: Gurunsi; yellow: other Voltaic.


The closest relatives of Kusaal are found in Manessy's Western Oti-Volta, a group roughly as diverse as Romance. Proto-Oti-Volta ${ }_{C}{ }^{*} f$ have merged with ${ }_{S}{ }^{*} z$; almost all inflecting verbs use the stem for perfective aspect, suffixing *da (from *ta) for the imperfective. The group shows a great deal of distinctive vocabulary, e.g. Kusaal kù'өm "water", Boulba kóà, vs Moba núm̀, Buli nyíam etc. Boulba (Notre) is an outlier; it devoices $* g * \overparen{g b} * z * v$, for example, and preserves noun classes lost elsewhere, as with tìebò "tree" vs Kusaal tìıg, Mooré tìıgá.

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 flexion *-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 forms a subgroup with Nabit and Talni, spoken in the adjacent Nabdam and Talensi districts. Like Kusaal, Nabit and Talni have lost inherited final short vowels in citation forms. Naden's materials suggest that as in Kusaal the vowel remains at the end of questions and negated clauses:

Nabit La bi'ime. $\quad$ "It is ripe." ( $m \varepsilon=$ Toende $m e$, Agolle $n \bar{\varepsilon}$ 16.1.1) La na bu biige. "It is not yet ripe."

Talni Bunpok doyam pu bokəra, buraa dozam m bokət.
"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, with many clear cognates and similar nominal morphology; verbs are uninflected. Proto-Oti-Volta $*_{S} *^{*} *_{C} *_{f}$ are preserved unchanged.

The Gurma languages are much less close. Verbs mark aspect by unpredictable changes of tone and/or addition or deletion of several different suffixes. Gulimancéma and Konkomba show nouns with paired class prefixes and suffixes. Moba shows some features suggestive of Western Oti-Volta influence.

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" |
| mōog | mūub | móóùg | "grass" |
| tı̀ıg | tìb | tī̀g | "tree" |

Nawdm aligns tonally with Western Oti-Volta and Buli: wáàǵb "snake", móógú "grass", tìib "tree." It has shifted ${ }^{*} p \rightarrow f, *_{s} \rightarrow h, *_{C} \rightarrow s, *^{*} z \rightarrow f$. It often has $\kappa$ [?] where Western Oti-Volta shows vowel glottalisation. Nawdm shows much less lexical similarity than Buli to Western Oti-Volta, but there are parallels in verb morphology. Most verbs use the stem as perfective and add -a for imperfective, dropping any perfective $-g$ suffix; another common pattern is perfective $-r a \sim$ imperfective $-l$.

Eastern Oti-Volta is very diverse. Manessy's subgrouping is largely based on shared initial consonant changes, some of which are clearly areal.

Ditammari and Nateni have broadly similar systems of verb flexion to Gurma, and also align with Gurma in showing L tones corresponding to Pattern H. Ditammari nouns show paired class prefixes and suffixes, as in Gulimancéma.

Byali shows mid tones in cognates of Kusaal Pattern H words. Most verbs oppose perfective -sə to imperfective -u.

Waama shows high tones in words corresponding to Western Oti-Volta Pattern H. Most verbs use a bare stem as perfective and add -ri/-di/-ti for imperfective. Of some 400 vocabulary items compared in Sambiéni 2005, 55 Waama words are not cognate to those of the other languages, compared to under 20 for the other languages; some of these words have cognates in Western Oti-Volta and Buli.

There is much less similarity between Oti-Volta as a whole and the Gurunsi languages, considered by Manessy to constitute the other major branch of Voltaic. The relationship between Oti-Volta and Gurunsi and the Adamawa languages is unclear (Kleinewillinghöfer 1996), and neighbouring related languages with suffixing noun flexion have sometimes been ascribed to Voltaic without firm evidence that they are closer to Oti-Volta or Gurunsi in particular than to other Volta-Congo groups.

### 1.2.4 Grammatical sketch

Kusaal and its close relatives Nabit and Talni differ from other Western OtiVolta languages in having undergone apocope of word-final short vowels even in citation forms. Thus where Mooré has the citation form gígemde "lion", the cognate Kusaal word normally appears in the Short Form (SF) gbīgīm. This is not a simple historical matter: the final vowel is still present in certain contexts. It reappears clause-finally when the clause contains a negation, ends a question, or is used as a vocative: the final word then appears as a Long Form (LF):

```
Lì à n\overline{\varepsilon}}\mathrm{ gbīgīm. "It's a lion."
3IN COP FOC lion:SG.
Lì kā' gbīgīmn\overline{\varepsilon}=\varnothing. "It's not a lion."
3IN NEG.BE lion:SG=NEG.
Lì à n\overline{\varepsilon} gbígìmnغ̀\varepsilon=\varnothing. "Is it a lion?"
3IN COP FOC lion:SG=PQ.
```

As here, after apocope any final consonant cluster drops the second consonant.

This appearance of untruncated forms is 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: negative NEG, vocative voc, polarquestion $P Q$ and content-question $C Q$, with different effects on preceding vowel length and tone. Alongside interlinear glossing they are represented by $=\varnothing$.

In citing word forms, superscripts are used for those parts of words which only appear in the LF: $g b \bar{l} g \bar{i} m^{\text {n } \varepsilon}$ "lion."

The phonology of Kusaal is greatly 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 vịugó "owl" has iu for ii because of the rounding effect of the suffix vowel. After apocope, the diphthong iu in vịug contrasts with the vowel of vịid "owls", shortened from vịidd́. Similarly, āaňdīgā "black plum tree" has the default epenthetic vowel $l$, and appears as $\bar{a} a \check{n} d \bar{l} g$ after apocope, whereas gàadı̀g̀̀ "passing" has rounding to $v$ before the flexion -go, and after apocope this becomes contrastive in the SF gàad̀̀g.

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:

```
M pū bóvdā=\varnothing. "I don't want to." (bòod}\mp@subsup{}{}{\textrm{a}}\mathrm{ "want")
1SG NEG.IND want=NEG.
M bósdī=bá. "I love them."
1SG want=3PL.
M p\overline{v} záb\overline{\varepsilon}=\varnothing. "I haven't fought." (zàb}\mp@subsup{b}{}{\varepsilon}\mathrm{ "fight")
1SG NEG.IND fight=NEG.
M zábī=bá. "I've fought them."
1SG fight =3PL.
```

Apocope reduces several liaison words of the underlying form $C V$ to a single consonant. So with the object pronoun $f^{\rho}$ "you ( sg )" and the locative postposition $n^{\varepsilon}$ :

```
M p\overline{v}}\mathrm{ bóodī=fó=ø. "I don't love you."
1SG NEG.IND want=2SG=NEG.
M bóodī=f.
    "I love you."
1SG want=2SG.
```

Lì $k \bar{a} ' \quad k \bar{v} k \bar{a}=\varnothing$. "It's not a chair."
3IN NEG.BE chair:SG=NEG.

Lì $k \bar{a}^{\prime} \quad k \bar{v} k \bar{\imath}=n \varepsilon ́=\varnothing$. $\quad$ It's not in a chair." ( $k \bar{v} k \bar{\imath}=n$ "in a chair")
3IN NEG.BE chair:SG=LOC=NEG.

Lì $k \bar{a}^{\prime} \quad d \bar{u} k o ́=\varnothing . \quad$ "It's not a pot."
3IN NEG.BE pot:SG=NEG.

Lì $k \bar{a}^{\prime} \quad d \bar{v} k i ́=n \bar{\varepsilon}=\varnothing . \quad$ "It's not in a pot." ( $d \bar{v} k i ́=n$ "in a pot")
3IN NEG.BE pot:SG=LOC=NEG.

The pronoun ${ }^{\circ}$ "him/her" has a SF which is segmentally zero. Its presence is still shown by the replacement of the preceding word-final vowel mora by $o$ [ $\sigma$ ]:

|  | "I don't love him/her." | [mpobo:dv:] |
| :---: | :---: | :---: |
| 1SG NEG.IND want=3AN=NEG. | LF $o$ of the pronoun "him/her" |  |
| $\grave{M}$ bósodo = $\quad$. | "I love him/her." | [mbo:dv] |
| 1SG want=3AN. | SF $\varnothing$ of the pronoun "him/her" |  |

The SF of the 2 pl subject ${ }^{\text {ya }}$ after imperatives is similarly segmentally zero:

## Gòsìm!

"Look!"
Look:IMP!

Gòsımī $=\varnothing$ !
"Look ye!" by apocope from gòsımī=yá
Look:IMP=2PL.suB!

Liaison words are not all left-bound. Right-bound non-contrastive personal pronouns inhibit apocope in the preceding word, as do the personifier $\grave{a}$ - and all words beginning with certain prefixes. Liaison before such words is marked by

Two particles of the form $n$ also frequently lose their own segmental form entirely, their presence again apparent only in the modified LF of the preceding word:
$\grave{m} \quad z u \overline{g v ́}=\varnothing$ zàbìd lā zúg
1SG head:SG=NZ fight:IPFV ART upon
"because my head hurts" (nominaliser-ǹ)
$\grave{M}$ zūḡ̄ $\varnothing$ zábìd. "My head hurts." (catenator-n)
1SG head:SG cat fight:IPFV.

Kusaal has contrastive vowel glottalisation, marked with '.
Vowel breaking results in four vowels ía ua iə ue which pattern throughout as monophthongs. Many phonemic diphthongs arise from fusion of vowels after deletion of intervocalic $* g$ and from fronting and rounding made contrastive by apocope.

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 $\mathrm{H}, \mathrm{M}$ and L respectively. $C V V C$ syllables may also have a circumflex ( X ) toneme, derived from HL on a single syllable. There is extensive external tone sandhi, and a tone overlay marks the verb phrases of main clauses.

Open-class words are built from $(C) V(V)(C)$ roots, followed by zero to three derivational suffixes $C$, and then zero or one flexional suffix $(C) V(V)$. Many nominal stems have a prefix $C V-C V n-C V l ı n-$ or $C V s ı n$ - before the root, e.g. $p \bar{i} \bar{p} \bar{r} r \bar{i} g$ "desert", and may thus contain $n C$ clusters between prefix and root: dìnd $\bar{\varepsilon} o g$ "chameleon."
 $m n$; kk tt $p p \eta \eta$ are written and usually realised single. No clusters occur wordinitially or finally except final mm . Otherwise, consonants are separated by epenthetic $\imath$ or v: dị̀'əsídìb "receivers", bā $\eta \bar{l} d \bar{\imath} b$ "wise men", gbī gīmn $\bar{\varepsilon}$ "lion" LF. Because of apocope, two-consonant clusters occur freely across word division, including within compounds.

Prefixes and flexional suffixes have only a three-way vowel contrast $a / \imath / v$. Suffix vowels are lost by apocope in SFs; before prosodic clitics $ו v$ become $\varepsilon$.

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

All flexion is by suffixing, as is all productive derivation. Most prefixes do not have identifiable meanings. Flexion is underlyingly simple, but with morphophonemic complications; these words are all regular members of the same noun class:

| būvg | "goat" | būvs | "goats" |
| :---: | :---: | :---: | :---: |
| sàbùa | "lover" | sàbù ${ }^{\text {a }}$ | "lovers" |
| nūa | "hen" | nว̄os | "hens" |
| kūk | "chair" | kūgūs | "chairs" |
| zàk | "compound" | zà'as | "compounds" |
| dà'a | "market" | dà'as | "markets" |
| bùn | "donkey" | bùmìs | "donkeys" |
| $t \bar{\varepsilon} \eta$ | "land" | $t \bar{\varepsilon} \varepsilon \check{n} s$ | "lands" |

Noun flexion marks singular and plural by suffixes which come in matched pairs, resulting in seven noun classes; most exceptions are transparently explicable phonologically. The classes partly correlate with meaning. The stem is itself a key
part of the paradigm, because adjectives and dependent pronouns are regularly compounded with preceding head nouns:

| $b \bar{v}$ ¢ | "goat" | + pị̀lìg | "white" | $\rightarrow$ bù-pị̀lìg | "white goat" |
| :---: | :---: | :---: | :---: | :---: | :---: |
| būvg | "goat" | + sị'a | "another" | $\rightarrow$ bù-sị'a | "another goat" |
| kūk | "chair" | + pị̀lìg | "white" | $\rightarrow$ kùg-pị̀lìg | "white chair" |
| kūk | "chair" | + kàjā | "this" | $\rightarrow$ kùg-kànā | "this chair" |

In most Voltaic languages the noun classes form a grammatical gender system, with pronoun and adjective agreement, but like most of its close relatives Kusaal has abandoned grammatical gender in favour of an animate/inanimate opposition.

Verb flexion shows just one conjugation of prototypical dual-aspect verbs, using the stem from for perfective aspect and marking the imperfective with a single suffix -da. Morphophonemic changes again complicate the surface picture:

| $k \bar{v}$ | pfv | $k \bar{v} v d$ | ipfv | "kill" |
| :--- | :--- | :--- | :--- | :--- |
| $\check{n} y \bar{\varepsilon}$ | pfv | $\check{n} y \bar{\varepsilon} t$ | ipfv | "see" |
| $v \bar{v} l$ | pfv | $v \bar{o} n$ | ipfv | "swallow" |

Dual-aspect verbs also have an imperative flexion -ma, appearing only when the verb has independency-marking tone overlay (see below.)

Single-aspect verbs typically express body positions, relationships, or predicative adjectival senses. They have only a single finite form, which always has imperfective aspect; as a lexical matter, they can be dynamic or stative:
Ò dìgì $n \bar{\varepsilon} . \quad$ "She's lying down."

3AN be.lying.down FOC.

Ò mòr búp
3AN have donkey:sg.

Ò gịm.
3AN be.short.

There are two verbs "to be": bغ̀ "exist, be somewhere" and the copula àeñ. Àen̆ is usually followed by the focus particle $n \bar{\varepsilon}$ whenever syntactically permitted, and then loses both the final $e \underset{e}{ }$ and the nasalisation:
Ò à n $\bar{\varepsilon}$ bịig.
"He's a child."
3AN COP FOC child:SG.

The two verbs share a common negative-verb counterpart kā'e "not be", which usually appears as $k \bar{a}$ ' clause-medially:

Ò $\quad k \bar{a}^{\prime} \quad$ bịi $i g \bar{a}=\varnothing$.
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: k̄̄vb "killing", k $\bar{v} v d$ "killer", k̄̄vdí $\eta$ "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 head-second compounds can be created freely: e.g. gbìgìm-kūvd "lion-killer."

Kusaal is SVO, with indirect objects preceding direct:

M tísī=f bún lā. "I've given you the donkey."
1SG give=2SG donkey:SG ART.

There are two 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 kà is "and" when linking VPs and clauses.)

Possessors precede heads: m̀ bịìig "my child", dāu lā bị̂ig "the man's child."
Adverbs often appear as postpositions preceded by NP dependents, as with $z \bar{u} g$ "head" used adverbially in técbv̀l lā zúg "onto the table."

The liaison word $n^{\varepsilon}$ noted above is a very general locative postposition.
The verb is preceded by particles expressing tense, mood and polarity. There is no agreement for person or number.

Gbīgımā lā sá pū kū búp láa=ø.
Lion:PL ART TNS NEG.IND kill donkey:SG ART=NEG.
"The lions didn't kill the donkey (yesterday.)"

The focus particle $n \bar{\varepsilon}$ may focus VPs or VP constituents (as after the copula àen̆ 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":

Nịdīb kpị̂id. "People die."
Person:pl die:IPFV.
$N i ̣ ̄ d \bar{l} b \quad k p i ̣ ̂ i d \quad n \bar{\varepsilon} . \quad$ "People are dying."
Person:PL die:IPFV Foc.

Main and content clauses have independency marking of the first VP, marked by a tone overlay and by special subject pronoun tone sandhi. The overlay is absent in negative polarity or irrealis mood and after the tense marker dāa; marking itself is absent after the clause-linker kà even in coordinating function, as in narrative:

> Ò gòs dú'atà.
> 3AN look.at doctor:SG.
but 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:
$D \bar{a} \quad$ ōs $\quad$ dv́'atāa=ø! $\quad$ "Don't look at the doctor!"
NEG.IMP look.at doctor:SG=NEG!
but Gòsìm dv́'atà! "Look at the doctor!"
Look.at:IMP doctor:SG!

Main clauses frequently have time or circumstance adjuncts preceding the subject; clauses nominalised with yà' "if" appear in this position:

Fù yá' bòod, m̀ ná tīsī=f bún.
2SG if want, 1SG IRR give=2SG donkey:SG.
"If you want, I'll give you a donkey."

Clause subordination by catenation using the same-subject catenator particle $n$ often creates structures resembling serial verb constructions:

M̀ kûes bùjù $\quad \varnothing$ tísì=f. "I've sold a donkey to you."
1SG sell donkey:Sg cat give=2SG.

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

Lì à ne gbīgīm lá kà $\grave{m}$ ňy $\bar{\varepsilon} t$.
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 $\grave{n}$ (frequently realised as segmental $\varnothing$ ) after the subject:
gbīgīm lá=ø k̄ bún "the lion having killed the donkey"
lion:SG ART=NZ kill donkey:SG ART

Relative clauses may be internally-headed, using indefinite pronouns as relatives:
[Paul=ǹ sōb gbáunŋ-sị̀'a $n$ tís Efesus dím lā]@ø n̆wá.
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)

Kusaal has also developed an antecedent-initial relative clause type where nominaliser-ǹ has fused with a preceding demonstrative to form a relative pronoun:
dàu-kànì pu'ā kpị lā "the man whose wife has died"
man-rel.sg wife:sg die art

A third type, complementisation, uses the initial linker particles y $\bar{\varepsilon}$ or kà.
Content clauses appear after verbs expressing communication or thought; they have independency marking. Contrastive personal pronouns are used logophorically:
ka Paul lebis ye on pu geem.
kà Paul lébìs y $\bar{\varepsilon}$ 万̄n $p \bar{v} \quad g \varepsilon ́ \varepsilon n ̆ m m=\varnothing . ~$
and Paul reply that 3AN.CN NEG.IND go.mad=NEG.
Paul replied that he [Paul] was not mad." (Acts 26:25, 1976)

Purpose clauses lack independency marking and have imperative mood:
$\grave{M}$ ná $t \overline{=}=f$ tîım yć fù nịf dā záb $\bar{\varepsilon}=\varnothing$.
1SG IRR give=2SG medicine that 2 SG eye:sG NEG.IMP fight=NEG.
"I'll give you medicine so your eye won't hurt."

Clefting constructions are based on catenation. By ellipsis they produce structures using $n$ for focussing subjects and kà for foregrounding other elements:
$\grave{M} z \bar{u} g \bar{v} \_\varnothing$ zábìd. $\quad$ "My head is hurting."
1SG head cat fight:IPFv. (Reply to "Where is the pain?")

Gbīgím kà m̀ dāa n̆ȳ̄.
"It was a lion that I saw."
Lion:SG and 1SG tNS see.

Although there is no syntactic movement rule for interrogative words, they are frequently preposed using kà, and as subjects they must be focussed with $n$ :

Fù bôod bó=ø? "What do you want?"
2SG want what=CQ?

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

Ànó'onì ø kúv=bá=ø? "Who has killed them?"
Who CAT kill=3PL=CQ?

Kusaal narrative links clause after clause with kà, omitting tense marking so long as the action is preceding in sequence; tense marking can also be omitted when a time AdvP is present in the same clause:

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-P̄̄-zót-yz̄l dá à né ò sàam bị̂ig mà'àa. PERS-NEG.IND-fear:IPFV-thing:SG TNS COP FOC 3AN father:SG child:SG only.
Kà dāar yīnní kà bịig lā né ò sàam ziṇ̆n'i $\varnothing$ sōn̆sīd.
And day:SG one and child:SG ART with 3AN father:SG sit CAT converse:IPFV.
Kà bịig lā tí yèl ò sàam y $\bar{\varepsilon} \ldots$
And child:SG ART once say 3AN father:sg that...
"Fears-nothing was his father's only son. One day the son and father were
sitting talking. The son said to his father ..." KSS p35

The second kà is preposing the time AdvP dāar yīnní; the third is carrying on the narrative, introducing a clause without the tense marker dà.

## 2 Sound system

### 2.1 Consonants

The following symbols are used for consonant phonemes, with $k p g b$ as digraphs; values resemble the corresponding IPA symbols, except as noted below.

| $k$ | $t$ | $p$ | $k p$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $g$ | $d$ | $b$ | $g b$ |  |  |  |
| $\eta$ | $n$ | $m$ |  |  |  |  |
|  | $s$ |  |  | $f$ |  | $h$ |
|  | $z$ |  |  | $v$ |  |  |
| $l$ |  |  |  |  |  |  |
|  | $r$ |  | $w$ |  | $y$ |  |

$k p g b z v$ are only found prefix- or root-initially 3.3 , and $w$ only root-initially. Syllable-final $y$ becomes the glide $i / e$. No $\eta$ occurs prefix- or root-initially. Phonemic $h$ occurs only syllable-initially in loans, but these include the very common hālí "even."

Root syllables with no initial consonant are optionally realised with initial [?].
$k t p$ represent $\left[\mathrm{k}^{\mathrm{h}}\right]\left[\mathrm{t}^{\mathrm{h}}\right]\left[\mathrm{p}^{\mathrm{h}}\right]$ prefix- or root-initially, [k] [t] [p] elsewhere. Except after prefixes, word-internal ktp $\quad \mathrm{r}$ represent /kk/ /tt/ /pp/ /ŋŋ/, but they are only realised as geminates in very slow speech. Word-final $g d b$ are partly devoiced, but still contrast with $k t p$.
$k g$ are palatalised before front vowels, for some speakers even becoming palatal stops or affricates. They may represent palatal stops or affricates in loans:

| tóklàe | "torch" |  |
| :--- | :--- | :--- |
| sógià | "soldier" |  |

Before $a$ and $\jmath$ velars are backed, or even uvular: kj̀bıgā [ $q^{\text {w }}$ っbiga] "hundred." $k g$ are labialised before rounded vowels; they might here be regarded as allophones of $k p g b$ rather than $k g$ : cf $k \bar{u} m$ "death", kpị "die"; kj̄bīr "bone", Moba kpábì; kpàkv̄r "tortoise", Dagbani kpàkpílí.
$t d n s z l r$ represent alveolars in general, but $s z$ are often dental, or even interdental; $l$ is never velarised. Before $u, z$ is sometimes heard as [3].
$s$ is often realised as [h] word-internally; it can represent $h$ in loanwords:

| Àláasìd (dâar) | "Sunday" | Hausa Lahàdì (from Arabic) |
| :--- | :--- | :---: |
| Dàsmáanì | personal name: YAbdu-r-Rahmaan(i); also Dàhàmáanì |  |

$d$ represents [d], and $r$ [r] (often [l] after an epenthetic vowel.) There is no contrast prefix- or root-initially: [d] appears by default, but often [r] phrase-internally after vowels. The symbol $d$ is used word-initially, $r$ after a prefix vowel.

| nō-dâvg | [nosaug] "cock" | nā'-dâad [nara:d] "oxen" |  |
| :--- | :--- | :--- | :--- |
| tīrâan | "neighbour" | àràzàk | "riches" |

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

| z̀n̆dìg | "unplug" | $\bar{\varepsilon} n ̆ r i ̄ g$ | "shift along" |
| :--- | :--- | :--- | :--- |
| mōd | "swell" | mōr | "have" |
| yàad | "graves" | yāar | "scatter" |
| zàbìd | "fight" (ipfv) | zàbìr | "fight" (gerund) |

Western Oti-Volta *r became *y except when geminated or between a long vowel or a consonant and ${ }_{l}$, where it remains as $r$ in Mooré and Agolle Kusaal but falls together with $l$ in Dagbani and with $d$ (as $r$ ) elsewhere. After a short root vowel $r$ thus reflects *rr except when introduced by analogy or borrowing: thus kpàr $\varepsilon^{\varepsilon}$ "lock" for expected *kpàd ${ }^{\varepsilon}$ (Dagbani kpari) has $r$ from an obsolete *kpàr ${ }^{\mathrm{a}}$ "be locked"; cf gùl ${ }^{\varepsilon}$ "suspend", gùlla "be suspended."
$n$ 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.

Before liaison -mı may become -m:

```
Gòsī \(m=m!\quad\) "Look at me!" for Gòsımī=m!
Gòsím fù nû'ug! "Look at your hand!" for Gòsımí fù nû'ug!
```

$k p g b$ represent [ kp ] [ $\overline{\mathrm{gb}}] ; \mathrm{kp}$ is unaspirated. They occur only before unrounded vowels, and (for some speakers) in prefixes like kpùkpàrìg/kùkpàrìg "palm tree." They represent labialised velars in loans: bákpàe "week", Hausa bakwài "seven."
$y w$ are [j] [w] respectively. They are strongly nasalised before nasalised vowels, and are then written $\breve{n} y \check{n} w$ with no nasalisation marking on the vowel:
$\check{n} y \bar{\varepsilon} \quad[j \tilde{\varepsilon}] \quad$ "see" $\check{n} w a \overline{d i} g$ [wããdıg] "moon"
ňy ňw reflect earlier initial $n \overparen{\eta m}$ respectively, cf Dagbani nyá "see", ymariga "moon." Some Toende speakers retain initial [n] [ŋm]. Kusaal initial nasalised vowels reflect earlier initial $\eta$ : Dagbani pubi, Kusaal j̀n̆b "chew."

### 2.2 Vowels

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

Agolle Kusaal has a nine-vowel system. Seven of these are written by default as
 contrast with short vowels in length, but not quality, and are written by doubling the vowel symbol: bāa [ba:] "dog." Mà'àa "only" has a unique overlong monophthong. The vowel $l$ is more central after velars and labials, and $v$ is slightly fronted after alveolars and $y ; u$ is fronted after alveolars: $z \bar{u} g$ "head" [3yg].

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

The two remaining vowels are the broken vowels $i a u$; the corresponding long vowels are iə uө. Though realised [ia] [va] [iə] [ue] as written, they pattern throughout as monophthongs, and will be referred to as such below. Before $y$ wordinternally, ì u ua are realised [ir] [থָr] and written ie ue.

| tịàk | [tiak] | "change" | puāk | [pöak] |
| :--- | :--- | :--- | :--- | :--- | "female"

Word-final iə ue only occur through monophthongisation in external sandhi 4.2 4.3; before prosodic clitics they diphthongise to ia ua respectively.

Nasalised iən̆ uөй (including after $m n$ ) occur only before underlying $* g$, and in the ipfv of fusion verbs by analogy 3.7. Elsewhere they have fallen together with $\varepsilon \varepsilon \check{n}$ ээn̆: cf n̄̄or "times", Mooré náooré, nōor "mouth", Mooré nóorè.

Short ía ưa have just two origins. Apocope $\underline{3.2}$ shortens final iə ue to īa ưa:
kịà SF of kịa "cut" kūā SF of kūa "hoe"

Elsewhere, ía ua replace $\varepsilon$ o before $k$ and before underlying * $g$, which is deleted with vowel fusion 3.7. Bj̀k "pit" (vs buàk "split") is due to the change *uakkv $\rightarrow$ okkv; other $\varepsilon k ~ \supset k$ arise by shortening of long vowels before $k$ (see below), as with tēk "pull" (vs tĩàk "change.")

Toende Kusaal here preserves phonetic monophthongs: Toende $s \bar{\varepsilon} \bar{\varepsilon} s=s i ̣ \partial s$ "waists" vs pē'ēs = pē' $\varepsilon s$ "sheep (pl)"; bó' ss = bū'өs "ask" vs tōom = t̄̄כm "depart." Mooré oo corresponds to Toende oっ/Agolle uө, but Mooré aoo to Toende oo/Agolle oэ: Mooré bàooda, Toende bòj̀t, Agolle b̀̀od, "want, wish."

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

| gàad | "pass" pfv | gàt |  | "pass" ipfv |
| :--- | :--- | :--- | :--- | :--- |
| $t \bar{\varepsilon} \varepsilon g$ | "drag" | $t \bar{\varepsilon} k$ | $* t \varepsilon \varepsilon k k ı$ | "pull" |
| $t \overline{\circ g}$ | "bitter" | $t \bar{e} e$ | $* t o э y a$ | "be bitter" |

The process also applies in loanwords: àtìuk "sea" (Hausa tèeku), kótv̀ "court." All sequences of dissimilar vowel symbols other than ia ua ie ue iə uө represent phonemic diphthongs. After a vowel symbol $e$ represents [ I ], $\underset{\sim}{i}$ is [ i ] (found only after $u$ ), and $u$ represents [ $\underset{\sim}{ }]$ :

| sōen̆ | [sõı] | "witch" | mùi | [mũi] | "rice" |
| :---: | :---: | :---: | :---: | :---: | :---: |
| dāu | [daṽ] | "man" | biāu | [bIãõk] | "shoulder" |

Unlike $y w, ~ e \underset{\sim}{i} u$ do not form syllable boundaries. Initial ya contrasts with $\underset{\sim}{ } a$ in tenseness and timing: iī "seek" and yā "houses" contrast as [rıa] ~ [ja], not [?ja] ~ [ja].

Primary diphthongs arise from word-final ${ }^{*} V w^{*} V y \underline{3.4}$ and from fronting, rounding and fusion 3.6 3.7. All also occur nasalised, and if not short, glottalised; some only occur glottalised. Non-initial [ I$]$ is written $e$ except after $\varepsilon$, and non-initial [ $\quad$ ] is written $o$ except after $a$. Fronting diphthongs occur only word-finally or before $y$, rounding diphthongs only word-finally or before velars. Diphthongs may be short or long; long may correspond to overlong before prosodic clitics 4.1. The only length contrasts in identical environments are avj/aun and ae/ae.

| Centring | Short | Long <br> ia | Overlong iaa |
| :---: | :---: | :---: | :---: |
|  |  | ua | uaa |
|  |  | ia'a |  |
|  |  | v'a | ally) |
| Fronting | $a e$ | ae | aee |
|  |  | ie | iee |
|  |  | ue | иее |
|  | งe | s'e |  |
|  | ui | ui |  |
|  | ve | v'e |  |
| Rounding | $a u$ | $a v$ |  |
|  | عu | $\varepsilon о$ |  |
|  | i̇au |  |  |
|  | ıu |  |  |
|  |  | iu |  |
|  |  | io |  |

Secondary diphthongs are created by replacement of final morae of wordfinal root vowels by [r] (never [i]) before the liaison word 4.22 pl subject ya and by [ v ] (never [u]) before the liaison word ${ }^{\circ}$ "him/her." Any vowel may precede:

| $z u \bar{o}=o$ [zuv:] | "steal him" | Long Form 3.2 |
| :---: | :---: | :---: |
| zúo [zuo] | "steal him" | Short Form |
| $b \bar{\varepsilon}\urcorner=y a ́ ~[b \varepsilon ı j a] ~$ | "be ye!" | Long Form |
| bēı [beı] | "be ye!" | Short Form |

The symbol $o$ is used for [ $\tau$ ] both in the 3sg animate pronoun and in the mora preceding it in liaison: thus dāvg [daog] "male", but e.g.

| ò bịig | [vbi:g] | "her child" | zúo | [zuv] |
| :--- | :--- | :--- | :--- | :--- |
| dà'o | $[$ dã̃ $]$ | "bought for him" |  |  |

Nasalisation is automatic on long vowels after m $n$ : mèzd "build" ipfv [mẽ:d]. Elsewhere it is marked by a following $\breve{n}$, 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 $w ; \check{n}$ also precedes $o$ [ $\mho$ ] before the 3sg pronoun: āňo [ãõ] "be him/her."

| $t \bar{\varepsilon} \varepsilon \bar{n} s$ | [tz̃:s] | "lands" | án̆sìb [ãsıb] | "mother's brother" |
| :---: | :---: | :---: | :---: | :---: |
| $g \bar{\varepsilon} \check{n}$ | [gz̃] | "get tired" | $g \bar{\varepsilon} \breve{n}^{\prime}$ [ [gz̃̃] | "get angry" |
| $g \varepsilon \bar{n} ' \varepsilon d$ | [gz̃:d] | "get angry" ipfv | n̆wām [ w ãm] | "calabash" |

 iin̆ uun̆, as in sịiln̆f "bee" cb sị̆n-, zùun̆g "vulture", cb zùn̆-; the only exception is sūn̆f "heart" (pl sūn̆yá), written sunf in KB. Nasalised iən̆ иөй occur only in fusion verbs 3.7. Nasalisation may result after lost initial $*_{\eta} *_{n} * \widetilde{\eta m}$ or before underlying $*_{n s} *_{n f}$; so with all ın̆ vvn̆: píın̆f "genet", pl pı̄ıní; zv́'vn̆f "dawadawa seed", pl $z \bar{v} ' v n i ́ ; ~ t \varepsilon ̀ \eta-$ $z u ̀ v n ̆ s ~ " f o r e i g n ~ l a n d s ", ~ s g ~ t \varepsilon ̀ \eta-z u ̀ \eta . ~$

Glottalisation does not affect vowel quality. It may be realised as creakiness or as [?] after the first mora; this [?] is never treated as a consonant. Glottalisation is marked by ' following the first/only vowel symbol (including $u$ ) other than $\underset{\sim}{i}$ :

| dà' | [dä] | "buy" | dà'a | [da:] | "market" |
| :---: | :---: | :---: | :---: | :---: | :---: |
| kù'өm | [kuerm] | "water" | $p u ' a ̄$ | [puad] | "woman" |
| kpị'a | [kpia] | "neighbour" | kpià' | [kpia] | "carve" |

Word-final short vowels and diphthongs ending statements and commands, but not questions, become glottalised; for example dāu "man" is realised [dã̃]]/[daṽ?], and $g \bar{\varepsilon} \check{n}$ "get tired" falls together with $g \bar{\varepsilon} \breve{n}^{\prime}$ "get angry."

Farefare, Talni and Nabit also preserve glottalisation: Farefare yú'v́ré = yū'vr "name"; Talni kwo?m, Nabit ks'm = kù'өm "water." Nawdm has 6 [?] in many cognates, e.g. béhgú "bad" = bz̄'og, daf- "buy" = dà'.

Glottalised short vowels arise by apocope 3.2. Except in kā'e *kagı "not be", all other cases precede $m$ or $\eta$ in closed syllables, e.g. kpè' $\eta$ "strengthen", lā' $\eta$ "set alight", nị̄'m "meat", kō'm "hunger", sò' $\eta \bar{a}$ "well", sù'm "goodness" (but only sù pl sùmà "good.") The vowels are traditionally written long: sv'vŋa etc. Only Agolle Kusaal shows this phenomenon, and only some informants. It probably arose from gemination of $m \eta$; KB has 385 examples of an sum to 47 of an sv'vm àn̆ súm "is good", but 30 of $k a^{\prime}$ svm to 40 of ka' sv'vm kā' súmm "is not good."

Yām/yā'am were probably originally distinct words: yām "sense" (Buli yám, Nawdm rárḿ) and yā'am "gall bladder" (Farefare yá'ám, Buli yáam, Nawdm ráhḿ.)

### 2.3 Syllables and tonemes

Syllables may be light (C)V or heavy (C)VV~(C)VC~(C)VVC; (C)VVC syllables are superheavy. A word-internal non-root $C V$ syllable is superlight if preceded by a $C V$ syllable which is not superlight, working left to right: dị'əsídıbà "receivers", sịgısídıbà "lowerers", mòlıfo "gazelle." Three-mora vowel sequences are disyllabic, dividing after the first mora: Long Form nū-áa "hen."

Stress falls on the root syllables of free words, but is subject to complex sandhi phenomena which have yet to be properly investigated. It is probably never contrastive, and roots can be reinterpreted as prefixes: dìtóy "right hand" is derived from dì "eat", but also appears as dàtìū $\eta$, while bv̄tīŋ "cup" is the instrument noun from bùd "plant seeds", but has the plural būtīıs, as if from bī $+t \bar{\eta} \eta$.

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

Tone is mostly distinctive as a syntactic marker, but lexical minimal pairs are quite common, e.g. būk "weaken", bùk "cast lots"; kūk "chair", kùk "ghost."

The tone-bearing unit is the syllable. Superlight syllables and catenator- $n$ are toneless; the toneme of the preceding syllable extends over them. Being disyllabic, overlong diphthongs carry two tonemes, as in the Long Form nūáa "hen."

There are four tonemes: High (H), marked ': gél "egg"; Mid (M), marked º: bāך "ring"; Low (L), marked `: bòk "pit"; and Circumflex (X): nû'ug "hand." When i carries a tone mark the dot is written below: bịịg "child."

X only appears on superheavy $C V V C$ syllables; on $C V V$ syllables, it is replaced by H. Cf nû'ug "hand", but Long Form nú'ugò.

Kusaal M corresponds to the H of other Western Oti-Volta languages. Kusaal H and X arise from ML sequences by synchronic and diachronic tone sandhi.

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 from first to second mora, differing from H on a superheavy syllable before pause, where the pitch fall occurs on the second mora: contrast mān sâam "my father", mān sáam "my guests."

Superlight syllables are toneless:

Bà $k a \overline{ }{ }^{\prime}$ dị̀'əsídıbā=ø. "They are not receivers."
3PL NEG.BE receiver:PL=NEG.

Lì kā' mólıfō=ø. "It's not a gazelle."
3IN NEG.BE gazelle:SG=NEG.
vs
Ò $p \bar{v} \quad z a ́ b i ̀=f \bar{y}=\varnothing . \quad$ "He didn't fight you."
3AN NEG.IND fight=2SG=NEG.
(word-final syllable)

Ka ya pv siakida.
"But you did not agree." (Lk 13:34)
Kà yà pū síákìdā=ø. (k/kk/ closes the preceding syllable)
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 }->\textrm{H}\downarrow\textrm{H
HX }->\textrm{H}\downarrow\textrm{X
MH }->\textrm{M}\downarrow\textrm{H}\mathrm{ if the next syllable is superheavy CVVC
    or if the next syllable precedes pause and is not L
```

Downstep between HH and HX:
$\grave{M}$ gós $\downarrow$ náaf lā $b \bar{\varepsilon} o g \bar{v}=n$.
1SG look.at cow:SG ART morning=LOC.
"I looked at the cow in the morning."
$\grave{M}$ gós $\downarrow$ nû'ug lā $b \bar{\varepsilon} o g \bar{v}=n$.
1SG look.at hand:SG ART morning=Loc.
"I looked at the hand in the morning."
vs Kà m̀ gōs náaf lā $b \bar{\varepsilon} o g \bar{v}=n$.
And 1sG look.at donkey:SG ART morning=Loc.
"And I looked at the cow in the morning."

Kà $\grave{m}$ gōs nû'ug lā $b \bar{\varepsilon} o g \bar{v}=n$.
And 1SG look.at hand:sG ART morning=Loc.
"And I looked at the hand in the morning."
$\mathrm{MH} \rightarrow \mathrm{M} \downarrow \mathrm{H}$ before a superheavy $C V V C$ syllable:

Lì à nē $\downarrow$ pú-kòэn̆r lā. $\quad$ "It's the widow."
3IN COP FOC widow:SG ART.

Bịig lā $\downarrow$ sá mèzd yị̀r lā.
Child:SG ART TNS build:IPFv house:SG ART.
"The child was building the house yesterday."

Mān $\downarrow$ bú-pị̀l $k a \overline{ }$ 'e= $=$. "My white goat isn't there."
1SG.CN goat-white:SG NEG.BE=NEG.

Lì kā' pú-kòon̆r $\bar{\varepsilon}=\varnothing$. "It's not a widow." 3IN NEG.BE widow:SG=NEG.

Bịig lā sá mè yịr lā. "The child built the house yesterday."
Child:SG ART TNS build house:SG ART.

Mān bú-sù̀ kā'e=ø. "My good goat isn't there."
1SG.CN goat-good:SG NEG.BE=NEG.

Mān kúkōr kā'e=ø. "My voice isn't there."
1SG.CN voice:SG NEG.BE=NEG.
$\mathrm{MH} \rightarrow \mathrm{M} \downarrow \mathrm{H}$ when the next syllable is followed by pause, and is not L :

Kà m̀ gōs $\downarrow \boldsymbol{b}$ úg lā. "And I looked at the donkey."
And 1SG look.at donkey:SG ART.
"There's no camel."
Camel:SG NEG.BE=NEG.

Lì à nē $\downarrow$ náaf lā. $\quad$ "It's the cow."
3IN COP FOC COW:SG ART.

O $p \bar{v} \quad y a ̄ d ı \downarrow$ gídā=ø. "He isn't scattering."
3AN NEG.IND scatter:IPFV=NEG.

Lì $k \bar{a}^{\prime} \quad b i ̣-\downarrow \boldsymbol{p u ́ g} \overline{\boldsymbol{a}}=\varnothing$. $\quad$ "It's not a girl."
3IN NEG.BE child-girl:SG=NEG.

Ò $p \bar{v} \quad \check{n} y \bar{\varepsilon} \downarrow \boldsymbol{s} \mathbf{v}^{\prime} \mathbf{v g} \boldsymbol{a}=\varnothing$. $\quad$ "She didn't find a knife."
3AN NEG.IND see knife:SG=NEG.

Lì kā' ňyị $\downarrow$ rífō=ø. "It's not an egusi seed."
3IN NEG.BE egusi:SG=NEG.
vs Kà m̀ gōs búg lā $b \bar{\varepsilon} o g \bar{v}=n$.
And 1sG look.at donkey:SG ART morning=LOC.
"And I looked at the donkey in the morning." (lā not prepausal)

Yūgúm lā kā'e=ø.
Camel:sg art neg.be=neg.

Lì à nē dôog lā.
3IN COP FOC hut:SG ART.

Ànó'onì ø yādıgídà=ø? "Who is scattering?" (L after H)
Who cat scatter:IPFV=CQ?

Lì kā' bị-púyàa=ø?
3IN NEG.BE child-girl:SG=PQ?

Ànó'onì ø ňy $\bar{\varepsilon}$ sú'vgà=ø? "Who found a knife?" (L after H)
Who cat see knife:SG=CQ.

Ò $p \bar{v} \quad \check{n} y \bar{\varepsilon}$ mólıf̄̄= $\varnothing$.
3AN NEG.IND see gazelle:SG=NEG.
"The camel's not there."
(lā not prepausal)
"It's the hut." (MX not MH)

Who found a knife? (L after H)
"She didn't find a gazelle."
(Superlight -ll- before prepausal -fō.)

### 2.4 Traditional orthography

Tone is unmarked. For word division see 3.1. KSS uses ng ng nk for $\eta \eta g \eta k$.

Before 2016, e o were used for $\varepsilon 0, i$ for $i \sim l$, and $u$ for $u \sim v$; e $o$ were also sporadically used for $l v$ as root vowels. KB has the same basic conventions as this grammar except for using $i$ for both [i] and [I]: tiig tìıg "tree", biig bịig "child."

KB has ye "that", tey "land", key "go" pfv, ken "go" ipfv for y $\bar{\varepsilon} t \bar{\varepsilon} \eta k \bar{\varepsilon} \eta k \bar{\varepsilon} n$, and
 * $\tilde{I}$ * $\tilde{0}$ : cf Toende $t \bar{\imath} \eta$ "land" vs meŋ $m \bar{\varepsilon} \eta$ "self" (Mampruli tiŋŋa, maŋŋa.) A related phenomenon is that word-final short $-\imath$ after $m n$ is usually written $\varepsilon$ in KB , as always with the pronouns one kane line bane ano'one.

KB writes bedegv for bèdvgū "a lot" and sanrega for sārıgá "prison."
ie is used for iə and ie, which are anyhow in near-complementary distribution.
$u o$ is used for $u \theta$ and $u o$, but traditional orthography always separates the
vowel symbols in the latter case: bu'os bū'өs "ask", zu o zúo "steal him."
KB has -uoe -voe for -ue -ve: duoe dūe "raise, rise", sv'oe sū'e "own."
io [iण] is written ieu in the 1996 NT and KB: kpi'eup kpị̄'oŋ "strong."
$e i u$ are used for e ei u. The contrast $a e / a e$ is expressed by writing aae or $a a \varepsilon$ for $a e$, e.g. paae pāe "reach." KB spells words consistently with either $a u$ or $a v$, but does not distinguish aư/av: yavg yàvg "grave", na'araug nā'-dâvg "ox", dau dāu "man", tavn tāun̆ "sibling of opposite sex." The symbols ia ua are used for ịa una and ia ua: kia kìà "cut", sia sịa "waist"; kua kūā "hoe", sabua sàbùa "lover." The conventions for marking glottalisation distinguish kpia' kpìià' "carve" from kpi'a kpị'a "neighbour."

Before 2016, u'a v'a were both usually written o'a, but KB has u'a: pu'a pú'ā "woman", pu'ab pū'ab "women."

Long Forms $\underline{3.2}$ with final -ya corresponding to Short Forms with final -e are written with -eya: vveya vūyá "be alive." Older texts also write būn-vv́yà "living things" as bunvoeya, but KB has bonvvya.

KB writes bieya bi̇ēyá "elder same-sex siblings", but suoya sūēyá "roads", zuoya zuēyā "hills" etc; older sources have sueya, zueya.
$y$ is omitted in dunia dūnıyā "world", laafia láafiyà "health."

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

When $n$ would be word-final without even a following glottalisation mark, the orthography formerly wrote $n n$ for $\check{n}$, but the 2016 system has adopted an ambiguous single n: gaan gāan̆ [gã:] "ebony tree", daan dāan [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

Minimal meaningful utterances constitute free words. Many bound forms are also best regarded as words. The "combining forms" (cbs) used as initial members of compound nouns may be dependents, but are more often NP heads before adjectives and demonstratives: tì-kànā "this tree." There are no diagnostic phonological differences between cbs and free words, and compounds may include unbound words: [ānzúrıfà nē sālımā lá'-]māan "[silver and gold goods]-maker." Again, bound personal pronouns and several particles resemble free-word affixes segmentally, but differ in tonal behaviour, mode of attachment, and distribution. Stress does not distinguish bound and free words, and tone does not distinguish right-bound and free words. However, left-bound liaison words 4.2 are distinct segmentally and tonally both from free words and from other left-bound words; the term clitic will be reserved for these words and for "prosodic" clitics 4.1. Boundness is distinct from syntactic dependency: combining forms, though always bound, may be dependents or heads, and personal pronouns always head their own NPs.

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" | kpùkpàrìg | "palm tree" |
| :---: | :---: | :---: | :---: |
| zịm-gbân̆'ad | "fisherman" | bù-pị̀lìg | "white goat" |
| bò-kàjā | "this goat" | bù-pị̀l-kàjā | "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: bvkaja bù-kàjā "this goat", but yamug bipuך (Acts 16:16, 1976) for yàmmùg-bị-púy "slave girl."

Traditional orthography writes pronouns as separate words if they have vowels of their own. Liaison enclitic object pronouns reduced to single consonants by apocope 3.2 are written solid with the preceding word in 2016 orthography; previously, $m$ [m] "me" was written as a separate word, while the mora before $f$ "you" was separated from the verb and joined to the pronoun as $u f$.

```
Fu boodi ti. "You love us." [fobo:ditr]
Fù bóodī=tí.
2SG want=1PL.
Fu boodi m. (2016: boodim) "You love me." [fobo:dim]
Fù bósdī=m.
2SG want=1SG.
M bood uf. (2016: boodif) "I love you." [ṃbo:dıf]
\(\grave{M}\) bóodī=f.
1SG want=2SG.
M nye uf. (2016: nyءعf) "I've seen you." [ṃj̃̃:f]
\(\dot{M} \check{n} y \hat{\varepsilon} \varepsilon=f\).
1 SG see=2SG.
```

Apocope deletes the entire segmental form of o "him/her", after the final vowel mora of the word before ${ }^{\circ}$ is changed to [ $\mho$ ], traditionally mistaken for the pronoun itself and written separately. In this grammar the [ $\mho$ ] is written $o$ but not separated:

```
Fu bood o.
"You love her."
[fubo:dv]
Fv̀ bóodō=ø.
2SG want=3AN.
Fv pu bood oo.
"You don't love her."
[fopobo:dv:]
Fv̀ pū bóodó=o=ø.
2SG NEG.IND want=3AN=NEG.
Fo nyeo.
"You've seen her."
```



```
Fv̀ n̆y\varepsilońo=\varnothing.
2SG See=3AN.
Fv pu ny\varepsilon oo.
    "You've not seen her." [fopvj\tilde{\varepsiloñ}̃:]
Fù pū \check{n}y\varepsilon̄ó=o=\varnothing.
2SG NEG.IND See=3AN=NEG.
```

The three liaison enclitics which are not object pronouns, locative $n \varepsilon$, discontinuous-past $n \varepsilon$ and the postposed 2 pl subject pronoun $y a$, are traditionally written solid with the preceding word whether reduced to single consonants (or zero) by apocope or preserving their own vowels: thus puvgun for $p \bar{v} v g \bar{v}=n$ "inside", boodin for bòวd̄̄=n "might wish."

The personifier particle à/ǹ, traditionally written solid with the following word, is here hyphenated to its host, as it can be attached to entire phrases.

Traditional orthography always writes focus-n $\bar{\varepsilon}$ solid after à "be", and usually after other verbs; $n \bar{\varepsilon}$ "with" is written solid after $w \bar{\varepsilon} n$ "resemble" by analogy:

```
O an\varepsilon biig.
    "He/she's a child."
O à n\overline{\varepsilon}}\mathrm{ bịilg.
3AN COP FOC child:SG.
```

Ka o nindaa wenne nintay ne.
Kà ò nịn-dáa wēn n̄̄ nịntā̄ n $\bar{\varepsilon}$.
And 3AN eye-face:SG resemble with sun:sg like.
"His face is like the sun." (Rv 10:1, 1996)

In KB w $\bar{\varepsilon} n n \bar{\varepsilon}$ appears as $n w \varepsilon n \varepsilon$ : Ka o nindaa nwene winnig $n \varepsilon$.
KB writes the independent-perfective particle yā solid with the preceding verb:

Nannanna o gaadya. "Now he has gone." (2 Sm 3:24)
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:

Arezana ne dunia gaadvg pv toi yaa.
Àràzánà n̄ dūnıyā gáadı̀g pū tōyá= $\varnothing$.
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 bịig:

Ò dāa n̆yc̄ bịìg.
3AN TNS see child:Sg.
bịig lā nû'ug "the child's hand"
child:SG ART hand:Sg
"She saw a child."

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 bịigā is seen in

> Ò dāa p $\bar{u} \quad \check{n} y \bar{\varepsilon} \quad$ bịi $i g \bar{a}=\varnothing . \quad$ "He/she did not see a child."
> 3AN TNS NEG.IND see child:SG=NEG.

Ànó'onì ø dāa n̆y $\bar{\varepsilon}$ bịíigà $=\varnothing$ ?
Who cat tns see child:SG=CQ?
"Who saw a child?"

```
M bịig
1SG child:SG=VOC!
```

The SF is derivable from the LF by apocope:

> A final long vowel is shortened and a final short vowel is deleted. Final diphthongs shorten by one mora.
> Subsequently
> Word-final consonant clusters drop the second consonant $\quad(k k t t p p \eta \eta$ become $k t p \eta$ but are written single in any case) Word-final $y$ becomes $e$ after back vowels and zero elsewhere

The shortening changes of final diphthongs induced by apocope are


Identical changes occur with nasalised and/or glottalised diphthongs.
Apocope was not a single process historically: quality neutralisation preceded deletion of word-final vowels clause-medially, which was distinct from the clause-final apocope seen in Kusaal, Nabit and Talni. In Toende Kusaal, word-final $g$ b become $k p$, except in perfectives and cbs (ya'ab "mould pots" vs ya'ap "potter"): apocope applies to dummy suffixes only after final stop devoicing.

Examples:
Lì à $n \bar{\varepsilon}$ dūk. $\quad$ IIt's a cooking pot."
3IN COP FOC pot:SG.

Dūk lā bódìg yā. "The pot has got lost."
Pot:SG ART get.lost pFv.

Lì kā' dūkó=ø.
3IN NEG.BE pot:SG=NEG.

Lì à nē dūkóo=ø?
3IN COP FOC pot:SG=PQ?

Ànó'onì Ø $\check{n} y \bar{\varepsilon}$ dūkó= $\varnothing$ ?
Who CAT see pot. $\mathrm{SG}=\mathrm{CQ}$ ?

Lì à ne $k \bar{u} k$.
Lì kā' kūkā.
Lì à nē kúkàa?

Lì à nē gbīgīm.
Lì kā' gbīgīmn $\bar{\varepsilon}$.

Lì à n $\bar{\varepsilon}$ yáarìm.
Lì kā' yáarīmm.

Bà à nē gbīgımā.
Bà kā' gbīgımāa.

Ò à nē dāu.
Ò kā' dāv.

Kà ò sláák.
And 3AN agree.

Ò pū siák $\bar{\varepsilon}=\varnothing$.
3AN NEG.IND agree=NEG.

Kà ò dīgī.
Ò pū dīgıyá.

Kà ò vvè .
Ò pū vūyá.
"It's a chair."
"It's not a chair."
"Is it a chair?"
"It's a lion."
"It's not a lion."
"It's salt."
"It's not salt."
"They (bà) are lions."
"They're not lions."
"He (ò) is a man."
"He's not 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."

Kà ò kíá.
Ò pū kịa.

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

The appearance of clause-final LFs is triggered by following prosodic clitics, which have no segmental form themselves 4.1. LFs occur clause-medially before liaison words 4.2 , 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.

The LF is historically primary, but it can usually be predicted from the SF given the aspect of a verb or the gender of a noun. Apocope often does not lead to loss of contrasts despite deleting the segments which conditioned them, allowing prediction of LFs from SFs; historically expected LFs may be replaced by other forms with the same SFs. Nevertheless, LFs are best regarded as synchronically primary. Consonantfinal SFs may have LFs ending in $a \varepsilon$ or 0 , and even before liaison final $m n$ or $l$ may or may not be geminated, and $m$ may become $m n$ or $m m$ :
ka ban ka kikirbe'ednam daamne ba daa nye laafiya
kà bàn kà kìkịr-bê'عd-nàm dâamnī=bá dāa n̆y $\bar{\varepsilon}$ láafiyà and REL.PL and fairy-bad-pl trouble:IPFV=3PL tNS see health "And people who were afflicted by evil spirits became well." (Lk 6:18, 1976)

The default LF ending corresponding to SFs ending in a consonant is $-\varepsilon$. Thus with loans like tịlás "necessity", LF tịlásè from Hausa tiilàs id, and in e.g.
Pu'abi du'a sieba la wosa, so' kae gat Joon ne [sic 3.1].
$P \bar{v} ' a b i ́=\varnothing \quad d u ̛ ' a ̀ ~ s i ̣ ə b a ̄ ~ l a ̄ ~ w u ̄ s a ̄, ~ s o ̄ ' ~ k a ̄ ' e \smile \varnothing ~ g a ́ t ~ J o o n \varepsilon=\varnothing . ~$
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; SFs ending in ịia' ư'ā may have LFs in ịia'a ư'aa or i'a 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: sāen̆ "blacksmith", LF sāen̆ or sān̆yā and sj̄ęn̆ "witch", LF sj̄en̆ or sj̄n̆yā. 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:
dīgī LF dīgıyá "be lying" vūe LF vūyá "be alive"

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, as in bịì $g^{\mathrm{a}}$ "child", kūk${ }^{\mathrm{a}}$ "chair", $d \bar{u} k^{3 /}$ "pot", sià $\mathrm{a}^{\varepsilon}$ "agree", gbīgīm ${ }^{\mathrm{n} \varepsilon}$ "lion", yàarìm ${ }^{\mathrm{m}}$ "salt", dīgīya/ "be lying down", zị' $e^{\text {ya }}$ "be standing."

Words with LFs in -ya where SF-final $y$ becomes $e$ are written with ${ }^{\text {ya}}$ :
$v \bar{v} e_{2}^{\text {ya/ }}$ "be alive" SF v̄̄e LF vōyá

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 sequence other than a long monophthong 4.1:

|  | gbīgımā | "lions" | SF gbīgımà | LF gbīgımāa |
| :---: | :---: | :---: | :---: | :---: |
|  | mòli | "gazelles" | SF mòlı | LF mòlıı |
|  | zう̀ | "run" | SF $z \grave{j}$ | LF zò |
|  | gòn̆ | "hunt" | SF gòn̆ | LF gòon̆ |
|  | kpià' | "shape wood" | SF kpià ${ }^{\text {' }}$ | LF kpị'a |
|  | kuā | "hoe" | SF $k$ ua | LF kūa |
|  | dāu | "man" | SF dāu | LF dāv |
|  | sāen̆ | "blacksmith" | SF sāen̆ | LF sāen̆ |
|  | pāe ${ }^{\prime}$ | "reach" | SF pāe | LF pāée |
|  | dị'el | "receive" | SF $d \underline{1} \times$ | LF dị̀ée |
|  | dūe ${ }^{\prime}$ | "raise/rise" | SF dūe | LF dūée |
|  | sịa | "waist" | SF sịa | LF sịãa |
|  | nūal | "hen" | SF $n \bar{u} a$ | LF nūáa |
| but | dà'a | "market" | SF dà ${ }^{\text {a }}$ | LF dà ${ }^{\text {a }}$ |
|  | ànịi | "eight" | SF ànịi | LF ànịi |

Words ending in LF ía'a u'aa rather than i'a u'a are written with superscript ${ }^{\text {a }}$ :

| diāa ${ }^{\text {a }}$ | "get dirty" | SF dịā ${ }^{\prime}$ | LF dịā'a |
| :---: | :---: | :---: | :---: |
| $p \underline{\prime}^{\prime} \bar{a}^{\text {a }}$ | "woman" | SF pu'ā | LF pu'āa |

A few cases must be written out separately, e.g. pāmm SF pāmné 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: dv̄k/ "pot", LF dūkó; nūa/ "hen", LF nūáa.

Words with root X in the SF becoming H in the LF are written with SF tonemes, as are words with a penultimate toneless superlight syllable in the LF:

| nû'ug | "hand" | SF nû'ug | LF nú'ugò |
| :--- | :--- | :--- | :--- |
| nóbìr | "foot" | SF nóbìr | LF nóbırè |
| wābv̄g/ | "elephant" | SF wābv̄g | LF wābvgó |
| dìgìr $\varepsilon^{\varepsilon}$ | "dwarf" | SF dìgìr | LF dìgırè |

Apocope-blocked words use LFs as citation forms. Final $l v$ do not become $\varepsilon$, but -mv becomes -mm. Final L tonemes become M. Secondary LFs are created before prosodic clitics by prolonging short final vowels; final M becomes H , except in Pattern A words 3.8. Apocope-blocking is seen in some nouns ending in $-\imath$ or $-v$, as a derivational feature in adverbs and quantifiers, as a downtoning measure with adjectives, and in many words with only one underlying mora.

| būudī | "tribe" | bèdvgō¹ | "a lot" |
| :--- | :--- | :--- | :--- |
| sùjā | "well" | $y \bar{a}^{\prime}$ | "houses" |

Blocked words which do not end in a short vowel add -ne for the secondary LF: pāmm SF pāmné LF "a lot"; mà'àa SF mà'anغ̀ LF "only"; gùllı̄mm SF gùllìmnè LF "only"; kòtà $a^{\text {n } \varepsilon ~ " a t ~ a l l . " ~ T h e ~ L F ~ o f ~} \check{n} y a ̄ e ~ " b r i g h t l y, ~ c l e a r l y " ~ i s ~ s i m i l a r l y ~ n ̆ y a ̄ e n \varepsilon ́ ~[j ̃ a ̃ i ̃ n e ̃] . ~$. Cf mè DK KT SB NT mèn WK; clause-finally (all sources) mèn ${ }^{\varepsilon}$ "also, too."

### 3.3 Roots, stems and flexions

Roots have the form $(C) V(C)$ where $V$ may be any short or long vowel. Final consonants may only be $b d g l m n s r$. $C V$ roots have $C V C$ allomorphs before vowelinitial flexions. Stems are derived from roots by adding up to three derivational suffixes $b d g l m n s r$. Only $d l m$ can follow another suffix. Nominal stems may also have up to two derivational prefixes $V C V C V N C V s ı N$ or $C V l ı N$, where $V$ is short, $N$ is a nasal homorganic with the following consonant and $\imath$ is an epenthetic vowel: tītā'ar "big", bùmbàrìg "ant", sīlīnsị̂un̆g "spider." Finally, either a flexional suffix (C)V or -mm [m:] appears, or the dummy suffix, which takes the form -ı after consonants, and zero after vowels.

Prefixes and flexional suffixes show only the affix vowels $a l v a a u v v$. Most bound monosyllabic words have the same restriction. Before prosodic clitics short LFfinal $\imath v$ become $\varepsilon$, realised [e] [o] 4.1. Prefix $\imath v$ are realised [i] [u] when the first vowel mora of the root is $i$ or $u$, or following $m$ n: tītā'ar [tıtã:r] "big", kùk $\bar{r} r$ [kokor] "voice", but kìkịrīg [kikirig] "fairy", sìsị'əm [sisi̇̃əm] "wind", sīlīnsị̂un̆g [silinsĩũg] "spider", vòlìnvùun̆l [vulimvũ:l] "mason wasp", dòndùug [dundu:g] "cobra" (KB dunduug), nịn-tāa [ninta:] "co-wife."

The short affix vowels $l v$ only contrast after velars: $l$ is the default after alveolars, and $v$ after labials, labiodentals and labiovelars, but prefixes show $v$ before root $u / v / \nu$ (dv̀ndùug "cobra") and $\imath$ before $i / \imath / \varepsilon$ (kpīkpịn "merchant.") In flexions -mm appears for *-mv; ı appears after labials only as the dummy suffix (LF zàbè "fight.")

No consonant clusters appear word-initially or finally except final -mm: pāmm "a lot." Homorganic nasal + C may occur after noun prefixes: kòndù $\eta^{\mathrm{a}}$ "jackal", gūmpūz $\bar{\varepsilon} r^{\varepsilon /}$ "duck", dàpkj̀y "measles." Except in loanwords, the only other wordinternal clusters permitted are kktt pp $\eta \eta$ nn mm ll mn.

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" $+\mathrm{sg}-\mathrm{rl} \quad \rightarrow \quad$ LF nóbırè $\quad \mathrm{SF}$ nóbìr
$d \bar{u} m-$ "knee" $\quad+\mathrm{sg}-\mathrm{rl} \quad \rightarrow \quad \mathrm{LF} d \bar{u} m n \bar{\varepsilon} \quad \mathrm{SF} d \bar{u} m$

The default epenthetic vowel is 1 . Before *-gv $^{*}-\eta \eta v$ it becomes $v$ 3.6. A similar diphthongisation of root vowels occurs before *-ya *-gv *-kkv*-ŋŋv and also from deletion of $* g$ with vowel fusion. Apocope renders these changes contrastive:

| SF āan̆dīg | LF āan̆dīgà | "black plum tree" |
| :--- | :--- | :--- |
| SF gàadùg | LF gàad̀̀gò | "(sur)passing" |
| SF vịid | LF vịiddé | "owls" |
| SF vịug | LF vịugó | "owl" |

Epenthetic vowels are also rounded when preceded by a short rounded root vowel with intervening $g$ (but not $\eta$ or $k$ ): thus $g b i ̄ g i ̄ m ~ " l i o n " ~ b u t ~ y u ̄ g o ́ m ~ " c a m e l . " ~$

After a single consonant preceded by short root $i$ or $u$, epenthetic $i v$ are realised [i] [u] respectively; this is not contrastive and is ignored in the orthography: sị̆gīd "lowers" [sigid], kūgūr "stone" [kugur].

In superlight syllables 2.3 epenthetic vowels are less prominent, with no vowel quality contrasts at all; elsewhere they have the same prominence as affix vowels.

### 3.4 Root allomorphy

Most roots ending in a vowel have either a long or short vowel throughout, but some show length alternation. All glottalised roots of this kind are underlyingly *CVg 3.7. Non-glottalised types are historically either monomoraic or have undergone lenition of a final consonant. In flexion, they show long vowels before -ga -go but short elsewhere, with following ${ }^{*} d \rightarrow t t * b \rightarrow p p$ (but not $* m \rightarrow m m$ or $* l \rightarrow l l$ ):

| dāvg ${ }^{\text {a }}$ | "male" | cf dāp ${ }^{\text {a }}$ | "men" |
| :---: | :---: | :---: | :---: |
| bịi ${ }^{\text {a }}$ | "child" | cf bịl ${ }^{\text {a }}$ | "little" |
| dòog ${ }^{\text {a }}$ | "hut" | $\mathrm{pl} d \grave{t}{ }^{\varepsilon}$ |  |
| $f u ̄ u g^{\text {a }}$ | "clothing" | $\mathrm{pl} f u \mathrm{t}^{\varepsilon /}$ |  |
| $\check{n} y \bar{\varepsilon}$ | "see" | ipfv $\check{n} y \bar{\varepsilon} t^{\mathrm{a} /}$ | imp n̆yċm ${ }^{\text {a }}$ |
| $k \bar{\varepsilon}$ | "allow" | ipfv $k \bar{\varepsilon} t^{\text {a/ }}$ | $i m p k e ̀ l^{\text {a }}$ |
| $d i$ | "eat" |  | imp dìm ${ }^{\text {a }}$ |
| yị | "emerge" | ipfv yị̀ ${ }^{\text {a/ }}$ | imp yị ${ }^{\text {a }}$ |
| zò | "run" | ipfv zòt ${ }^{\text {a }}$ | imp zòm ${ }^{\text {a }}$ |
| $d \bar{v}$ | "rise" | $\operatorname{ipfv} d \bar{v} t^{\text {a/ }}$ | imp dòm ${ }^{\text {a }}$ |
| lù or lị | "fall" | ipfv lùt ${ }^{\text {a }}$ or lịt ${ }^{\text {a }}$ | imp lùm ${ }^{\text {a }}$ or lị̀m ${ }^{\text {a }}$ |

$Z \bar{u} g^{2 /}$ "head", pl $z \bar{u} t^{\varepsilon /}$ has an exceptional short vowel before -go; contrast Farefare zúugó pl zútó. All regular gerunds show long vowels: $\check{n} y \bar{\varepsilon} \varepsilon b^{\rho / ~ " s e e i n g . " ~}$

There is variation before -rع. The default is a long vowel: pı̀-kòon̆ $r^{\varepsilon}$ "widow", dà-kj̀כn̆ré "bachelor" vs pvkontim "widowhood" and Toende Kusaal pokõp "widows", dakõp "bachelors", dakõtum "bachelorhood." Regular gerunds show long vowels, as in n̄̄-lôor $r^{\varepsilon}$ "fasting", but WK has nā'-lór ${ }^{\varepsilon}$ "place for tying up cows", wìd-lōr ${ }^{\varepsilon /}$ "place for tying up horses." Short-vowel allomorphs before -re are characteristic of roots that were formerly *CVy: cf Mooré lóe "tie." Sporadic monophthongisation of such diphthongs explains e.g. lù/lị "fall" and Farefare dèegò = Kusaal dòogo "hut."

Long vowels before sg -ga or -go may be introduced into the pl, optionally or always: thus $d^{\prime} \partial^{\varepsilon} d^{\varepsilon}$ "huts", fūud ${ }^{\varepsilon /}$ "shirts", and always $d \bar{a} a d^{\varepsilon}$ "male" pl, bịiis ${ }^{\varepsilon}$ "children."

Before derivational suffixes the vowel is lengthened

| dì | "eat" | dìıs | "feed" |
| :--- | :--- | :--- | :--- |
| dāpa | "men" | dàalìm $^{\mathrm{m}}$ | "masculinity" |

Exceptions are $y \bar{i} s^{\varepsilon}$ beside $y!̣ i i s s^{\varepsilon /}$ "make emerge" from yị "emerge"; gōs ${ }^{\varepsilon}$ "look",


Before the noun pl suffix -aa unglottalised $C V(V)$-stems insert $-y$-, with long vowels shortened and io ue becoming ie ue [ir] [ur], found only in this context:

| $g a \bar{n} r^{\varepsilon /}$ | "ebony fruit" | pl gān̆yá (short sg vowel from pl) |
| :---: | :---: | :---: |
| bàlàar ${ }^{\varepsilon}$ | "stick, club" | pl bàlàyà |
| kùkōr ${ }^{\text {c/ }}$ | "voice" | pl kùk $y$ yá (*CVy-root) |
| nōor ${ }^{\text {e/ }}$ | "mouth" | pl nōyá |
| $z \bar{v} v r^{\varepsilon}$ | "tail" | pl z $\overline{\text { vag }}$ |
| bịər $r^{\varepsilon /}$ | "elder same-sex sib" | pl bi̇ēyá |
| $z \bar{u} \theta r^{\varepsilon}$ | "hill" | pl zưēyā |

$C V^{\prime} V$ root-stems change to $C V d$ - before -aa:

| tītā'ar ${ }^{\text {e }}$ | "big" | pl tītādā |
| :---: | :---: | :---: |
| pòn̆'or ${ }^{\text {c }}$ | "cripple" | pl pòn̆ ${ }^{\text {à }}$ |
|  | "name" | pl yōdá |
| $y u \bar{\prime} \cdot \theta r^{\varepsilon}$ | "penis" | pl yuādā |

Stems in *-ag- *-iag- *-uag- may show analogical forms with -d-:

| bà'ar | "idol" (Farefare bàgrè) | pl bà'a or bàdà |
| :--- | :--- | :--- |
| mò' $a r^{\varepsilon}$ | "reservoir, dam" | pl mu्c'àa or mù'adà |

Rounded vowels become glottalised before derivational $g s$ :

| $v \bar{u} r^{\varepsilon /}$ | "alive" | $\nu \bar{u}^{\prime} v g^{\varepsilon /}$ | "come alive" |
| :---: | :---: | :---: | :---: |
|  |  | $v \bar{u}^{\prime} v s^{\varepsilon /}$ | "breathe, rest" |
| kò | "break" intrans | kう̀'og ${ }^{\text {¢ }}$ | "break" trans/intrans |
| kòolv́n ${ }^{\circ}$ | "broken" | kò'os ${ }^{\varepsilon}$ | "break several times" |
| pòod ${ }^{\text {a }}$ | "be few" | pò'og ${ }^{\text {¢ }}$ | "diminish" |
| tòn̆ | "shoot" | tòn' $\sim s^{\varepsilon}$ | "hunt" |

Sporadic $C V V \sim C V C$ alternations are seen in

| no | "tread" | nōbá | "feet" |
| :---: | :---: | :---: | :---: |
| sว̄on̆ $r^{\text {¢ }}$ | "liver" | sobri | "liver" (Mampruli) |
| tòn̆ | "shoot" | tān̆ ${ }^{3}$ *tãbbv | "war" |
| し̄ | "tie" | lōdī $\mathrm{g}^{\text {g/ }}$ | "untie" |
| $p \bar{v}$ | "divide" | $p u ̄ d i ̄ g^{\varepsilon /}$ | "divide" |
| wịid ${ }^{\text {a }}$ | "draw water" ipfv | wịk ${ }^{\varepsilon}$ *wiggı | pfv |
| $v i ̣ ' ~$ | "uproot" | $v i ̣ k^{\varepsilon /} * v i g g ı$ | id |

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

| tōvmā | "work" noun | tòm ${ }^{\text {m }}$ | "work" verb |
| :---: | :---: | :---: | :---: |
| yع́oŋ | "one" | yīu $\eta^{\text {a/ }}$ | "single" |
| kāal ${ }^{\text {/ }}$ | "count" | kāl ${ }^{\text {l } /}$ | "number" |
| tūolv́g ${ }^{\text {a }}$ | "hot" | $t \bar{u} l^{\text {la/ }}$ | "be hot" |

CVC is invariable before derivational suffixes other than -lım- "-ness" and the $-y$ - of stative verbs; thus sáannìm ${ }^{\mathrm{m}}$ "strangerhood", $k p i ̣ ̀ ' \partial m \mathrm{ma/} \mathrm{"be} \mathrm{strong"}$,

| màal ${ }^{\text {c }}$ | "sacrifice" (verb) | mālv̄ ${ }^{\text { }}$ | "sacrifice" (noun) |
| :---: | :---: | :---: | :---: |
| pịəlìg ${ }^{\text {a }}$ | "white" | $p$ ¢̇lìg ${ }^{\text {® }}$ | "whiten" |
| $k p i ̣{ }^{\prime} \circ \eta^{\text { }}$ | "strong" | $k p \varepsilon ̇ ' \eta{ }^{\varepsilon}$ | "strengthen" |
| lịəb ${ }^{\text {c }}$ | "become" | lèbì ${ }^{\text {® }}$ | "turn over" |
| tūvlúg ${ }^{\text {a }}$ | "hot" | tōlī $\mathrm{g}^{\varepsilon /}$ | "heat" |
| yāar ${ }^{\text {¢ }}$ | "scatter" | $y a ̄ d i ̄ g^{\varepsilon /}$ | "scatter" |
| $d \bar{\varepsilon} \varepsilon \eta^{\text {a }}$ | "first" | dè ${ }^{\varepsilon}$ | "go first" |
| $p \grave{\text { li }} \mathrm{b}^{\varepsilon}$ | "blow" (flute) | pèbìs ${ }^{\text {e }}$ | "blow" (wind) |
| yùul ${ }^{\text {e }}$ | "swing" intransitive | yùlìg ${ }^{\text {c }}$ | "swing" transitive |

Alternation appears in flexion in a few nouns:

| zịin ${ }^{\text {a }}$ *ziimga | zịmí |
| :---: | :---: |
| náafo *naagfo | nịigí |
| wáaf ${ }^{\text {* waagfu }}$ | wịigí |
| pịim ${ }^{\mathrm{m} /}$ | pịmá |
| yòvm ${ }^{\text {m }}$ | yòmà |

### 3.5 Consonant clusters

The changes described below precede deletion of postvocalic $* g$.
Except after prefixes, adjacent consonants within a word must assimilate to $k k p p t t \eta \eta \mathrm{~mm} n \mathrm{ll} \mathrm{mn}$ or insert an epenthetic vowel, as shown below; ə marks pairs which insert an epenthetic vowel.

| $1 \downarrow 2 \rightarrow$ | $g$ | $d$ | $b$ | $m$ | $n$ | $r$ | $s$ | $l$ | $f$ | $y$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $g$ | $k k$ | $\partial$ | $\partial$ | $\partial$ | $\partial$ | $\partial$ | $\partial$ | $\partial$ |  | $\partial$ |
| $d$ | $\partial$ | $t t$ | $\partial$ | $\partial$ |  | $\partial$ | $\partial$ |  |  | $r$ |
| $b$ | $\partial$ | $\partial$ | $p p$ | $[m m]$ | $\partial$ | $\partial$ | $\partial$ | $\partial$ |  | $\partial$ |
| $m$ | $\eta \eta$ | $m n$ | $m m$ | $m m$ |  | $m n$ | $[: s]$ | $n n$ |  | $m m$ |
| $n$ | $\eta \eta$ | $n n$ | $m m$ | $\partial$ |  | $n n$ | $\check{\vdots} s$ | $n n$ | $\sim$ | $n n$ |
| $r$ | $\partial$ | $\partial$ | $\partial$ | $\partial$ |  | $r$ | $\partial$ | $t t$ | $\partial$ |  |
| $s$ | $\partial$ | $\partial$ | $\partial$ | $\partial$ |  | $\partial$ | $\partial$ |  |  | $s$ |
| $l$ | $\partial$ | $n n$ | $\partial$ | $\partial$ |  | $l l$ | $\partial$ | $l l$ | $\partial$ | $l l$ |

The change $b m \rightarrow m m$ only occurs after a short root vowel, whereas $m s \rightarrow \tilde{:} s$ 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:

| $t \bar{\varepsilon} \eta^{\mathrm{a}}$ | "land" | pl | $t \bar{\varepsilon} \varepsilon n ̆ S^{\varepsilon}$ | *tensı |
| :--- | :--- | :--- | :--- | :--- |
| $k v \grave{l i} \eta^{\mathrm{a}}$ | "door" | pl | kùlìs ${ }^{\varepsilon}$ | *kvlınsı |

For the pl būtīıs of būtī $\eta^{\text {a }}$ "cup" see 2.3.
*nf becomes $f$ with nasalisation of a preceding root vowel, but there is no lengthening of a short preceding root vowel in the only case which occurs:

| $n i ̣ f o l$ | "eye" | pl | nịní |
| :--- | :--- | :--- | :--- |
| píın̆fo | "genet" | pl | pīıní |

*SS only inserts an epenthetic vowel in the pl pūsis ${ }^{\varepsilon /}$ of $p u \overline{s i} g^{\mathrm{g} /}$ "tamarind." All other plurals in $-s ı s^{\varepsilon}$ in my materials are for ${ }^{*}$-sınsı. ${ }^{*} P \bar{u} s^{\varepsilon /}$ would have appeared to show no ending in SF.

The cluster $m n$ is merging with $m m$. All mna and $m n \varepsilon$ in KB cross word division by the criteria of this grammar, but mni is still usual in plurals like tomtomnib tòm$t \bar{v} m n \bar{i} b$ "servants." A few cases of mna remain in older texts, as with wum na for LF wùmnā "do not hear" (Mt 13:15, 1996) and tumtum na for LF tùm-tūmnā "servant" (Gal 1:10, 1996), where KB has tomtomma. Some informants preserve mne: SB gbīgīmn $\bar{\varepsilon}$ "lion", dūmn $\bar{\varepsilon}$ "knee", WK gbīgīmm $\bar{\varepsilon}, d \bar{u} m m \bar{\varepsilon}$. Informants have $m n \imath$ in agent noun plurals only: būn-túmmìr "useful thing" pl tūmnā SB, bù-sān̆'ammır "goat for destruction" WK.

## Derivation precedes flexion in consonant cluster formation.

Stem-final $k k p p t t \eta \eta m n n n$ never assimilate further; $m m$ assimilates only with $m m m \rightarrow m m$ in imperatives. Thus e.g. $k \bar{\jmath} t^{\varepsilon /}$ "slaughter", ipfv k̄̄tída; dàm ${ }^{\mathrm{m}}$ "shake", ipfv dàmmìd ${ }^{\mathrm{a}} \mathrm{ipfv}$, gerund dàmmù ${ }^{\mathrm{J}}$ but imperative dàm ${ }^{\text {ma }}$.

However, stem-final $l l r(r)$ assimilate the initial of the noun class suffix -re: kùg$\boldsymbol{d} \bar{\varepsilon} \boldsymbol{I}^{\mathbf{l} / /}$ "chair for leaning on."

Stem-internal $n n$ becomes $n$ except after short root vowels: cf pị̂bīnn $n^{\mathrm{n} \varepsilon}$ pl pịbinā "covering", Mooré pìbíndgà "lid, cover"; zịn̆'in ${ }^{\varepsilon}$ "sit down", Mooré zĩndi; vàbìn ${ }^{\varepsilon}$ "lie prone", Mooré vábende. For many speakers, stem-internal mm in single-aspect verbs similarly becomes $m$ except after short root vowels 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 ${ }^{*} n d \rightarrow n n$ in the ipfv after short root vowels, but nowhere else; this may reflect the origin of derivational $n$ from *nn.

| bùn | bùnna | bùnìm | a |
| :--- | :--- | :--- | :--- |
| dı̀gìn | "reap" |  |  |
| gò'on | dı̀gını̀d $^{\text {a }}$ | dı̀gını̀m $^{\text {a }}$ | "lie down" |
| gò'onıd |  | gò'onìm $^{\text {a }}$ | "extend neck" |

$N$-stem gerunds never show assimilation: būnīb ${ }^{5}$, dìgınv̀ ${ }^{5}$.
$M$-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 $^{\mathrm{m}} \quad$| wòm $^{\text {ma }}$ womid (Phil 1:30) $\quad$ wòm $^{\mathrm{ma}} \quad$ "hear" |
| :--- |

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

| $t \overline{o r o m}{ }^{\text {m/ }}$ | tóom ${ }^{\text {ma }}$ tōomíd ${ }^{\text {a }}$ tòom ${ }^{\text {ma }}$ | "depart" |
| :---: | :---: | :---: |
| kàrìm ${ }^{\text {m }}$ | kàrı̀m ${ }^{\text {ma }}$ /kàrımìd ${ }^{\text {a }}$ kàrı̀m ${ }^{\text {ma }}$ | "read" |


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 $n \bar{\varepsilon} /$ :

M pū kárìmmā.
M̀ kárìm né.
Kà bà kárımìd.
Kà bà kárìm.

> "I'm not reading."
> "I'm reading."
> "And they were reading." only "And they read."

Examples for assimilation versus epenthetic vowel insertion:

| *gg $\rightarrow$ kk | gì ${ }^{\text {a }}$ | "dumb" sg | gìgìs ${ }^{\varepsilon} \mathrm{pl}$ |
| :---: | :---: | :---: | :---: |
|  | cf $k \bar{\jmath} l i ̄ g^{\text {a }}$ | "river" sg |  |
| $* d d \rightarrow t t$ | bìt ${ }^{\text {a }}$ | "plant" ipfv | bùd ${ }^{\varepsilon} \mathrm{pfv}$ |
|  | cf $d \bar{v} g \bar{v} d^{\mathrm{a} /}$ | "cook" ipfv | $d \bar{v} g^{\varepsilon} \mathrm{pfv}$ |
| $* b b \rightarrow p p$ | sэ̄p ${ }^{\text {/ }}$ | "writing" ger | sōb ${ }^{\text {e pfv }}$ |
|  | cf $k p a \bar{r} \bar{i}{ }^{\circ}$ | "locking" ger | kpàr ${ }^{\varepsilon} \mathrm{pfv}$ |
| $* l d \rightarrow n n$ | $k \grave{n}{ }^{\text {ne }}$ | "bags" pl | kòlù ${ }^{\text {a }} \mathrm{sg}$ |
|  | cf $z \bar{u} \theta b i d^{\varepsilon}$ | "hairs" pl | $z u ̄ \theta b v ́ g^{\circ} \mathrm{sg}$ |


| $* m g \rightarrow \eta \eta$ | bù ${ }^{\text {a }}$ | "donkey" sg | bùmis ${ }^{\varepsilon} \mathrm{pl}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| $* n g \rightarrow \eta \eta$ | gbàu ${ }^{\text {º }}$ | "book" sg | gbànà pl |  |
|  | cf $\check{n}$ wādī $g^{\text {a/ }}$ | "month" sg | ňwādī ${ }^{\text {¢/ }} \mathrm{pl}$ |  |
| $* n r \rightarrow n n$ | tān ${ }^{\text {n }}$ | "earth" sg | tānā pl |  |
| $* m r \rightarrow m n$ | $d \bar{u} m^{\mathrm{n}} \varepsilon$ | "knee" sg | dūmā pl |  |
| $* l r \rightarrow l l$ | $g \varepsilon ́ l^{1 \varepsilon}$ | "egg" sg | gżlá pl |  |
| $* r r \rightarrow r$ | kùkpàr ${ }^{\varepsilon}$ | "palm fruit" sg | kv̀kpàrà pl |  |
|  | cf dìgìr ${ }^{\text {c }}$ | "dwarf" sg | dìgà pl |  |
| $* n b \rightarrow m m$ | sáam ${ }^{\text {ma }}$ | "strangers" pl | sāan ${ }^{\text {a/ }} \mathrm{sg}$ |  |
|  | cf $n \grave{1} d \bar{d} b^{\text {a/ }}$ | "people" pl | $n i ̣ d^{\text {a/ }} \mathrm{sg}$ |  |
| *mb $\rightarrow$ mm | kīm ${ }^{\text {mo }}$ | "shepherding" ger | kìm ${ }^{\mathrm{m}} \mathrm{pfv}$ |  |
|  | cf $k a \bar{d} \bar{l}^{\prime} b^{\circ}$ | "driving off" ger | kàd ${ }^{\varepsilon} \mathrm{pfv}$ |  |
| *ll $\rightarrow$ ll | Bùl ${ }^{\text {l }}$ | "Buli" | Bùlìs ${ }^{\text {c }}$ | "Bulsa" |
| $* r l \rightarrow t t$ | Bāt ${ }^{\varepsilon /}$ | "Bisa language" | Bārīs ${ }^{\text {c/ }}$ | "Bisa people" |
| $* m l \rightarrow n n$ | Dàgbān ${ }^{\text {ne/ }}$ | "Dagbani" | Dàgbām ${ }^{\text {ma/ }}$ | "Dagomba" |
| $*_{n l} \rightarrow n n$ | Gūrín ${ }^{\text {n }}$ | "Farefare | Gūrís ${ }^{\text {e }}$ | "Farefare people" |
|  |  | language" |  |  |

### 3.6 Vowel changes before ${ }^{*}-\boldsymbol{y a}{ }^{*}-\boldsymbol{g v}$ *-kkv $^{*}$ - $\boldsymbol{\eta} \boldsymbol{\eta v}$

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 $\underset{\sim}{e}$, producing a short fronting diphthong:

| SF vv̄e | LF vōyá | "be alive" | SF tōe | LF tōyá | "be bitter" |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SF sāęn̆ | LF sān̄yā | "smith" | SF sōenn̆ | LF sōňyā | "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 $e[\mathrm{I}]$ :

```
sōn̆'eya/ *sõ'õya "be better than"
sū'e \({ }^{\text {ya/ }} \quad\) *sv'vya \(^{\prime} \quad\) "own" (cf sū'vlím \({ }^{\mathrm{m}}\) "property")
```

Short unrounded root vowels become diphthongs in $u$ before LF * $\eta \eta v * k k v$ :

| $g b a ̀ u \eta^{\circ}$ | *gbapŋv | "book" | pl gbànà |
| :---: | :---: | :---: | :---: |
| lāuk ${ }^{\text {a }}$ | *lakkv | "goods item" | $\mathrm{pl} \mathrm{la}^{\prime} a d^{\varepsilon}$ |
| yīun ${ }^{\text {/ }}$ | *yıpŋo | "single" | pl yīná |

Short tense $i$ does not diphthongise in nị̀n-gbị̣ $\eta^{J / ~ " b o d y . " ~}$
Short ia becomes iau, but short ua becomes o: *uakkv $\rightarrow$ okkv

| binaunh ${ }^{\text {a }}$ | *biãakv | "shoulder" | pl biāă'ad |
| :---: | :---: | :---: | :---: |
| bj̀ ${ }^{\text { }}$ | *buakkv | "pit" | pl bù'ad ${ }^{\text {e }}$ |

Unrounded second morae of long vowels become [ъ] before LF *gv *ŋŋv:

| dàvg ${ }^{\circ}$ | *daagv | "log" | pl dàad ${ }^{\text {® }}$ |
| :---: | :---: | :---: | :---: |
| $f$ f̄n̆'og ${ }^{\text {/ }}$ |  | "ulcer" | $\mathrm{pl} f \overline{\text { č }}{ }^{\prime} \varepsilon d^{\varepsilon /}$ |

Long ii becomes iu, whereas iə becomes io [iv]:

|  | vịug ${ }^{\text {/ }}$ | *viigv | "owl" | pl vịid ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: |
| but | dàbịog ${ }^{\text {º }}$ | *dabiagv | "coward" | pl dàbị̀ $\mathrm{d}^{\varepsilon}$ |
|  | kpị' oŋ ${ }^{\text {a }}$ | *kpi'əŋŋ二 | "strong" | pl kpị'əmā |

No case with $u u / u v$ occurs, because of the rule $* \boldsymbol{u \theta g} \boldsymbol{\theta} \boldsymbol{\operatorname { o g g v }}$ :

| Sà'-dàbòog ${ }^{\text {* }}$ Sa'-dabuөgv | "place of the Sarabose Sà'-dàbùөs ${ }^{\varepsilon}$ clan" |
| :--- | :--- |
| lām-fôog $\quad$ *lam-fuөgv | "toothless" (lām $\mathrm{m} \varepsilon /$ "gum", fùe "extract") |

Pl vowels are remodelled on the sg: lām-fôod ${ }^{\varepsilon}$ "toothless." The only stem with final $u \theta$ in the $g \supset \mid d \varepsilon$ class is formally-plural $z u ̀ \theta d^{\varepsilon}$ "friendship." There is probably a parallel rule *iəgv $\rightarrow \boldsymbol{\varepsilon v g v}$, with similar pl remodelling: with bị̄'əm ${ }^{\mathrm{m}}$ "enemy" cf
$b \bar{\varepsilon}^{\prime} o g^{\circ}$
$b \bar{\varepsilon} \bar{\varepsilon}^{\prime} \varepsilon d^{\varepsilon}$
bè'-
"bad"
bị'a
bị̀ $\partial S^{\varepsilon}$
bià'-

Dàbị̆og ${ }^{3}$ is perhaps influenced by an obsolete *dàbịəəm ${ }^{\mathrm{m}}$ "coward" (Mooré ràbćعmà.)
The epenthetic vowel $l$ is rounded to $v$ before LF *-gv *- $\eta v$ :

|  | $\bar{a} a n ̆{ }^{\text {did }}{ }^{\text {a }}$ | *ããdıga | "black plum tree" |
| :---: | :---: | :---: | :---: |
| but | gàadio ${ }^{\text {o }}$ | *gaadıgo | "(sur)passing" (gerund) |
| pl | mālımā | *malımaa | "sacrifices" |
| but | mālv̄ ${ }^{\circ}$ | *malıpŋט | "sacrifice" |

### 3.7 Consonant deletion and vowel fusion

The changes described below apply after diphthongisation by fronting and rounding but before apocope. They are late historically: Haaf 1967 still has e.g. baga for bā'a "diviner" (Prost 1979 baxa) and winbagr for wīn-bâ'ar "altar"; Toende Kusaal has different deletion rules from Agolle, and no fusion.
*g is deleted after a ịa una and their nasalised counterparts before any vowel, affix or epenthetic; fusion then results in glottalised long vowels and diphthongs:

$$
\text { *agV } \rightarrow \text { a'a *iagV } \rightarrow \underset{\sim}{i} a^{\prime} a \quad \text { *uagV } \rightarrow v^{\prime} a
$$

v'a becomes u'aa word-finally. The rule applies later than *gg $\rightarrow k k$ :

| but | $p u{ }^{\prime} \bar{a}^{\text {a }}$ | *puaga | "woman" | $\mathrm{pl} p \bar{v}^{\prime} a b^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | zàk ${ }^{\text {a }}$ | *zakka | "compound" | $\mathrm{pl} z a ̀ ' a s^{\varepsilon}$ |
|  | lāuk ${ }^{0}$ | *lakkv | "item of goods" | pl lā'ad ${ }^{\text {¢ }}$ |
|  | piàunn̆ ${ }^{\text { }}$ | *piããkv | "word" | pl pi̇àn̆'ad ${ }^{\text {c }}$ |
|  | pųāk ${ }^{\text {a }}$ | *puakka | "female" (adj) | $\mathrm{pl} p \bar{\prime}^{\prime} a s^{\varepsilon}$ |
|  | bòk ${ }^{\text {ºn }}$ | *buakkv | "pit" | pl bù'ad ${ }^{\text {e }}$ |

*g is deleted after aa io uө and their glottalised counterparts (but not after $a v$ عo io ว๐ resulting from rounding before *gv.) When an affix vowel follows the * $g$, fusion creates overlong diphthongs:

```
*aaga }->\mathrm{ aa 4.1
*izga -> iaa
*uөga }->\mathrm{ uaa
*aagı }->\mathrm{ aee
*iəgı \(\rightarrow\) iee
*uөgı \(\rightarrow\) uee
```

Glottalised vowels behave in the same way.
Thus with deletion of the $* g$ in $g a \mid s \varepsilon$ class singulars:

| bāa | *baaga | "dog" | pl bāas ${ }^{\varepsilon}$ |
| :--- | :--- | :--- | :--- |
| sịa | *siəga | "waist" | pl sị̀ $S^{\varepsilon}$ |
| sàbùa | *sabuөga | "lover" | pl sàbù $\theta S^{\varepsilon}$ |

So too with "fusion verbs" in *-gl:

| pāel | *paagı | "reach" |  |  |
| :--- | :--- | :--- | :--- | :--- |
| kpị̀'e | *kpi'əgı | "approach" | cf $k p i ̣ ' ə s^{\varepsilon}$ | "neighbours" |
| dūe | *duөgı | "raise, rise" |  |  |

Except before ${ }^{*}$, $* \tilde{\varepsilon} \tilde{\boldsymbol{\varepsilon}} \boldsymbol{g} \rightarrow * \tilde{\mathbf{a}} \tilde{g} \boldsymbol{g}$ and $* \tilde{\boldsymbol{\jmath}} \tilde{\boldsymbol{\rho}} \boldsymbol{g} \rightarrow * \tilde{\boldsymbol{u}} \tilde{\boldsymbol{e}} \boldsymbol{g}$ prior to ${ }^{*} g$-deletion (and similarly with glottalised vowels), creating alternations:


Tones show that the ipfv of fusion verbs has no underlying *g 3.8.2; older texts reflect this, keeping $\varepsilon \varepsilon n ̆ ~ כ \supset n ̆, ~ e . g . ~ p o n ' o d ~ p \overline{n ̆ ' o d ~}{ }^{\mathrm{a} /}$ from $p \overline{u_{n}}{ }^{\prime} e^{\prime}$. Later sources introduce iən̆ иөй into ipfvs and imperatives by analogy: pun'od pūn̆'өd ${ }^{\mathrm{a} / .}$

### 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. Analogous Patterns appear throughout Western Oti-Volta.

Nominals show only three basic distinct Patterns (H, L and A), and verbs only two (H and A.) Allocation precedes all synchronic rules which delete segments, including apocope.

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

Any tonemes after H are L. L flexional suffixes other than the dummy suffix carried $M$ historically; the original toneme appears before locative $n^{\varepsilon}$ and bound object pronouns, and accounts for the M spreading seen after the corresponding SFs.

Superlight syllables $\underline{2.3}$ are toneless; superlight LF syllables which become closed as a result of apocope must acquire a toneme, which is M after a preceding M syllable, and L otherwise:

| wābū $g^{\circ /}$ | "elephant" | LF wābvgó | SF wābv̄g |
| :--- | :--- | :--- | :--- |
| dìgìr | "dwarf" | LF dìgırè | SF dìgìr |
| nóbìr | "foot" | LF nóbırè | SF nóbìr |

### 3.8.1 Nouns and adjectives

Examples will be given as sg, pl, cb 5.1. Cbs are always affected by apocope.
Noun prefixes 10 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 $\mathrm{H} / \mathrm{X}$ after the prefix.

Cbs from $C V$-stems sometimes behave tonally like prefixes:

| $p \overline{-}-k p a \bar{a} d^{a /}$ | $p \overline{-}-k p a ̄ a d i ́ b^{\mathrm{a}}$ | pū-kpá- | "farmer" |
| :--- | :--- | :--- | :--- |
| $z u \bar{g}-k \bar{v} g \bar{v} r^{\varepsilon /}$ | $z u \bar{g}-k \bar{v} g a \bar{a}$ | $z u \bar{g}-k v ́ g-$ | "pillow" 5.2 |
| $k \bar{a}-w \bar{\varepsilon} n n i \bar{r} r^{\varepsilon /}$ | $k \bar{a}-w \bar{\varepsilon} n n a \bar{a}$ | $k \bar{a}-w \varepsilon ́ n-$ | "corn" |

Pattern $\mathbf{H}$ displays H on the first syllable if it is superheavy in the LF, but otherwise has the initial tonemes MH; the H toneme falls on the third syllable if the second is superlight in the LF. Any tonemes following H are L. Consonant-final cbs always treat their final syllables as open

| $v \bar{u} r^{\varepsilon /}$ | vūyá | $v \bar{v} r-$ | "alive" |
| :---: | :---: | :---: | :---: |
| $y \stackrel{i ̣}{1 / 1}$ | $y \bar{a}^{\prime}$ | yị- | "house" |
| fūug ${ }^{\text {/ }}$ | $f u ̄ u d^{\text {d }}$ | fū- | "shirt, clothes" |
| $d \bar{v} k^{\text {J/ }}$ | $d \bar{v} g \bar{v} d^{\varepsilon /}$ | $d \bar{v} g$ - | "cooking pot" |
| $n \overline{1} d^{\text {a/ }}$ | nịdī $\mathrm{b}^{\mathrm{a} /}$ | nịn- | "person" |
| $k u \bar{u} \bar{v}^{\varepsilon /}$ | kūgá | $k \bar{u} g$ - | "stone" |
| $g \overline{\mathrm{t}}{ }^{\text {a/ }}$ | gōtíb ${ }^{\text {a }}$ /tt/ | $g$ ¢̄t- | "seer, prophet" |
| sābılíga | sābılís ${ }^{\varepsilon}$ | sābīl- | "black" |
| sābíl ${ }^{\text {l }}$ | sābılá |  |  |
| yū ${ }^{\text {óm }}{ }^{\text {m }}$ | yūgomá | $y \overline{\mathrm{v}} \mathrm{V}$ ט̄m- | "camel" |
| $d i ̣ ' \partial s^{\mathrm{a} /}$ | dị'əsídì ${ }^{\text {a }}$ | dị'əs- | "receiver" |
| sūgoríd ${ }^{\text {a }}$ | sūgurídìb ${ }^{\text {a }}$ | sūgoríd- | "forgiver, forbearer" |
| kv̄alín ${ }^{\text {a }}$ | kv̄'alís ${ }^{\text {® }}$ | kū'alín- | traditional smock |


| sú'ө ${ }^{\text {a }} / \mathrm{y}$ / | sū'өmís ${ }^{\text {® }}$ | $s u ̄ ' ө \eta$ - | "rabbit" |
| :---: | :---: | :---: | :---: |
| sāan ${ }^{\text {a/ }}$ | sáam ${ }^{\text {ma }}$ | sāan- | "stranger, guest" |
| sáannìm ${ }^{\text {m }}$ |  |  | "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:

| $n u ̄ a l$ | SF nūa | LF nūáa | "hen" |
| :--- | :--- | :--- | :--- |
| $v \overline{v^{\prime}} \mathrm{m} /$ | SF vōm | LF vómm | "life" |
| dāam $^{\mathrm{m} /}$ | SF dāam | LF dáamm | "millet beer" |

Loss of underlying segments may shift the H toneme to the left.
H may appear on a LF superlight syllable if it is preceded by $r$ derived from *rr:
n̆yịríf $\quad$ nyyịrí $\quad$ "egusi seed"

Many words have a long root vowel followed by a segment which has been deleted 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 in the LF and carries H:

| nịis ${ }^{\text {c }}$ | * $n$ iinsı | (beside nịimís ${ }^{\varepsilon}$ ) | "birds" (sg nịín $/ \mathrm{y}$ / $/$ ) |
| :---: | :---: | :---: | :---: |
| píln̆fo | *pıınfo | (pl pīıní) | "genet" |
| wáafo | *waagfo | (pl wịigí) | "snake" |
| yáab ${ }^{\text {a }}$ | *yaagba |  | "grandparent" |
| vúөr ${ }^{\varepsilon}$ | *vuegrı |  | "fruit of red kapok" |
| náar ${ }^{\text {c }}$ | *naagrı | gerund of nāe ${ }^{\prime}$ | "finishing" |
| dị ${ }^{\prime}$ ə $r^{\varepsilon}$ | * di' ${ }^{\text {arı }}$ | gerund of $d \overline{1}{ }^{\prime} e^{\prime}$ | "getting" |
| $p u ́ n{ }^{\prime} \mathrm{ra}^{\varepsilon}$ | *põ'õgrı | gerund of pūn' ${ }^{\prime}$ | "rotting" |

A few root-stems show a different irregularity: in $\mathrm{sg} / \mathrm{pl}$ forms with consonantinitial flexions, the initial syllable carries X in the SF if it is superheavy, H otherwise; all following tonemes are L. Forms with vowel-initial suffixes and cbs are regular.

| nû'ug ${ }^{\text {a }}$ | $n u{ }^{\prime} \mathbf{s}^{\varepsilon}$ | $n \bar{u}{ }^{\prime}-$ | "hand, arm" |
| :---: | :---: | :---: | :---: |
| à-gâvn̆g ${ }^{\text {a }}$ | à-gâan̆ ${ }^{\varepsilon}$ | $\grave{a}-g \bar{a} \check{n}-$ | "pied crow" |
| gbêcn̆m ${ }^{\text {m }}$ |  | $g b \bar{\varepsilon} \check{n}-$ | "sleep" |
| nóbìr ${ }^{\text {c }}$ | nōbá | nōb- | "foot, leg" |
| $g \varepsilon ́ l^{1 \varepsilon}$ | $g \bar{\varepsilon} l a ́$ | $g \bar{\varepsilon} l-$ | "egg" |
| kị́sù ${ }^{\text { }}$ | kịsá | kịs- | "hateful, taboo" (adj) |
| áňsìb ${ }^{\text {a }}$ | ān̄s-nám ${ }^{\text {a }}$ | ān̆s- | "mother's brother" |

So too the gerunds sóňsì ga "talking", gósì ga "looking", kìkịrùgo "hurrying."
Some of these words have probably lost a segment: $s r$ can represent older ss $r r$, and cf Mooré gãoobgó "pied crow." Nû'ug "hand" has added further class suffixes to old $\supset \mid \varepsilon$ class forms: cf Nawdm núfú pl níhí. Nóbìr ${ }^{\varepsilon}$ "leg" is remodelled segmentally on the basis of the plural: cf Toende sg nō'ग$t ~ p l ~ n o b a . ~$

Examples for Pattern H with prefixes:

| dàyūug² | dàyūud ${ }^{\text {/ }}$ | dàyū- | "rat" |
| :---: | :---: | :---: | :---: |
| Bùsán ${ }^{\text {a }}$ | Bùsâan̆s ${ }^{\text {a }}$ | Bùsāp- | "Bisa person" |
| zīnzāun ${ }^{\text {a/ }}$ | zīnzāná | zīnzáuņ- | "bat" |
| $g u ̄ m p u \overline{z \bar{\varepsilon}} r^{\varepsilon /}$ | gūmpūzēyá | gūmpūzér- | "duck" |
| pīpịrī ${ }^{\text {a/ }}$ | pīpịrīs ${ }^{\varepsilon /}$ | pīpịr- | "desert" |
| tīntōn̆ríg ${ }^{\text {a }}$ | tīntōn̆rís ${ }^{\text {® }}$ | tīntón̆r- | "mole" ( $r$ from *rr) |

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

| $s \grave{v}^{\prime} v g^{\text {a }}$ | $s$ v̀' $^{\prime} s^{\text {® }}$ | sv̀'- | "knife" |
| :---: | :---: | :---: | :---: |
| zàk ${ }^{\text {a }}$ | $z a ̀ ' a s^{\varepsilon}$ | $z a ̀$ - | "dwelling-compound" |
| mòlif ${ }^{\text {o }}$ | mòli | mòl- | "gazelle" |
| pùgudìb ${ }^{\text {a }}$ | pùgùd-nàm ${ }^{\text {a }}$ | pùgùd- | "father's sister" |
| sàal ${ }^{\text {a }}$ | sàalìb ${ }^{\text {a }}$ | sàal- | "human" |
| nònìd ${ }^{\text {a }}$ |  |  | "lover" |
| bòsdìm ${ }^{\text {m }}$ |  |  | "will" |
| zòtìm ${ }^{\text {m }}$ |  |  | "fear" |
| dàalìm ${ }^{\text {m }}$ |  |  | "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 ${ }^{\text {ma }}$ | sàam-nàm ${ }^{\text {a }}$ | sàam- | "father" |
| :---: | :---: | :---: | :---: | :---: |
|  | $m \varepsilon ̀ \varepsilon \eta^{\text {a }}$ | mèsmìs ${ }^{\text { }}$ | mè $\ \eta-$ | "turtle" |
|  | àn̆rò ${ }^{\circ}$ | àn̆rımà | àn̆rùn- | "boat" |
|  | kàrù ${ }^{3}$ or kàr |  |  | "reading" (gerund) |
|  | yàlò ${ }^{\text {² }}$ | yàlımà | yàlòn- | "wide" |
|  | zillìm ${ }^{\text {m }}$ | zı̀lımà | zilìm- | "tongue" |
| But | sịilín ${ }^{\text {a }}$ | sịilímis ${ }^{\varepsilon}$ or sṭilís ${ }^{\varepsilon}$ | sịilín- | "proverb" |
|  | zàan̆súp ${ }^{\circ}$ | zàaňsímà | zàan̆sún- | "dream" |
|  | nòjìlím ${ }^{\text {m }}$ |  | nòjìlím- | "love" |
|  | sùjìdím-tāa |  |  | "co-helper" 9.2.1.4 |
|  | dàalím ${ }^{\mathrm{m}}$ | dàalímis ${ }^{\text {c }}$ | dàalím- | "male sex organs" |
|  | bị'isím ${ }^{\text {m }}$ |  |  | "milk" |

Tonally exceptional forms are bùgúm ${ }^{\mathrm{m}}$ cb bùgúm- or bùgv̄m- "fire", tàdımís ${ }^{\varepsilon}$ "weakness", bùdımís ${ }^{\varepsilon "}$ confusion."

Pattern L with prefixes:

| kùkpàrìg $g^{\mathrm{a}}$ | kùkpàrìs ${ }^{\varepsilon}$ | kùkpàr- | "palm tree" |
| :--- | :--- | :--- | :--- |
| sāmán $\mathrm{n} \varepsilon$ | sāmánà | sāmán- | "courtyard" |

Pattern A shows M throughout in $\mathrm{sg} / \mathrm{pl}$ forms and L throughout in the cb .

| $b \bar{v} v g^{\text {a }}$ | $b \bar{v} v s^{\varepsilon}$ | bò- | "goat" |
| :---: | :---: | :---: | :---: |
| $t a ̄ n{ }^{\text {ne }}$ | tānā | tàn- | "earth" |
| $s i \bar{l} d^{\text {a }}$ | $s i ̄ d i ̄ b^{\text {a }}$ | sìd- | "husband" |
| $p u ' \bar{a}^{\text {a }}$ | $p \bar{v}^{\prime} a b^{\text {a }}$ | pu'à- | "woman, wife" |
| $s \bar{a}^{\prime} a b$ | no pl | sà'- | "millet porridge" |
| $g b i ̄ g i ̄ m ~ \frac{n \varepsilon}{}$ | gbīgımà | gbìgìm- | "lion" |
| $\check{n} w a ̄ a \eta^{\text {a }}$ | $\check{n} w a \overline{a m i ̄}{ }^{\text {c }}$ | n̆wàay- | "monkey" |
| $m \bar{\varepsilon} \varepsilon d^{\text {a }}$ | $m \bar{\varepsilon} \varepsilon d \bar{l} b^{\text {a }}$ | mèzd- | "builder" |
| siākīd ${ }^{\text {a }}$ | sịākīdī ${ }^{\text {a }}$ | siàkìd- | "believer" |
| $b u ̄ t i ̄ \eta^{\text {a }}$ | būtīıs ${ }^{\text {c }}$ | bùtì H - | "cup" |
| $m \bar{\varepsilon} \varepsilon d \bar{\imath} \eta^{\text {a }}$ | $m \bar{\varepsilon} \varepsilon d \bar{i} s^{\varepsilon}$ | mèzdìp- | "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:
$p u ̀ ' v s^{\mathrm{a}} \quad$ pū'vsīdī $b^{\mathrm{a}} \quad$ pù'vs- $\quad$ "worshipper"

Pattern A all-M LFs become all-L before the interrogative clitics 4.1 .
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 sg $-a$, and disyllabic LFs in $-m m V$ or $-m m$. Some speakers allow H optionally before the interrogative clitics.

| yūgvdī $r^{\text {c/ }}$ | yūgodā | yùgòd- | "hedgehog" |
| :---: | :---: | :---: | :---: |
| $\check{n} w a \bar{a} \eta^{\text {a }}$ | $\check{n} w a \bar{a} \overline{m i s}^{\varepsilon /}$ | n̆wàay- | "monkey" |
| $b a ̄ \eta i ̄ d^{\text {a }}$ |  | bàjìd- | "wise man" |
| kpārıdī $\eta^{\text {a }}$ | $k p a ̄ r ı d i ̄ s^{\varepsilon /}$ | kpàrıdìp- | "thing for locking" |
| gbīgīm ${ }^{\mathrm{m} /}$ | gbīgımà | gbìgìm- | "lion" |
| $z \overline{\text { 人̇om }}$ m ${ }^{\text {/ }}$ | zōomā | zòom- | "fugitive" |
| tādīm ${ }^{\text {m/ }}$ | tādımis ${ }^{\text {s/ }}$ | tàdìm- | "weak person" |

Lì à $n \bar{\varepsilon}$ gbīgīmmé ?
Lì à $n \bar{\varepsilon}$ gbígìmmèz?

Pattern A with prefixes:

| dàkīi $g^{\mathrm{a}}$ | dàkīis ${ }^{\varepsilon}$ | dàkì- | "sib-in-law via wife" |
| :--- | :--- | :--- | :--- |
| fūfūm ${ }^{\mathrm{m} \varepsilon}$ | fūfūmā | 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 the derivational origin of the imperfective flexion (see below.) 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 16.5. 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:
$\grave{O} p \bar{v} d \bar{v} g \bar{\varepsilon}$.
Ò pū dúgè $\varepsilon$ ?
Kà ò dūgí=lī.

Examples for Pattern H:

| $\check{n} y \bar{\varepsilon}$ | $\check{n} y \bar{\varepsilon} t^{\mathrm{a} /}$ |
| :---: | :---: |
| $k \bar{\nu}$ | $k \bar{v} v d^{\text {a/ }}$ |
| $d \bar{v} g^{\varepsilon}$ | $d \bar{v} g \bar{u} d^{\text {a/ }}$ |
| $k u \bar{l}{ }^{\varepsilon}$ | kūn ${ }^{\text {na/ }}$ |
| $y a \bar{d} \mathrm{~g}^{\text {g/ }}$ | yādıgíd ${ }^{\text {a }}$ |
| mōol ${ }^{\text {¢/ }}$ | móon ${ }^{\text {na }}$ |
| dī $\mathrm{i}_{\text {l }} \mathrm{l}^{\varepsilon /}$ | dì gín ${ }^{\text {na }}$ |
| $n \overline{k^{\varepsilon /}} \quad / \mathrm{kk} /$ | $n \bar{k} i^{\text {d }}{ }^{\text {a }}$ /kk/ |
| lā ím $^{\mathrm{m}} / \mathrm{y} \mathrm{y} /$ | $\text { lāทím }{ }^{\mathrm{ma}} / \mathrm{y} \eta /$ |
|  | dīgī̀a/ |

"She didn't cook."
"Didn't she cook?"
"And she cooked it."

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:

| $t \overline{o ̄} m^{\mathrm{m} /}$ | SF tōom | LF tóวmm | "disappear" |
| :--- | :--- | :--- | :--- |
| pāe | SF pāe | LF pāée | "reach" |

For the tonemes of stative verbs like $k p i ̄ 1$ 'əm ${ }^{\mathrm{ma} /}$ "be strong" see 9.1.2.1. Fusion verbs show no sign of $* g$ in the imperfective tonally, or in agent nouns:

| pāel | pāad ${ }^{\mathrm{a} /}$ | "reach" |
| :--- | :--- | :--- |
| $d \bar{̣} ' e^{\prime}$ | $d \bar{̣}{ }^{\prime} \ni d^{\mathrm{a} /}$ | "get" |
| pūn̆'el | pūn̆' $\theta d^{\mathrm{a} /}$ | "rot" WK |

Contrast the corresponding gerunds: páar $d i^{\prime} \partial r^{\varepsilon} p u ́ n ̆ ' ө r^{\varepsilon}$.
Pattern A shows all tonemes L in indicative and imperative, all M in irrealis. Historically, indicative and imperative ipfv forms did not become all-M despite having a M flexion because they incorporated a Pattern-L-deriving derivational suffix; the allM irrealis shift perhaps reflects a non-dummy pfv irrealis flexion $-l$, with the much less frequent ipfv irrealis forms following the analogy of the pfv.

| $b u d^{\varepsilon}$ | $b \grave{t} t^{\text {a }}$ | "plant" |
| :---: | :---: | :---: |
| di | $d i t^{\text {a }}$ | "eat" |
| $m \check{\text { m }}$ | $m \dot{\varepsilon} \varepsilon d^{\text {a }}$ | "build" |
| $z a ̀ b^{\varepsilon}$ | $z a ̀ b i ̀ d^{\text {a }}$ | "fight, hurt" |
| bùel ${ }^{\varepsilon}$ | bùon ${ }^{\text {na }}$ | "call" |
| bòdì ${ }^{\text {® }}$ | bòdıgìd ${ }^{\text {a }}$ | "get lost, lose" |
| $n \grave{1} \eta^{\varepsilon}$ | nị̀jì ${ }^{\text {a }}$ | "do" |
| màal ${ }^{\text {a }}$ | màan ${ }^{\text {na }}$ | "sacrifice" |
| dìgìn ${ }^{\text {c }}$ | dìgını̀ ${ }^{\text {a }}$ | "lie down" |
| wànı̀m ${ }^{\mathrm{m}}$ | wànìm ${ }^{\text {ma }}$ | "waste away" |
| zàan̆sìm ${ }^{\text {m }}$ | zàaňsìm ${ }^{\text {ma }}$ | "dream" |
|  | tàbìya | "be stuck to" |
|  | vèn ${ }^{\text {na }}$ | "be beautiful" |

Ò kv̀ $z a ̄ b \bar{\varepsilon}$.
Ò kù bōdıgē.
Ò nà bòdıgè $\varepsilon$ ?
Ò kù bōdıgīdā.
Ò kì būөnnā.
"She won't fight."
"He won't get lost."
"Will she get lost?" 4.1
"She won't be getting lost."
"She won't be calling."

$$
\begin{array}{ll}
\text { Ò kù bōdıgī=má. } & \text { "He will not lose me." } \\
\text { Ò kv̀ bōdıgīdī=má. } & \text { "He won't be losing me." }
\end{array}
$$

The LF before the bound pronoun ${ }^{\circ}$ can show final M or H (all WK):
$\quad$ Ò kù zābó=o.
or $\quad$ Ò kù zābō $=o$.

"He won't fight him."<br>"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 4.2. Left-bound particles with SF $C V$ which are not liaison enclitics carry M or L ; M changes to H in the LF CVV. Tonally unique is independentperfective $y \bar{a} 16.5$, which remains M before the negative clitic and becomes L before the interrogative clitics $\underline{4.1}$ :

Lì bòdìg néc?
Lì bòdìg yàa?

Is it lost?" (focus-n $\bar{\varepsilon}$ )
"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. Gịhīlím ${ }^{\mathrm{m}}$ "shortness", from the Pattern A adjective gị $\eta^{\mathrm{a}}$ "short", possibly represents a five-mora-stem Pattern A toneme allocation (but cf gịinhlím ${ }^{\mathrm{m}}$ id.)

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

| áňsì $b^{\mathrm{a}}$ | "maternal uncle" | ān̆sín $\eta^{\mathrm{a}}$ | "sister's child" |
| :--- | :--- | :--- | :--- |
| kị́sù $g^{\text {o }}$ | "hateful" | kịs $s^{\mathrm{a} /}$ | "hate" |
| gósì $g^{\mathrm{a}}$ | "looking" | $g \overline{s^{\varepsilon}}$ | "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:

| bịig | "child" | bịilím |  |  |
| :--- | :--- | :--- | :--- | :--- |
| nà'ab | "childhood" | $(-l-)$ |  |  |
| nā | "chief" | nä'am | "chiefship" | $(-m-)$ |

When added to L or A roots the derivational suffixes $b g l s$ always produce Pattern L nominals, while $d m n$ may produce either Pattern L or Pattern A.

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" | $d \bar{v} g u ̄ b^{\prime /}$ |
| :---: | :---: | :---: |
| $n{ }^{\text {a/ }}$ | "take" | nōkír ${ }^{\text { }}$ |
| dī $\mathrm{i}_{1} \mathrm{l}^{\varepsilon /}$ | "lay down" | dīgılógo |
| $m غ ̀$ | "build" | $m \bar{\varepsilon} \varepsilon b$ |
| sùn ${ }^{\varepsilon}$ | "help" | sùnìr ${ }^{\text {c }}$ |
| digin ${ }^{\varepsilon}$ | "lie down" | dìgını̀ ${ }^{\text {a }}$ |
| zàan̆sìm ${ }^{\text {m }}$ | "dream" | zàan̆sv́n ${ }^{\text {a }}$ |

Gerunds derived with $* d$ from Pattern A verbs are likewise Pattern L: bòodìm ${ }^{\mathrm{m}}$ "will", mغ̀ $\varepsilon d i ́ m-t a ̄ a$ "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 explains the merger of Patterns L and A dynamic ipfv as a L-type form which does not change to all-M in the indicative, despite having a non-dummy flexional suffix.

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 mapped into those of dynamic verbs 9.1.2.1.

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

| from Pattern H verbs |  | Pattern H |
| :--- | :--- | :--- |
| from Pattern A verbs: | containing derivational - $d-$ <br> otherwise | Pattern A <br> Pattern L |

The suffix ${ }^{*} d$ in these formations is Pattern-A-deriving: b̄̄odīr $r^{\varepsilon}$ "desirable", $m \bar{\varepsilon} \varepsilon d \bar{l} \eta^{\mathrm{a}}$ "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. Tone sandhi follows apocope and the independency tone overlay 16.5 . M dropping and the changes before interrogative clitics apply before other tone sandhi rules, which then apply left to right.

Sandhi after words with flexional suffixes (other than dummy suffixes 3.3) differs from sandhi after other forms: sàn̆-kàyā "this blacksmith", sāĕn lā "the blacksmith"; Toende Kusaal shows differences with apocope too 3.2.

### 4.1 Prosodic clitics

Prosodic clitics have no segmental form, but cause a preceding word to appear as a Long Form, completely suppressing apocope. (On clitics without segmental form cross-linguistically, see Spencer and Luís 2012: 5.5.1.)

Before prosodic clitics short LF-final $\imath v$ become $\varepsilon$ r respectively, realised slightly closer than as root vowels. Final iə uө diphthongise to ia ua: pfv LF kịa "cut" vs ipfv kịəd, pfv LF kūa "hoe" vs ipfv kūed. Overlong monophthongs reduce to long, resulting in words which have segmentally identical SF and LF:

| buta | "waist" | SF sịa | LF sịāa *īa | *siəga |
| :--- | :--- | :--- | :--- | :--- |
|  | "dog" | SF bāa | LF bāa | *baaga |
|  | $k \bar{v}+{ }^{+}$ | "kill him/her" | SF kv́o | LF kv́o [kv:] *kvo=o |

Before prosodic clitics and also with apocope-blocking, final -mı and -mv become - $m m$ whenever the $m$ is not geminated. The final $m$ was presumably once syllabic, but currently - mm is non-tone-bearing [m:].

The negative prosodic clitic appears at the end of a clause containing a negated or negative verb 16.4. (Mooré uses segmental yé in the same way.) Superscript notation represents LFs as they appear before the negative clitic segmentally, with lowering of short final $\tau v$ to $\varepsilon$; long $u v v$ are not lowered:

> Lì kā' nóbır $\bar{\varepsilon}=\varnothing$.
> 3IN NEG.BE leg:SG=NEG.

Lì $k \bar{a} ' \quad d \bar{v} k o ́=\varnothing . \quad ~ " I t ' s ~ n o t ~ a ~ p o t ~\left(~ d v ̄ k^{\rho}\right) . "$
3IN NEG.BE pot:SG=NEG.

Bà kā' mólīı=ø.
3PL NEG.BE gazelle:PL=NEG.
"It's not a leg (nóbìre)."
"They are not gazelles (mòlì)."

LF-final L syllables are changed to M before the negative clitic:

| mòlı̀ | "gazelles" | SF mòlı̀ | LF mòl̄̄ı |
| :--- | :--- | :--- | :--- |
| yàarı̀m |  |  |  |
| t | "salt" | SF yàarìm | LF yàarīmm |
| ț $^{\mathrm{m}}$ | "medicine" | SF tìım | LF tīımm |

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

Lì ká' ò tīımm.
but Lì kā' tîımm.
Lì ká' bà dā'a.
but Lì kā' dá'a.
"It's not her medicine (tìım ${ }^{\mathrm{m}}$ )."
"It's not medicine."
"It's not their market (dà'a)."
"It's not a market."

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 ${ }^{\text {/ }}$ | "shirt, clothes" | SF fūug | LF fūugó |
| :---: | :---: | :---: | :---: |
| pāe ${ }^{\prime}$ | "reach" | SF pāe | LF pāée |
| nūa' | "hen" | SF nūa | LF nūáa |
| $y \bar{a}^{\prime}$ | "houses" | SF $y \bar{a}$ | LF yáa |
| bèdvgō/ | "a lot" | SF bèdvgō | LF bèdvgóv |
| gāan̆' | "Nigerian ebony" | SF gāan̆ | LF gáan̆ |
| tāun̆ ${ }^{\prime}$ | "opposite-sex sib" | SF tāun̆ | LF távn̆ |
| dāam ${ }^{\text {m/ }}$ | "millet beer" | SF dāam | LF dáamm |
| $v \bar{u} \mathrm{~m}^{\mathrm{m} /}$ | "life" | SF vōm | LF vómm |

Before the SF of ${ }^{0}$ "him/her", a Pattern H perfective ending in a root vowel has H toneme, but the overlong diphthong formed with the LF o carries MH:
$\check{n} y \bar{\varepsilon}+{ }^{0} \quad$ "see him/her"
SF n̆yćo
LF n̆yz̄ó $=o$

LFs of the same form appear with some single-word clause adjuncts. KB consistently writes such adjuncts with final $\varepsilon \rho$ rather than $l v$.
bozugo ba zi' one tomi m la naa.
bō zúgō, bà zī' ónì tv̀mì=m lā náa=ø.
because 3PL neg.Know rel.an send=1SG ART hither=neg.
"Because they do not know him who sent me here." (Jn 15:21)

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

Occasional examples of such LFs are seen ending yà'-clauses:

Kikirig ya'a mor buude, fun tis o ka o lebig o moogin.
Kỉkịrīg yá' mōr būvdē, fūn tísò=ø kà ò lèbìg ò mōogū=n.
Fairy:SG if have innocence, 2SG.CN give=3AN and 3AN return 3AN grass:SG=LOC.
"When a fairy is right agree so that it will go back to the bush." KSS p38

The vocative clitic ends a vocative clause. It has similar effects to the negative clitic, although the audio NT version sometimes shows a change of final M tone to falling.
M $\quad$ bịi $s \bar{\varepsilon}=\varnothing!$
1SG child:PL=VOC!

Lem na, lem na, fun kane an Sulam tej nida!
Lદ̀m nā, lèm nā, fūn-kánì àn̆ Sulam tén nị̀dā=ø! Return:IMP hither, return:IMP hither, 2SG-REL.SG cop Shulam land:sG person:SG=voc! "Return, return, O Shulammite!" (Sg 6:13)

The two interrogative prosodic clitics end questions. Final vowel length distinctions are neutralised to short in content questions, long in polar questions.

```
Ànó'onì ø n̆y\overline{\varepsilon} nóbır\varepsiloǹ=ø? "Who saw a leg (nóbìr}\mp@subsup{r}{}{\varepsilon})\mathrm{ ?"
Who cat see leg:SG=CQ?
Lì à n\overline{\varepsilon} nóbır\varepsiloǹ\varepsilon=\varnothing? "Is it a leg?"
3IN COP FOC leg:SG=PQ?
```

Ànó'onì n̆y $\bar{\varepsilon}$ kúkà?
Ànó'oǹ̀ n̆yc̄ dūkó?
Ànó'onì n̆yc̄ móli?
Ànó'oǹ̀ n̆y $\bar{\varepsilon}$ bédvgó?
"Who saw a chair ( $k \bar{v} k^{\mathrm{a}}$ )?"
"Who saw a pot ( $d \bar{v} k^{\mathrm{J} / ? "}$
"Who saw gazelles (mòlı̀)?"
"Who saw a lot (bèdvgō/)?"

Kusaal signals questions with a final falling intonation. All questions end with a L or H toneme. Both interrogative 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 4.4. In Kusaal (unlike Dagbani) this lowering only affects the final word, not a sequence of several all-M words.

Ànó'onì ø ňyć bà bịigà=ø? "Who saw their child (bịi ${ }^{\text {a }}$ )?"
Who cat see 3Pl child:SG=CQ?

Ànó'onì n̆yc̄ bịíià?
Ànó'onì n̆yc̄ sú'vgà?
Fù bôod bó?
Ànó'onì n̆y $z$ zuéyà?
M̀ ná bōdīg.
M̀ ná bòdıgè $\varepsilon$ ?
Ò p $\bar{v} d \bar{v} g \bar{\varepsilon}$.
Ò pū dúgè $\varepsilon$ ?
"Who saw a child?" tonally identical to
"Who saw a knife (sù'vga)?"
"What (bō) do you want?"
"Who saw hills (zuēēā)?"
"I will get lost."
"Will I get lost?"
"She didn't cook."
"Didn't she cook?"

### 4.2 Liaison

Liaison words prevent apocope applying to the preceding word, which retains its final LF vowel, but with loss of quality and length contrasts. Final short vowels become $t$, for some speakers replaced by $v$ after $g$ preceded by a rounded root vowel. Final -mm behaves as -mı. All final diphthongs become 2-mora monophthongs; final -ya is dropped, and the preceding vowel similarly becomes a 2-mora monophthong.

The pl suffixes $-a-l$, apocope-blocked forms, and the final vowels of bound words do not change segmentally before liaison.

Certain liaison words then induce new changes to the final LF vowel.
Liaison enclitics are always preceded by liaison. They are joined to the preceding word by $=$. The locative particle $n^{\varepsilon} \underline{13.2}$ attaches after nominal sg or pl forms; discontinuous-past $n^{\varepsilon} \underline{16.2 .2}$ and the postposed 2 pl subject pronoun ya 17.1.3 attach after verb forms. The bound object pronouns $m^{\mathrm{a}} f^{\text {o o }}$ lı tı ya ba 12.3.1 attach directly to a verb word or after $n^{\varepsilon}$ or ${ }^{\text {ya }}$. Nominaliser- $\grave{17.3}$ follows complete NPs.

| $k \bar{v} k^{\text {a }}$ | "chair" | $+n^{\varepsilon}$ | "at" | $\rightarrow$ | $k \bar{u} k \bar{l}=n^{\varepsilon /}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $d \bar{v} k^{\text {a/ }}$ | "pot" | $+n^{\varepsilon}$ | "at" | $\rightarrow$ | $d \bar{v} k i ́=n^{\varepsilon}$ |
| pōog ${ }^{\text {/ }}$ | "field" | $+n^{\varepsilon}$ | "at" | $\rightarrow$ | pōogú= $n^{\varepsilon}$ |
| yàvg ${ }^{\text {ºm }}$ | "grave" | $+n^{\varepsilon}$ | "at" | $\rightarrow$ | yàvg $\bar{v}=n^{\varepsilon /}$ |
| kù'өm ${ }^{\text {m }}$ | "water" | $+n^{\varepsilon}$ | "at" | $\rightarrow$ | $k u ̀ ' ө m \bar{l}=n^{\varepsilon /}$ |
| $\check{n y y \bar{\varepsilon}}$ | "see" | $+m^{\text {a }}$ | "me" | $\rightarrow$ | $\check{n} y \varepsilon ́ \varepsilon=m^{\text {a }}$ |
| kià | "cut" | $+l$ | "it" | $\rightarrow$ | $k i ̣ \partial=1 \bar{l} /$ |
| dà'a | "market" | $+n^{\varepsilon}$ | "at" | $\rightarrow$ | $d \bar{a}^{\prime} a=n^{\varepsilon /}$ |
| pāe ${ }^{\text {d }}$ | "reach" | $+t ı$ | "us" | $\rightarrow$ | páa $=t \overline{\mathrm{l}}$ / |
| pịe ${ }^{\text {/ }}$ | "wash" | $+t ı$ | "us" | $\rightarrow$ | $p!̣ ⿱=t i \bar{l}$ |
| $d \bar{u} e^{\prime}$ | "raise" | $+t ı$ | "us" | $\rightarrow$ | $d u ́ \theta=t \bar{l} /$ |
| $s \bar{u}^{\prime} e^{\text {ya/ }}$ | "own" | $+l$ | "it" | $\rightarrow$ | sú'v $=1 \bar{l} /$ |
| $v \bar{u} e^{\text {ya/ }}$ | "live" | $+n^{\varepsilon}$ | dp | $\rightarrow$ | $v \bar{v} v=n^{\varepsilon /}$ |

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

| but | $B a ̀ ~ b o ̀ o d i ̄=y a ́ . ~$ |  | "They love you." |
| :---: | :---: | :---: | :---: |
|  | Kà bà ňyć $=y$ ā. |  | "And they saw you (pl)." (ňys "see") |
|  | Kà bà kv́e=yā. | [korja] | "And they killed you (pl)." (kv̄ "kill") |
|  | Kà bà kịe=yā. | [kirja] | "And they cut you (pl)." (kià "cut") |
|  | Kà bà páa=bā. |  | "And they reached them." (pāe/ "reach") |
| but | Kà bà páe=yā. |  | "And they reached you (pl)." |

The spurious pronoun $u f$ "you" of older texts $\underline{3.1}$ creates purely orthographic "diphthongs": gban'e uf "seize you" (Mt 5:40, 1996) KB gban'af, gbán̆' $a=f$.

The 3sg animate object pronoun ${ }^{\circ}$ "him/her" and the postposed 2 pl 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 ${ }^{0}$ becomes $o 3.1$ [ $\left.\overline{3}\right]$. In the LF this mora fuses with the [ v$]$ of the LF of the pronoun itself as [ $\mho:$ ], written $o=o$ :

| bòod ${ }^{\text {a }}$ | "want" | $+{ }^{0}$ | $\rightarrow$ | SF bòodō | LF bòodó=o [bo:dv:] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| tòm ${ }^{\text {m }}$ | "send" | $+{ }^{0}$ | $\rightarrow$ | SF tùmò | LF tùmò $=0$ |
| $\check{n} y \bar{\varepsilon}$ | "see" | + ${ }^{\circ}$ | $\rightarrow$ | SF n̆yćo | LF $\check{n} y \bar{\varepsilon} o ́=0$ |
| $z \bar{u}$ | "steal" | $+{ }^{0}$ | $\rightarrow$ | SF zúo | LF zūó=o [zư:] |
| $d i$ | "eat" | $+{ }^{\circ}$ | $\rightarrow$ | SF dio | LF dìò=o |
| kìà | "cut" | $+{ }^{0}$ | $\rightarrow$ | SF kịo | LF kịò=o |
| pāe ${ }^{\prime}$ | "reach" | $+{ }^{0}$ | $\rightarrow$ | SF páo | LF pāó=o |
| pịe ${ }^{\text {/ }}$ | "wash" | $+{ }^{\circ}$ | $\rightarrow$ | SF pịo | LF pịóo $=0$ |
| dūe ${ }^{\prime}$ | "raise" | $+{ }^{0}$ | $\rightarrow$ | SF dúo | LF dūó=o |
| àeñ̆ ${ }^{\text {ya }}$ | "be" | $+{ }^{\circ}$ | $\rightarrow$ | SF ān̆o | LF àn̆ó=o [ãṽ:] |

Before ${ }^{\text {ya }}$ the preceding mora becomes [r] even after front root vowels:

|  | gòsìm ${ }^{\text {a }}$ | "look!" | + ya | $\rightarrow$ | SF gòsımī |  | LF gòsımi $=$ yá |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $k \bar{v}$ | "kill" | + ya | $\rightarrow$ | SF $k \bar{v} e$ | [koi] | LF $k \bar{v} e=y a ́$ |
|  | kìa | "cut" | + ya | $\rightarrow$ | SF kịe | [kir] | LF kịe = yá |
|  | pāe ${ }^{\prime}$ | "reach" | + ya | $\rightarrow$ | SF pāe |  | LF pāe=yá |
|  | pịe ${ }^{\text {/ }}$ | "wash" | + ya | $\rightarrow$ | SF pịe |  | LF pịe = yá |
|  | $d \bar{u} e^{\prime}$ | "raise" | + ya | $\rightarrow$ | SF dūe |  | LF dūe=yá |
| and |  | "be" | + ya | $\rightarrow$ | SF bē $\quad 1$ | [ber] | LF b $\bar{\varepsilon}^{\text {c }}$ = yá |

Except for nominaliser-ǹ, liaison enclitics carry H after host-final M toneme and M after L or H . Liaison-enclitic SF-final M becomes H before prosodic clitics.
$\grave{M}$ bóvdī=bá.
Kà m̀ zábì=bā.
Kà m̀ pū zábì=fō.
Kà m̀ kv́v=bā.
Kà m̀ pū zábì=báa.
Ànó'onì kúv=bá?
"I love them."
"And I fought them."
"And I didn't fight you."
"And I killed them."
"And I didn't fight them."
"Who has killed them?"

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

| but | pว̄og ${ }^{\text {/ }}$ | "field" | $+n^{\varepsilon}$ | $\rightarrow$ pōogú= $n^{\varepsilon}$ | WK |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | bịi ${ }^{\text {a }}$ | "child" | $+n^{\varepsilon}$ | $\rightarrow$ bịig $\bar{\imath}=n^{\varepsilon /}$ |  |
|  | mò'ar ${ }^{\text {e }}$ | "dam, lake" | $+n^{\varepsilon}$ | $\rightarrow$ mù'arī $=n^{\varepsilon /}$ |  |
|  | yàad ${ }^{\text {® }}$ | "graves" | $+n^{\varepsilon}$ | $\rightarrow$ yàadi $=n^{\varepsilon /}$ | WK |
|  | kv̄vdíb ${ }^{\text {a }}$ | "killers" | $+n^{\varepsilon}$ | $\rightarrow k \bar{v} v d i ́ b i ̄=n^{\varepsilon /}$ | WK |

Discontinuous-past $n^{\varepsilon}$ and $2 \mathrm{pl}{ }^{\text {ya }}$ always impose M on the preceding syllable:

|  | $d \bar{v} g^{\varepsilon}$ | "cook" | $+n^{\varepsilon}$ | $\rightarrow d \bar{v} g \bar{v}=n^{\varepsilon /}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | bòdìg ${ }^{\text {e }}$ | "lose" | $+n^{\varepsilon}$ | $\rightarrow$ bòdıgī $=n^{\varepsilon /}$ |  |
|  | $y a ̄ d i ̄ g^{\varepsilon /}$ | "scatter" | $+n^{\varepsilon}$ | $\rightarrow$ yādıgī $=n^{\varepsilon /}$ |  |
| ipfv | $k \bar{v} d^{\text {a/ }}$ | "kill" | $+n^{\varepsilon}$ | $\rightarrow k \bar{v} v d \bar{l}=n^{\varepsilon /}$ |  |
|  | dōıla/ | "follow" | + ya | $\rightarrow$ dōllī | LF dōllī = yá |

Indicative perfective forms without independency-marking tone overlay change LF-final $M \rightarrow H$ before bound object pronouns; final $L$ and $H$ are not affected. Pattern H fusion verb perfectives here behave exactly like $C V V$-stems.

|  | bòdì ${ }^{\varepsilon}$ | "lose" | $+m^{\text {a }}$ | "me" | $\rightarrow$ bòdıgì $=m^{\text {a }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | dì | "eat" | $+l$ | "it" | $\rightarrow$ dìl $=1 \bar{l} /$ |  |
|  | yādī $\mathrm{g}^{\varepsilon /}$ | "scatter" | $+m^{\text {a }}$ | "me" | $\rightarrow$ yādıgí= $\mathrm{m}^{\text {a }}$ |  |
| but | $d \bar{v} g^{\varepsilon}$ | "cook" | $+l$ | "it" | $\rightarrow d \bar{v} \mathrm{~g}^{\prime}=l \bar{i} /$ |  |
|  | $g \bar{\sim} s^{\varepsilon}$ | "look" | $+{ }^{\circ}$ | "him/her" | $\rightarrow$ gōsó | LF $g$ ว̄só=o |
|  | $k \bar{v}$ | "kill" | $+m^{\text {a }}$ | "me" | $\rightarrow k$ v́v $=m^{\text {a }}$ |  |
|  | pāe ${ }^{\prime}$ | "reach" | $+m^{\text {a }}$ | "me" | $\rightarrow$ páa $=m^{\text {a }}$ |  |
|  | dị'el | "get" | + ba | "them" | $\rightarrow d i^{\prime} \partial=b \bar{a}^{\prime}$ |  |

After all other verb forms, object pronouns change LF-final L to M:

| $z a ̀ b i d^{\text {a }}$ | "fights" | $+m^{\text {a }}$ | "me" | $\rightarrow$ zàbıdī $=m^{\text {a/ }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| zàbìd ${ }^{\text {a }}$ | "fights" | $+{ }^{\circ}$ | "him/her" | $\rightarrow$ zàbıdō | LF zàbıdó=o |
| yādı íd $^{\text {a }}$ | "scatters" | + ba | "them" | $\rightarrow$ yādı $\mathrm{gíd}^{\text {di }}=$ bá |  |
| yādı $\mathrm{gíd}^{\text {a }}$ | "scatters" | + 0 | "him/her" | $\rightarrow$ yādıgídō | LF yādıgídó=o |
| $k \bar{v} d^{\text {a/ }}$ | "kills" | $+m^{\text {a }}$ | "me" | $\rightarrow k \bar{v} v d i ́=m^{\text {a }}$ |  |
| $k \bar{v} d^{\text {a/ }}$ | "kills" | $+{ }^{\circ}$ | "him/her" | $\rightarrow$ kūvdó | LF kv̄vdó=o |

With independency-marking:

| bòdì ${ }^{\text {® }}$ | "lose" | $+m^{\text {a }}$ | "me" | $\rightarrow$ bj̀dıgī $=m^{\text {a/ }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| bòdìg ${ }^{\text {c }}$ | "lose" | $+{ }^{0}$ | "him/her" | $\rightarrow$ bòdıgō | LF bòdıgó=o |
| yādī ${ }^{\text {// }}$ | "scatter" | $+m^{\text {a }}$ | "me" | $\rightarrow$ yàdı $\mathrm{g}_{\mathrm{i}}=\mathrm{m}^{\mathrm{a} /}$ |  |
| yādī $\mathrm{g}^{\varepsilon /}$ | "scatter" | $+{ }^{\circ}$ | "him/her" | $\rightarrow$ yàdıgō | LF yàdıgó=o |

The sequence $o=o$ forms a tautosyllabic long vowel; thus word-final $\bar{o}$ becomes $o ́=o$ before prosodic clitics, and $\grave{o}$ becomes $\bar{o}=o$ before the negative clitic:

Kà bà zábò.
Kà bà pū zábō=o.
"And they fought him."
"And they didn't fight him."

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

Kà bà n̆yźo.
Kà bà $p \bar{u} \check{n} y \bar{\varepsilon} o ́=o$.
"And they saw her."
"And they didn't see her."

The irrealis of Pattern A verbs has M before liaison; final $o=o$ can be H or M :

Ò nà $b \bar{\partial} d ı g \bar{\imath}=m$.
Ò nà bōdıgī=bá.
Ò kù bōdıgīdī=má.
Ò kù zābó=o/zābō=o.
"He will lose me."
"She will lose them."
"He won't be losing me."
"He won't fight him."

Liaison enclitics reduced to a single consonant by apocope close the final syllable of the preceding word; thus X toneme is not changed to H in e.g.

Kà bà $k i ̣ \theta=m . \quad$ "And they cut me."

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

Ò bè né dâ' $a=n$.
Dāu lā $m \hat{\varepsilon} \varepsilon=n$.
Dāư lā $k \hat{v} v=m$.
"She is at market"
"The man built (earlier today.)"
"The man has killed me."

The toneme on the enclitic itself is the same as it would have been without the toneme changes induced by preceding words:
Ò $k \bar{v} v=b a ́$.
Dāu lā kúv=bá.
"She has killed them."
"The man has killed them."

The pronoun ya becomes -ní- before liaison. The pronoun was historically *na, regularly becoming *yã 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 $r$, before which $n$ became $n$-. (Cf also $n i ̣ ̀ \eta^{\varepsilon}$ "do" $=$ Toende Kusaal ể $\eta$, locative $n^{\varepsilon} \sim n \bar{\imath} /=$ Toende $-\imath$, nịe "appear" $=$ Toende yẽe, nị̀ $\eta^{\mathrm{a}}$ "body" $=$ Mooré yĩnga.)

$$
\begin{array}{ll}
D \bar{a} \quad d \overline{o l l l i}=y a ́=\varnothing! & \text { "Follow ye not!" } \\
\text { NEG.IMP follow=2PL.SUB=NEG! } &
\end{array}
$$

$D \grave{l}^{\prime} \quad \partial m \bar{\imath}=\varnothing$ !
Receive:IMP=2PL.SUB!

Dị' $\partial m \bar{\imath}=n i ́=b a \bar{l}$ !
Receive:IMP=2PL.SUB=3PL.

> Dị'əmī=nó=ø!

Receive:IMP=2PL.SUB=3AN.

$$
\text { Dị'əmī=ní } \quad \text { àlá! } \quad \text { "Keep ye on receiving!" }
$$

Receive:IMP=2PL.SUB ADV:thus!

Biise, siakimini ya du'adib nэya.
Bịiis $\bar{\varepsilon}=\varnothing, \quad$ siàkìmī=ní yà dv̄'adīb nóyà.
Child:PL=VOC, agree:IMP=2PL.SUB 2PL parent:PL mouth:PL.
"Children, obey your parents." (Eph 6:1)

Nominaliser-ǹ is bound to both left and right. It fuses with preceding pronoun subjects 12.3.1; my informants have segmental zero in all other contexts. Texts often show $n$ and/or liaison, though $n$ is usually omitted after words with SFs ending in nasal consonants; in KB, $n$ (without liaison) occurs mostly after foreign proper names.
ya zuobid wosa kalli an si'em
yà zūөbíd wūsā kāllí= $=\quad$ àn̆ sị'əm
2PL hair:PL all number:SG=NZ COP INDF.ADV
"how much the number of all your hairs is" (Lk 12:7)

Nominaliser-ǹ has a fixed-L toneme 4.4. Except after subject pronouns, the change of a preceding M toneme to H is often the only sign of its presence:
dāu lá=ø zàb nà'ab l̄a "the man having fought the chief" man:SG ART=NZ fight chief:SG ART

Non-enclitic liaison words comprise the pronouns m̀ fù ò lì tì yà bà, the personifier à/n 12.5.1, catenator-n, all words with the number prefixes à bà bù or the manner-adverb prefix à, and ànô'on ${ }^{\varepsilon}$ "who?" Liaison before these words is marked in glossing. It is consistent only with pronouns after a verb within a VP:

```
Tì gósí` bà bịis. "We looked at their children."
1PL look.at 3PL child:PL.
```

The quality of the final vowel mora before liaison words beginning with $\grave{a}$ - is not predictable from the phonology alone. Before ànô'on ${ }^{\varepsilon}$ "who?", the manner-adverb prefix $\grave{a}$ - and personifier-particle $\grave{a}$ - the forms are the same as before consonant-initial liaison words. Fusion-verb forms with final -e are probably simply orthographic: àan̆ "be" always appears as aan(n).

| Ò nị̀ní àlá. 3AN do ADv:thus | "She did thus." (contrast àlá "how many?" below) |
| :---: | :---: |
| yeli Abaa | "said to Dog" KSS p20 |
| yèlı̀ ${ }_{\text {A }}$-Bāa |  |
| say PERS-dog:SG |  |
| ... [n] loo Abaa zuur | "... tying Dog's tail" KSS p20 |
| ...n lóo À-Bāa zôvr |  |
| ...CAT tie PERS-dog:Sg tail:SG |  |
| ka ba gban'e Adayuug | "and they seized Rat" KSS p20 |
| kà bà gbáň'a À-Dàyūug |  |
| and 3PL seize PERS-rat:SG |  |

Ka fv aan ano'onc? "And who are you?" (Jn 1:19)
Kà fù áan̆ ànó'onغ̀=ø?
And 2SG COP who=CQ?

Before the number prefix $a$ - a pre-liaison short vowel is not $-\imath$ but $-a$ :
$\grave{M}$ mór n̄̄ bịisá àtán̆'. "I have three children."
1Sg have FOc child:PL NUM:three.
$\begin{array}{ll}\text { Pと̀ } \varepsilon d a ́ \_ \text {àlá=ø? } & \text { "How many baskets?" } \\ \text { basket:PL NUM:how.many=CQ? } & \text { (contrast àlá "thus" above) }\end{array}$

Informants contract -á à- to á- and -í à- to either -á- or -í-:
$N u ̄$ '-bịbìs álá kà fò ňy $\overline{\text { ñtá }}=\varnothing$ ?
hand-small:PL NUM:how.many and 2SG see:IPFV=CQ?
"How many fingers do you see?"

The number-prefix originated as ${ }^{*} \eta a-$, where ${ }^{*} \eta$ disappeared early throughout Western Oti-Volta; other $a$ - prefixes began with consonants which persisted long enough for consonant-initial sandhi to be preserved (cf French "H aspiré.")

WK and DK round LF-final $\imath$ before $\grave{o}$ "his/her", but all written sources have -i:

Ba gosi o biig.
"They've looked at her child."
Bà gòsú ò bịig.
3PL look:at 3AN child:SG.

Except for catenator- $n$, all non-enclitic liaison words begin with a fixed-L toneme 4.4. Preceding verb forms show the final tonemes seen before the enclitic object pronouns, and preceding nominal forms show the tonemes seen before the locative particle, but M becomes H before the fixed- L toneme of the liaison word:

Kà bà dìtí bà dīıb. "And they were eating their food."
And 3PL eat:IPFV 3PL food. (ML $\rightarrow$ HL: cf dìtī=bá "were eating them")
bane na yel Zugsobi ba tuuma a si'em la
bànì nà yz̄l Zūg-sóbí bà tv̄vmá=ø àn̆ sị’əm lā
rel.pl irr say Lord 3pl deed:PL=NZ Cop indF.ADV art
"Those who will tell the Lord how their deeds are." (Heb 13:17, 1996)

After pause, catenator-n 17.2 is a syllabic nasal assimilated to the position of the following consonant. Elsewhere, WK has liaison alone, except for words unchanged before liaison, where he has a consonantal nasal with assimilation of position. KB shows the same pattern. Older sources often show $n$ along with or instead of liaison.

Kà ò zóoø $k \bar{\varepsilon} \eta \quad n \bar{a} . \quad$ "And he came running"
And 3an run cat come hither.

```
Bōo` ø lá=ø? "What's that?"
What cat that=CQ?
```

tuvm kane ka m tommi tisid Wina'am la.
tùvm-kànì kà m̀ túmmì 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)

Catenator- $n$ is tonally null. The preceding final LF toneme is M after M toneme and $L$ otherwise; $M$ spreading follows whenever the preceding word would induce it:
amaa o kena ye o tom tisi ba
àmáa ò $k \bar{\varepsilon} \quad n a \bar{a}$ ý ò túm Ø $\quad$ tìsì=bā
but 3an come hither that 3AN work cat give=3pl
"but he came to serve them" (Mt 20:28)

M̀ nók sú'vgì Øø kịá nịm lā.
1Sg pick.up knife:SG cat cut meat:SG ART.
"I cut the meat with a knife."

### 4.3 Segmental contact

The initial consonant of postdependent ňwà "this" is assimilated after a consonant-final word, and $l \mathrm{~m} n$ are geminated; emic nasalisation is lost.
bịis ňwá
Zōn ňwá

The $l$ of the article $l \bar{a} /$ assimilates to word-final $-r$ :
pù-kòon̆r lāa "the widow" [pokõ:ra]

Initial $n$ of focus- $n \bar{\varepsilon}^{\prime}$ assimilates to a preceding word-final $d t n r l m$ in normal rapid speech, with $l m n$ geminated:

| Bà kpịid nē. | "They're dying." | [ba kpi:de] |
| :---: | :---: | :---: |
| M zót n̄̄. | "I'm afraid." | [mi zote] |
| M̀ mór nē bịisá àyị́'. | "I have two children with me." | [ṃ more bi:sa:ji] |
| Lì pè' $\varepsilon$ l n $\bar{\varepsilon}$. | "It's full." | [lı pę:l:ع] |
| Lì sàn̆'am n̄̄. | "It's spoilt." | [lı sã̃:m: ] |

Final $n m \eta$ of right-bound words adopt the place of articulation of following consonants, as does syllabic $\grave{n}$ but not $\grave{m}$ :

|  | nịn-bámmā | "these people" | [nimbam:a] |
| :---: | :---: | :---: | :---: |
|  | nàm zī' | "still not know" | [nanzin] |
|  | N-Bịl | Mbillah (personal name) | [mbil] |
| but | M n nónī $=$. | "I love you." | [m̧nonif] |

Within phrases, word-final short vowels denasalise before initial $n$ or $m$ :

```
àwá nā "like this here" (àňwá "like this")
k\overline{\varepsilon}n\overline{a}
```

Older sources write sukpi'oŋ supeen $a$ for sūn̆-kpị'o $o \eta^{\circ}$ "boldness", sūn̆-p $\varepsilon \hat{\varepsilon} n^{\text {n } \varepsilon}$ "anger", àn̆ "be" (KB sunkpi'euך, sunpecn, an.)

Fronting diphthongs ending cbs and non-VP-final verbs are monophthongised unless the next word begins with $y$ (with ie $\rightarrow i ə$, ue $\rightarrow u \theta$.) Thus sāeñ̆ lā "the blacksmith", but sàn̆-kànā "this blacksmith" and e.g.

Ò sù'v lór.
Dúe wēlá?
غ̇n̆rıgìm pāa dv́'atà.
"She owns (sū'e) a lorry."
"[You] arose (dūe) how?" (Morning greeting)
"Shift along up to (pāe) the doctor."

Ti ya'a vve, ti vone tis Zugssb la.
Tì yá' vv̄e, tì vú n $\bar{\varepsilon} \smile \varnothing$ tís $Z u ̄ g$-sób lā.
1PL if be.alive, 1Pl be.alive FOC cat give Lord art.
"If we live, we live to the Lord." (Rom 14:8)

Mānī ø án̆ dú'atà kà fūn mén áeñ.
1SG.CN CAT COP doctor:SG and 2SG.CN also Cop.
"I'm a doctor and you are too." WK
$\grave{M}$ á nē dú'atà. $\quad$ I'm a doctor." (see above on the loss of nasalisation)

This change is fairly recent: cf soiput (Haaf 1967) for sòn̆-pūta "witchfinder." It is often ignored in older texts: voen v $\bar{v} v=n$ "would live" (Gal 3:21, 1996), Kristo da faaen ti Kristo dá fāan̆=tí "Christ saved us" (Gal 5:1); analogical misspellings also occur, like faaenm for fàan̆m "save!" and even naae da for nāadá ipfv LF "end."

### 4.4 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. M spreading follows
all words ending in M toneme
all words not bound to the right
except for verb perfectives (unless ending in M) noun or adjective plurals ending in -á or -í certain forms affected by M dropping 4.5
bound subject pronouns

Independency marking affects $M$ spreading after subject pronouns, VP particles and verb forms 16.5. M spreading does not follow clause adjuncts. Its occurrence is otherwise unaffected by clause structure:

Bà tìs nâ'ab lā bún. "They gave the chief a donkey (bù $\eta^{\mathrm{a}}$ )."
3PL give chief:SG ART donkey:SG.

Bà n̆wè' nâ'ab lā súnā. "They beat the chief well (sùjā')."
3PL beat chief:SG ART good:ADV.

M spreading is absent after perfectives without tone overlay which do not end in M , and after nominal plurals in -á or - i :

Kà m̀ gōs nâ'ab lā.
but Kà m̀ záb nà'ab lā.
$\grave{M}$ dìgà lú yā. $\quad$ "My dwarfs have fallen down."
1SG dwarf:PL fall PFV.
but M̀ yūgomá lù yā. "My camels have fallen down."
"And I've looked at ( $g \overline{\mathrm{o}} \mathrm{s}^{\varepsilon}$ ) the chief (nà'ab ${ }^{\mathrm{a}}$ )." "And I've fought (zàb ${ }^{\varepsilon}$ ) the chief."

1SG camel:PL fall PFV.

Fixed-L words carry an initial/sole L toneme which is not subject to M spreading. All liaison words not bound to the left are fixed-L except for catenator- $n$ : right-bound personal pronouns m̀ fù ò lì tì yà bà, personifier à-/ǹ-, ànô'on ${ }^{\varepsilon}$ "who?", and all words with the number or manner-adverb prefixes $\grave{a}-b \grave{a}-b \dot{c}-$. Also fixed-L are the linker particle kà and all forms of nominaliser-n. Initial à in loanwords is usually treated as fixed-L by analogy.

If there is no intervening pause, a preceding M toneme must become H :

Bà kùvdí bà būvs. "They kill their goats."
3PL kill:IPFV 3PL goat:PL.

Lì à né à-dàalón. "It's a stork"
3IN COP FOC PERS-stork:SG.
wuu saa naani iank ya nya'aj n ti paae ya tuona la.
wūv sáa=ø nāanī íán̆k yà n̆yá'aך $n$ tí páe $y a ̀ ~ t u ̀ o n a ̀ ~ l a ̄ ~$
like rain:SG=NZ then jump 2PL behind cat once reach 2PL before.ADV ART
"like when lightning leaps from East to West" (Mt 24:27, 1996)

Fixed-L does change to M before the negative clitic; thus né tì "with us" but

Amaa o pv lal ne tii.
Àmáa ò pū lāl né tīı=ø.
But 3 SG neg.ind be.far with 1PL=NEG.
"But he is not far from us." (Acts 17:27)

After word-final M, the term "M spreading" is easily seen to be appropriate. Right-bound personal pronouns followed by M spreading bear M in ILK and Niggli's materials, which can be taken as having given rise to floating M tonemes in current Agolle. Historically, words with SFs ending in H or L which are followed by M spreading had LF-final M, delinked by apocope in the SF 3.8, but synchronically, M spreading after free words is largely determined by syntactic role: for example, words with identical L-final sg and cb, like mà "mother", zùà "friend", dú'atà "doctor", show M spreading after sg but not cb, and lànnìg "squirrel" shows tone sandhi unaffected even by the analogical addition of segments in the cb.

### 4.5 M dropping

M dropping takes place exclusively within NPs and AdvPs. It occurs after any free form as a predependent other than contrastive personal pronouns, and also after any cb ending in M toneme, whether as dependent or head. Historically, it may have arisen by dissimilation of adjacent $M$ tonemes to ML; cf Meeussens's Rule (Nurse and Phillippson p65) and the note on the origin of M spreading above.

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: dāu lā póog $\bar{v}=n$ "in the man's field $\left(p \bar{o} g^{\circ /}\right) . "$

Examples with a cb as head:

| bù-pị̀lì $\mathrm{g}^{\text {a }}$ | "white goat" | bì-pāalíg ${ }^{\text {a }}$ | "new goat" |
| :---: | :---: | :---: | :---: |
| bị-pón-pị̀lì ${ }^{\text {a }}$ | "white girl" | bị-púy-pāalíg ${ }^{\text {a }}$ | "new girl" |
| nō-pịəlì $g^{\text {a }}$ | "white hen" | nō-páalì ${ }^{\text {a }}$ | "new hen" |

With a cb as dependent (nכ̄כr $r^{\varepsilon /}$ "mouth", $d \bar{̣} ' \partial s^{\mathrm{a} / ~ " r e c e i v e r " ~ p l ~ d i ̣ ' ~} \partial s^{\prime} d i ̀ b^{\mathrm{a}}$ ):

$$
n \bar{\jmath}-d i ̣ ̂ ' \partial s^{\mathrm{a}} \quad \text { "chief's interpreter" } \quad \text { pl n̄̄-dị́'əsìdìb }{ }^{\text {a }}
$$

There is no M dropping after personal pronouns:

| m̀ bịig | "my child" | m̀ tìıg | "my tree" |
| :--- | :--- | :--- | :--- |
| mān bịig | "my child" | mān tî̀g | "my tree" |
| mān yūgóm | "my camel" | mān gbīgīm | "my lion" |

M dropping does occur after words which do not also induce M spreading:
m̀ bīēyá bịis $\quad$ "my elder same-sex siblings' children (bịiis ${ }^{\varepsilon}$ )"
m̀ biēyá fùud "my elder same-sex siblings' clothes (fūud ${ }^{\varepsilon /}$ )"

M dropping after free NPs also followed by M spreading:

| dāu bị̂ig | "a man's child" | nà'ab bị̂ig | "a chief's child" |
| :--- | :--- | :--- | :--- |
| dāūu là yúgòm | "the man's camel" | dāu lā gbígìm | "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 nâ'ab lā bị̂ig. "They've given (it) to the chief's child."
3PL give chief:SG ART child:SG. (M dropping applied to bịì ${ }^{\text {a }}$ "child")

Bà tìs nâ'ab lā bịìg. $\quad$ "They've given the chief a child."
3PL give chief:SG ART child:SG. (No M dropping applied to bịi ${ }^{\text {a }}$ )

It occurs regardless of the meaning or role of the preceding dependent:
$m \bar{o} o g \bar{v}=n$ wábùg lā $\quad$ "the wild (in-the-bush) elephant $\left(w a \bar{b} \bar{v} g^{\partial /}\right)$ "

M dropping follows cb heads, but never uncompounded heads:

```
    kūg-yínnì "one stone" with yínnì as adjective 12.4.1
but kūgv̄r yīnní "one stone"
wāb\overline{v}g l\overline{a}
wābīs pịigā "ten elephants"
```

The final element of a compound induces following M spreading in accordance with the usual rules 4.4 regardless of whether it has been subject to M dropping:

| bù-wōk | "tall goat" | nō-wók | "tall hen" |
| :---: | :---: | :---: | :---: |
| bù-wōk-pịəlìg | "tall white goat" | bì-wōk-páalìg | "tall new goat" |
| nō-wók-pịəlìg | "tall white hen" | nō-wók-pāalíg | "tall new hen" |
| bò-wōk dîıb | "tall goat's food ( $d \bar{\imath} \imath b^{\text {) }}$ ) ${ }^{\prime}$ | 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 (dāu lā) X has got lost (bj̀dìg yā)" and "my elder same-sex siblings' ( $\grave{m}$ bíēyá) X has got lost", with Pattern H and A nouns affected by M dropping:

| wābū ${ }^{\text {/ }}$ | "elephant" | Dāu lā wábòg bòdìg yā. |
| :---: | :---: | :---: |
| pōog ${ }^{\text {/ }}$ | "field" | Dāu lā pôog bòdìg yā. |
| $b \bar{a} \eta^{\text {a }}$ | "ring" | Dāu lā báy bòdìg yā. |
| $p \bar{v} v g^{\text {a }}$ | "inside" | Dāun lā pôvg bòdìg yā. |


| but | wābv̄ $g^{\prime /}$ | "elephant" | M̀ biēyá wàbv̀g bódìg yā. |
| :--- | :--- | :--- | :--- | no M spreading

Pattern L nouns are not subject to M dropping, and show unchanged following tone sandhi; by analogy, so do Pattern H nouns with an intrinsic initial H or X toneme, while words like náaf ${ }^{\text {" cow" fluctuate: }}$

| $b \grave{\prime} \eta^{\text {a }}$ | "donkey" | Dāu lā búy bódìg yā. |
| :---: | :---: | :---: |
| àn̆rù ${ }^{\text {a }}$ | "boat" | Dāư lā án̆rù ${ }^{\text {doud }}$ bódìg yā. |
| dòsg ${ }^{\text {a }}$ | "house" | Dāư lā dôog bódìg yā. |
| à-gâvn̆g ${ }^{\text {a }}$ | "pied crow" | Dāư là gâvn̆g bódìg yā. |
| náafo | "cow" | Dāu lā nâaf bódìg yā |
|  |  | Dāu lā nâaf bòdìg 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:

|  | dāu lā bv́-pìəlìg |
| :---: | :---: |
|  | dāu lā bú-pāalíg |
|  | dāu là nó-pị́əlìg |
|  | dāu lā nó-páalìg |
| but | dūg-kájā |
|  | [sālımā dúg-]kàjā |

> "the man's white goat (bù-pìəlìg)"
> "the man's new goat (bì-pāalíg)"
> "the man's white hen (nj̄-pịəlìg)"
> "the man's new hen (nō-páalìg)"
> "this pot" (dūk $k^{\circ /}$ cb dv̄ $g$ - "pot")
> "this [golden pot]"

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 dôog]<br>pò'vsv̀g [fûug dôog]

"tent" (fūug ${ }^{\text {/ }}$ "cloth", dòogo "house")
"tabernacle" (pù'vsùgo "worship")
but Lì kā' [[[dāu lā bịiig] bị̀ər] nâaf] zv̀vrē.
"It's not the man's child's elder-same-sex-sibling's cow's tail." WK


## 5 Noun flexion

### 5.1 Noun classes

Nouns inflect for number by adding noun class suffixes to the stem; the stem itself 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. Archaisms like nwadibil (Mt 2:2, 1996) for ňwād-bịla "star" (KB nwadbil) suggest that the dummy suffix after consonant-final cbs was formerly not completely deleted.

In the paradigms, noun forms are cited as $\mathrm{sg}, \mathrm{pl}$ and cb in order.
Each class suffix has a basic singular, plural or non-count meaning. Count nouns pair a singular with a plural suffix. The classes were once grammatical genders, with separate 3rd person pronouns and agreement of adjectives and numerals, but Kusaal now has a natural gender system opposing persons and nonpersons. Five pairings account for most count nouns, labelled using LFs of the suffixes, as the $a|b a, g a| s \varepsilon, g$ ว| $d \varepsilon, r \varepsilon \mid a a$ and $f \supset \mid \imath$ noun classes. Two unpaired noncount suffixes bo mm form two more noun classes mostly containing mass nouns. The current 3rd person pronouns are based on the original $a \mid b a$ and $r \varepsilon \mid a a$ classes.

An expected class suffix may be replaced by one from a different class if the regular form would be ambiguous. This has become regular with class $g \supset \mid d \varepsilon$ stems ending in $m n$ following a short vowel, which always use plural -aa instead of -d $\varepsilon$, as do all gerunds with sg go. Adjectives avoid ambiguous suffixes altogether.

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

The classes are thus as follows:

| $\begin{aligned} & a \mid b a \\ & \quad b a(\mathrm{sg}) \end{aligned}$ | $s i \bar{l} d^{a}$ <br> $n a ̀ ' a b^{a}$ | sīdīb ${ }^{\text {a }}$ <br> nà'-nàma | $\begin{aligned} & \text { sìd- } \\ & \text { nà'- } \end{aligned}$ | "husband" <br> "chief" |
| :---: | :---: | :---: | :---: | :---: |
| $g a \mid s \varepsilon$ | $b u \bar{v} g^{\text {a }}$ | $b \bar{v} v s^{\varepsilon}$ | bù- | "goat" |
| $g o \mid d \varepsilon$ | dò $g^{\circ}$ <br> bū' $\theta S v ́ g^{\circ}$ | dòวd ${ }^{\varepsilon}$ <br> bū'esá | dòbū' $\theta$ - | "hut" <br> "question" |
| $r \varepsilon \mid a a$ <br> $l \varepsilon$ | nว̄or ${ }^{\varepsilon /}$ <br> Kūsâal ${ }^{\varepsilon}$ | nōyá | n̄- | "mouth" <br> "Kusaal" |
| folu | mòlíf ${ }^{\text {a }}$ | mòlı | mòl- | "gazelle" |
| bo | $s \bar{a}^{\prime} a b$ |  | sà'- | "porridge" |
| mm | tìım ${ }^{\text {m }}$ |  | tì- | "medicine" |

In two contexts, the sg LF adopts the form proper to a different class suffix that would have produced the same SF: rounded vowels before -ga may result in LFs in -go, as in nû'ug "hand", and a|ba stems in ln rfollowing a short root vowel show LF $-\varepsilon$ with $l$ and $n$ geminated, as if the suffix were $r \varepsilon$, e.g $\operatorname{Bin}^{n} \varepsilon$ "Moba person."

Stems in -m in the $a \mid b a$ class avoid $\mathrm{pl} b a$; some human-reference $g a \mid s \varepsilon$ class nouns have alternative plurals with ba; countable $m m$ class nouns use pl -aa or -s or nàm ${ }^{\text {a }}$; the small fo|u class has members with fo|lı suffixes in only one number. A few other cases of irregular pairing mostly involve replacement of $\mathrm{pl}-d \varepsilon$ by other suffixes.

A few nouns end in -ı or $-v$ with apocope-blocking 3.2:
būudī
nà'asì
kābırí
sūgoru
bùud-

"tribe"<br>"honour"<br>"entry permission"<br>"forbearance"

They are probably loans from related languages without apocope, like kịibú "soap" from Mampruli. Cognates of būudī show that $-d \imath$ represents $\mathrm{pl} d \varepsilon$ : Mooré búudu "family, kind" sg búugu. Kābırí, sūgvrv́ may show equivalents of $\mathrm{sg} r \varepsilon$.

An alternative way of forming plurals is to use the word nàm ${ }^{\mathbf{a}}$, preceded by a dependent cb for a count noun (kpèعn̆m-nàm ${ }^{\text {a }}$ "elders"), or a $\mathrm{sg} / \mathrm{pl}$ form for a mass noun (sā'ab nám² "portions of porridge", bùgóm náma "fires.") Nàmª pluralises loanwords, pronouns, quantifiers, plural forms with singular meaning, mass nouns with count meaning, and forms with the personifier particle $\grave{a}-$. It is also used to avoid ambiguous regular plurals, and with

| mà | mà nám ${ }^{\text {a }}$ sic | mà- | "mother" |
| :---: | :---: | :---: | :---: |
| $b \bar{a}^{1 /}$ | bā'-nám ${ }^{\text {a }}$ | $b \bar{a} '-$ | "father" |
| zuà | zùà-nàm ${ }^{\text {a }}$ | zuà- | "friend" |

There are partial correlations between class and meaning (see also 8.2.)
The $a \mid b a$ class has exclusively human-reference membership.
The $g a \mid s \varepsilon$ class has general membership but includes most tree names, many larger animals, and tools. Most nouns referring to people belong to $a \mid b a$ or $g a \mid s \varepsilon$.

The $g o \mid d \varepsilon$ and $r \varepsilon \mid a a$ classes are the default non-human countable classes. They include all names of fruits, and about four out of five nouns for body parts. Humanreference nouns in $g \supset \mid d \varepsilon$ are pejorative: bāl $\bar{\varepsilon} r \bar{u} g^{\rho / ~ " u g l y ~ p e r s o n ", ~ d a ̀ b i ̣ ̀ o g ~}{ }^{\text {0 }}$ "coward", $z \bar{l} l \bar{v} g^{2 /}$ "fool." Most human-reference nouns in $r \varepsilon \mid a a$ originated in $a \mid b a$ and were transferred for phonological reasons. The $l \varepsilon$ subclass includes all names of languages.

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

The bo class has only three members known to me that are not gerunds: sā'ab ${ }^{\top}$ "millet porridge, TZ", tān̆ $p^{0}$ "war" and kī'ıb ${ }^{\text {/ }}$ "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 $b>$ 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.

### 5.2 Remodelled combining forms

For levelling between sg and pl forms see 3.4 3.6.
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 sg, or of the pl if there is no extant $s g$ or if it has a distinct meaning.

| $w \bar{o} k^{\text {a/ }}$ | $w a{ }^{\prime} a d^{\varepsilon /}$ | $w a \overline{'-}$ or wōk- | "long, tall" (adjective) |
| :---: | :---: | :---: | :---: |
| $t a ̄ n ̆ p$ |  | tàn̆p- | "war" |
| zịn̆'a | $z \dot{\varepsilon}{ }^{\prime}{ }^{\prime} \varepsilon s^{\varepsilon}$ | zîăn̆'- or zèn̆'- | "red" (adjective) |
| no sg | k!̣! | $k i ̣-\quad$ or $k \bar{a}-$ | "cereal, millet" |
| lā'afo | lị̆gıdī | là'- or lị ${ }^{\text {g- }}$ | "cowrie" pl "money" |
| $z \bar{u} g^{\text {/ }}$ | $z u \bar{t}{ }^{\varepsilon /}$ | $z u \bar{g}$ - | "head" |

The cb $z \bar{u} g$ - "head" is frequently read $z \bar{u}$ - in the audio NT, and $z \bar{u} g$ - can behave tonally like a $C V$ noun prefix 3.8.1. Mooré and Toende Kusaal have zu-.

Cbs as heads are more prone to levelling than as dependents: nịn-dáa "face", nịn-tám ${ }^{\mathrm{m}}$ "tears", nịin-gótìs ${ }^{\varepsilon}$ "spectacles" but nịf-kánā "this eye" from nịifo/ "eye." Gbàun $\eta^{3}$ "book" has cb gbàūŋ-, but dependent gbàn- is seen in the 1976 NT gbanmi'id gbàn-mị̀id "scribe", KB gbaunmi'id.

Remodelled cbs are regular with $m$ and $n$ stems, and with $C V$-stems in $r \varepsilon \mid a a$ :

| $z i ̄ n z a ̄ u \eta^{\text {a/ }}$ | $z i ̄ n z a ̄ n a ́$ | zīnzáun | "bat" |
| :---: | :---: | :---: | :---: |
| $g b \bar{\varepsilon} r^{\varepsilon /}$ | gbēyá | $g b \bar{\varepsilon} r$ - | "thigh" |
| kùkōr ${ }^{\text {/ }}$ | kùkōyá | kùkōr-/kùkj̄- | "voice" |

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

| dāu | $d \bar{a} p^{\text {a }}$ | dàu- sg dàp- pl | "man" |
| :---: | :---: | :---: | :---: |
| tāun̆ ${ }^{\prime}$ | tān̆ ${ }^{\text {a/ }}$ | tāunn̆- sg tān̆p-pl | "sib of opposite sex" |

Thus dàu-sùn "good man", dàp-sùmà "good men."
Disambiguation is clearly involved with some longer remodelled cbs:

| kòlùg-kàjā | "this bag" | cf cb kòl-from | kj̄lī $g^{\mathrm{a}}$ "river" |
| :--- | :--- | :--- | :--- |
| lànnìg-pị̀əlìg | "white squirrel" | cf cb làn- from | lānn |

### 5.3 Paradigms

By default, class suffixes attach after a stem-final epenthetic vowel or root vowel. Complications arise from consonant assimilation, rounding before -go -ks - $\quad$, deletion of $* g$ after aa iə uө aă̆ $\varepsilon \varepsilon \check{n}$ ээй, and with $C V V$-stems before $a, u$ and $a a$.

### 5.3.1 a|ba

Stem-final $m n$ assimilate before $\mathrm{pl}-\mathrm{ba}: * m b \rightarrow m m,{ }^{*} n b \rightarrow m m$.
Most stems ending in consonants show $-a$ in the sg:

| sīd ${ }^{\text {a }}$ | sīdī $b^{\text {a }}$ | sìd- | "husband" |
| :---: | :---: | :---: | :---: |
| $n i ̣ d d^{\text {a/ }}$ | nịdī̀ ${ }^{\text {a/ }}$ | nịn- irreg | "person" |
| sàal ${ }^{\text {a }}$ | sàalìb ${ }^{\text {a }}$ | sàal- | "human being" |
| $k \bar{v} v d^{\text {a/ }}$ | $k v ̄{ }^{\text {díb }}{ }^{\text {a }}$ | k $\bar{v}$ vd- | "killer" |
| sāan ${ }^{\text {a/ }}$ | sáam ${ }^{\text {ma }}$ | sāan- | "guest, stranger" |
| kpīkpị̀ $n^{\text {na/ }}$ | kpīkpị̀nníb ${ }^{\text {a }}$ | kpīkpị́n- | "merchant" |
| $y \bar{v} v m-y \hat{\prime}{ }^{\prime} v m^{\text {na }}$ | $y \overline{v o m-y o ̂ ' v m n i ̀ b ~}{ }^{\text {a }}$ | yūom-yט̂'vm- | "singer" |
| $p u$ 'à-sān̆'am ${ }^{\text {ma }}$ | $p u$ 'à-sān̆'amìdīb ${ }^{\text {a }}$ | pu'à-sàn̆'am- | "adulterer" |
| bị-pịt ${ }^{\text {a/ }}$ | bị-pịtitíb ${ }^{\text {a }}$ | bị-pịt- | "younger child" |
| $z a ̀ '-n \overline{-g u ́ r ~}{ }^{\text {a }}$ |  | $z a ̀ '-n \bar{o}-g u ́ r-$ | "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 3.8.1; similar behaviour is found with agent nouns from a few other verbs. Many of these nouns also have nàm ${ }^{\mathrm{a}}$ plurals.

| kù $\theta S^{\text {a }}$ | $k u ̄{ }^{\text {a }}$ ¢ ${ }^{\text {dī }}{ }^{\text {a }}$ | kùөs- | "seller" |
| :---: | :---: | :---: | :---: |
| Sịgīs ${ }^{\text {a/ }}$ | sịg ${ }^{\text {sísidìb }}{ }^{\text {a }}$ | sịgīs- | "lowerer" |
| dils ${ }^{\text {a }}$ | dìss-nàm ${ }^{\text {a }}$ | dils- | "glutton" |
| sòs ${ }^{\text {a }}$ | sōsıdìb ${ }^{\text {a }}$ | sòs- | "beggar" |
| $t i s^{\text {a }}$ | tīsıdīb ${ }^{\text {a }}$ | tis- | "giver" |


| wād-tis ${ }^{\text {a }}$ | wād-tísì ${ }^{\text {a }}$ | wād-tís- | "lawgiver" NT |
| :---: | :---: | :---: | :---: |
| $k i ̣ s^{\text {a/ }}$ or kịssīda/ | kịsıdíb ${ }^{\text {a }}$ | kịsīd- (only) | "hater" |
| $z a ̀ b-z a ̀ b^{\text {a }}$ | zàb-zàb-nàm ${ }^{\text {a }}$ | zàb-zàb- | "warrior" |
|  | zàb-zābıdīb ${ }^{\text {a }}$ |  |  |
| $g b a ̄ n-z a ́ b^{\text {a }}$ | gbān-záb-nàm ${ }^{\text {a }}$ | gbān-záb- | "leatherbeater" |
| $\check{n} w i ̣$-tćk ${ }^{\text {a }}$ | $\check{n} w i ̣-t \varepsilon ́ k i d ̀ ̀ b^{\text {a }}$ |  | "rope-puller" |

Stems in VVm- have sg -mm; they make pls in -se or nàm ${ }^{\text {a }}$ to avoid SFs which would be identical in sg and pl.

|  | kpị̀'imís ${ }^{\text {® }}$ | kpị'im- | "dead person, corpse" |
| :---: | :---: | :---: | :---: |
| $z \bar{u}^{\prime} ө m^{\mathrm{m} /}$ | $z \overline{\text { 'amís }}{ }^{\text {c }}$ | $z u \overline{\text { ' }}$ 'm- | "blind person" |
| tādīm ${ }^{\text {m/ }}$ | tādımīs ${ }^{\varepsilon}$ | tàdìm- | "weak person" |
|  | tàdìm-nàm ${ }^{\text {a }}$ |  |  |
| $k p \bar{\varepsilon} \varepsilon \check{n} m^{\text {m }}$ | kpē¢n̆mmā LF only, WK |  |  |
|  | kpè ${ }^{\text {ancm-nàm }}{ }^{\text {a }}$ | kpè 2 n̆m- | "elder" |
| $b i ̣ ̀ ' ə m^{\mathrm{m}}$ | bị'əmmā LF | nly, WK |  |
|  | bị'əm-nàm ${ }^{\text {a }}$ | bị'əт- | "enemy" |

Stems in ln $r$ following a short root vowel show sg LF -lle -nne -re, with the SFs reinterpreted as the outcome of adding $-r \varepsilon$ instead of $-a$. Agent nouns from singleaspect verbs with stems in $-l l$ or $-r(r)$ show LF sg forms in either $-a$ or $-\varepsilon$ and analogical plurals in -aa alongside -ba.

|  | Dàgbā $n^{\text {ne/ }}$ | Dàgbāmma/ | Dàgbān- | "Dagomba person" |
| :---: | :---: | :---: | :---: | :---: |
|  | $B i n^{\text {n } \varepsilon}$ | Bìm ${ }^{\text {ma }}$ | Bìn- | "Moba person" |
|  | Kòtān ${ }^{\text {n } / ~}$ | Kı̀tāmma/ | Kùtān- | member of EW's clan |
|  | Mōr ${ }^{\text {/ }}$ | Móom ${ }^{\text {ma }}$ irreg | Mōr- | "Muslim" |
|  | n̆yà'an-dòl ${ }^{\text {la }}$ | n̆yà'an-dòllìb ${ }^{\text {a }}$ | n̆yà'an-dòl- | "disciple" NT |
|  | ňyā'an-dólı ${ }^{\text {l }}$ | ňyā'an-dóllà | n̆yā'an-dól- | id WK |
|  | gbàn-zān̆l ${ }^{\text {la/ }}$ | gbàn-zāňllíb ${ }^{\text {a }}$ | gbàn-zān̆l- | "book-carrier" KT WK |
|  | bù-zān̆l ${ }^{\text {la/ }}$ | bv̀-zān̆llíb ${ }^{\text {a }}$ | bv̀-zān̆l- | "goat-carrier" WK |
| or | bì-zān̆ılı ${ }^{\text {l }}$ | bù-zān̆llá |  |  |
|  | gbàn-mōr ${ }^{\text {a/ }}$ | gbàn-mōríb ${ }^{\text {a }}$ | gbàn-mōr- | "book-owner" DK |
|  | gbàn-tāra/ | gbàn-tāríb ${ }^{\text {a }}$ | gbàn-tār- | id DK |
|  | bù-mōr ${ }^{\text {a/ }}$ | bù-mōríb ${ }^{\text {a }}$ | bù-mōr- | "goat-owner" WK |
| or | bù-mōr ${ }^{\text {c/ }}$ | bò-mōrá |  |  |

There is no one rule for the sg form with stems ending in vowels.
Four nouns end in diphthongs in the sg:

| dāu | $d a \overline{p a}$ | dàu-, dàp- 3.4 | "man" |
| :---: | :---: | :---: | :---: |
| tāun̆ ${ }^{\prime}$ | tān̆p ${ }^{\text {a/ }}$ | tāun̆-, tān̆p- | "sib of opposite sex" |
| sāeñ/sāeñy ${ }^{\text {ya }}$ | sāan̆b ${ }^{\text {a }}$ | sàn̆- | "blacksmith" |
| sōeñ/sōeñy ${ }^{\text {ya }}$ | sว̄on̆ ${ }^{\text {a }}$ | sòn̆- | "witch" |
| * CVg -stems appear in |  |  |  |
| pu'áa ${ }^{\text {a }}$ *puaga | $p \bar{v}^{\prime} a b^{\text {a }}$ | pu'à- | "woman, wife" |
| bā'a *baga | $b a ̄ ' a b^{\text {a }}$ | 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
pịtú pịtíb ${ }^{\text {a }} \quad$ pịt- $\quad$ "junior same-sex sib"
Sàam-pịit $t^{\mathrm{a} /}$ "father's younger brother" and bị-pị̀ $t^{\mathrm{a} /}$ "younger child" are regular. Some $C V V$ stems introduce $-d$ - in the sg and in the pl or cb :

| wı̀ıd ${ }^{\text {a }}$ | wì ${ }^{\text {a }}$ | wìld- | "hunter" |
| :---: | :---: | :---: | :---: |
| sōn̆'od ${ }^{\text {a/ }}$ | sōn̆'ob ${ }^{\text {a/ }}$ | sōn̆'od- | "someone better than" |
| $p \overline{\text { en kpāad }}{ }^{\text {a/ }}$ | $p \bar{v}-\mathrm{kpā} a d i ́ b^{\text {a }}$ | pū-kpá- | "farmer" |

Other CVV stems have become re|aa class: pù-kòon̆r ${ }^{\varepsilon}$ "widow", dà-kòon̆r $r^{\varepsilon}$ "bachelor", bịəəre/ "elder same-sex sib", pòn̆'or $r^{\varepsilon}$ "cripple", n̆y $\bar{\varepsilon} \varepsilon r^{\varepsilon /}$ "next-younger sib." Related languages still keep pl -ba, e.g. Toende Kusaal pókốót pl pokõp "widow", dákốot pl dakõp "bachelor."

A subclass referring to older/important people has -ba for sg , with pl nàmá

|  |
| :---: |
| yáab ${ }^{\mathrm{a}}$ *yaagba |
| pùgudìb ${ }^{\text {a }}$ |
| áňsìb ${ }^{\text {a }}$ |
| sàam ${ }^{\text {ma }}$ |
| dị̀m ${ }^{\text {ma }}$ |
| dàyáam ${ }^{\text {ma }}$ |


| nà'-nàm ${ }^{\text {a }}$ | nà'- |
| :---: | :---: |
| yāa-nám ${ }^{\text {a }}$ | yāa- |
| pùgùd-nàm ${ }^{\text {a }}$ | pùgòd- |
| ān̆s-nám ${ }^{\text {a }}$ | ān̆s- |
| sàam-nàm ${ }^{\text {a }}$ | sàam- |
| dị̀m-nàm ${ }^{\text {a }}$ | dịəm- |

"chief"
"grandparent"
"father's sister"
"mother's brother"
"father"
"man's parent-in-law"
"woman's id"

### 5.3.2 ga|se

| $b \bar{v} v g^{\text {a }}$ | $b \bar{v} v s^{\varepsilon}$ | $b u ̀-$ | "goat" |
| :---: | :---: | :---: | :---: |
| $z \bar{ว} g^{\text {a }}$ | $z \bar{ว} S^{\varepsilon}$ |  | "run, race" |
| $\check{n} w a ̄ d i ̄ g{ }^{\text {a/ }}$ | $\check{n} w a ̄ d i ̄ s^{\varepsilon /}$ | $\check{n} w a \bar{d}-$ | "moon, month" |
| bù-dibì ${ }^{\text {a }}$ | $b u ̀-d i b i s s^{\varepsilon}$ | bù-dìb- | "male kid" |
| kōlī $\mathrm{g}^{\text {a }}$ | $k o ̄ l i ̄ s^{\varepsilon}$ | kòl- | "river" |
| kpùkpàrì ${ }^{\text {a }}$ | kpùkpàris ${ }^{\text {® }}$ | kpùkpàr- | "palm tree" |
| $p u \overline{s i ̄} g^{\text {a/ }}$ | $p u \overline{s i} s^{\varepsilon /}$ | $p u ̄ s$ - | "tamarind" |

Root-stems in Caa Ciə Cuө delete the *g of the sg -ga, with vowel fusion; nasal final ian̆ uan̆ correspond to $\varepsilon \varepsilon n ̆ ~ o o n ̆ ~ b e f o r e ~ a ~ c o n s o n a n t: ~$

| bāa | $b a ̄ a s^{\varepsilon}$ | bà- | "dog" |
| :---: | :---: | :---: | :---: |
| sịa | sịə ${ }^{\varepsilon}$ | sià- | "waist" |
| sàbùa | sàbù $\theta S^{\varepsilon}$ | sàbuà- | "lover, girlfriend" |
| zịn̆'a | $\chi$ ż̀n̆' $\varepsilon s^{\varepsilon}$ | zi̊ăn̆'- or zèn̆'- | "red" (adjective) |
| $n \bar{u}$ '-ịñ'a | $n \bar{u} '-\hat{\varepsilon} n^{\prime}$ ' $\varepsilon S^{\varepsilon}$ | $n u ̄ '$ 'ćñ'- | "fingernail" |
| nūa' | n̄̄os ${ }^{\text {/ }}$ | ก⿹弔- | "hen" |

Stems in ${ }^{*} \mathrm{CVg}$ - show *gg $\rightarrow k k$ in the sg, and *Cag- *Ciag- *Cuag- delete *g with vowel fusion in the cb and pl:

| gìk ${ }^{\mathrm{a}}$ | gìg̀̀s $s^{\varepsilon}$ | gìg- | "dumb person" |
| :--- | :--- | :--- | :--- |
| zàk | zà'as | zà'- | "compound" |
| pūāk $\mathrm{k}^{\mathrm{a}}$ | pū'as |  | pú'à- |

Stems in -m- $n$ - show $* m g \rightarrow \eta \eta$ and ${ }^{*} n g \rightarrow \eta \eta$, with remodelled cbs. In the pl *Vns $\rightarrow \tilde{V}: s$, but *ms never assimilates in 2-mora stems, and only optionally otherwise:

| $t \bar{\varepsilon} \eta^{\text {a }}$ | $t \bar{\varepsilon} \varepsilon \check{n} s^{\varepsilon}$ | tદ̀ท- | "land" |
| :---: | :---: | :---: | :---: |
| pà ${ }^{\text {a }}$ | pàan̆s ${ }^{\text {® }}$ | pàj- | "power" |
| bùn ${ }^{\text {a }}$ | bùmis ${ }^{\text {c }}$ | bùn- | "donkey" |
| $n a ̄ \eta^{\text {a }}$ | nāmīs ${ }^{\varepsilon}$ | nàn- | "scorpion" |
| $s u ́ ' ө \eta^{\text {a }}$ | sū'өmís ${ }^{\text {e }}$ | $s u ̄ ' ө j-$ | "rabbit" |
| nịin ${ }^{\text {a }}$ | nịis ${ }^{\varepsilon} / n$ ịimís ${ }^{\varepsilon}$ | nịin- | "bird" |
| kùlì ${ }^{\text {a }}$ | kùlis ${ }^{\varepsilon} / \mathrm{k}^{\text {dollımis }}{ }^{\varepsilon}$ | kùlìn- | "door" |
| pịəsín ${ }^{\text {a }}$ |  | pịəsín- | "sponge for washing" |
| $m \bar{\varepsilon} \varepsilon \chi^{\prime} \eta^{\text {a }}$ | $m \bar{\varepsilon} \varepsilon d \bar{s} s^{\varepsilon}$ | mèzdì ${ }^{\text {- }}$ | "building tool" |
|  | $m \bar{\varepsilon} \varepsilon d \bar{l} m \bar{i} S^{\varepsilon}$ |  |  |

Various irregularities are seen in


Several stems with rounded vowels before the suffix have $\operatorname{sg} g o$ for $g a$ :

| $k \bar{u} u g^{\mathrm{a} / / k} \bar{u} u g^{\text {a }}$ | $k u ̄ u s^{\varepsilon /}$ | $k \bar{u}-$ | "mouse" |
| :---: | :---: | :---: | :---: |
| sù'vg ${ }^{\text {a }}$ /sì'vg ${ }^{\text {a }}$ | sò'vs ${ }^{\text {® }}$ | sò'- | "knife" |
| nû'ug ${ }^{\text {a }}$ | nû'us ${ }^{\varepsilon}$ | $n u \bar{\prime}-$ | "hand" |
|  | $z$ ònzòวňs ${ }^{\varepsilon}$ | zùnzòn- | "blind person" |
| tè $\eta$-zù ${ }^{\text {² }}$ | tè $\eta$-zòvn̆s ${ }^{\varepsilon}$ |  | "foreign land" |
| yú'v ${ }^{\text {a }}$ | $y \overline{0}{ }^{\text {comís }}{ }^{\varepsilon}$ | $y$ v̄'vŋ- | "night" |
| zùun̆g ${ }^{\text {a }}$ | zùun̆s ${ }^{\varepsilon} / z u$ un̆ ${ }^{\varepsilon}$ | zùn̆- | "vulture" |

Some original go|d $\varepsilon$ nouns have substituted $\mathrm{pl}-s \varepsilon$ for $-d \varepsilon$ instead of -aa 5.3.3:

| yàmmù ${ }^{\text { }}$ | yàmmìs ${ }^{\text {e }}$ | yàm- | "slave" (yàmmùg ${ }^{\text {a }} \mathrm{WK}$ ) |
| :---: | :---: | :---: | :---: |
| à-dàalón ${ }^{\text {a }}$ | à-dàalís ${ }^{\varepsilon} \mathrm{WK}$ | à-dàalón- | "stork" |
|  | à-dàalímìs ${ }^{\text {e }}$ |  |  |
| sị́'u ${ }^{\text {º }}$ | sị'imís ${ }^{\text {e }}$ | SỊ'un- | a kind of big dish |
| dìsóno | dìsiss/dìsímà | dìsón- | "spoon" |

Two words of this type drop -s- from the stem in the plural:

| wīlısúp ${ }^{\text {a }}$ | wīlımís ${ }^{\text {e }}$ | wīlısúp- | a kind of snail |
| :---: | :---: | :---: | :---: |
| yālısún ${ }^{\text {a }}$ | yālımís ${ }^{\text {® }}$ | yālısúp- | "quail" |

### 5.3.3 go|de

Before the sg -go -ko -ŋว stem-final vowels are rounded, changing epenthetic vowels to $v$ and creating rounding diphthongs from root vowels.

| dàvg ${ }^{\text {a }}$ | dàad ${ }^{\varepsilon}$ | dà- | "piece of wood" |
| :---: | :---: | :---: | :---: |
| $f \bar{n} \bar{n}^{\prime} \mathrm{og}^{\text {/ }}$ | $f \varepsilon \bar{̄} \breve{' S}^{\prime} \varepsilon d^{\varepsilon /}$ | f $\overline{\text { ®̆ñ'- }}$ | "ulcer" |
| $g b \varepsilon ̇ ' o g^{\circ}$ |  | gbè'- | "forehead" |
| dàbịog ${ }^{\text { }}$ | dàbịə d $^{\varepsilon}$ | dàbìà- | "coward" |
| vịu $u g^{\text {a/ }}$ | vịid ${ }^{\text {ع/ }}$ | vị- | "owl" |
| mōog ${ }^{\text {a }}$ | mōod ${ }^{\text {e }}$ | mò- | "grass, bush" |
| dòndùug ${ }^{\text { }}$ | dòndùud ${ }^{\text {¢ }}$ | dòndù- | "cobra" |
|  | $z u ̀ \theta d^{\varepsilon}$ |  | "friendship" |
| wābū ${ }^{\text {a/ }}$ | wābīd ${ }^{\varepsilon /}$ | wāb- | "elephant" |
| bālērū ${ }^{\text {a/ }}$ | bālc̄rīd ${ }^{\text {/ }}$ | bālćr- | "ugly person" |
|  | bālc̄rīs ${ }^{\text {c/ }}$ |  |  |
| $b \bar{\varepsilon} s \bar{v} g{ }^{\text {a }}$ | $b \bar{\varepsilon} s \bar{d} d^{\varepsilon}$ | $b$ bes- | kind of pot |

Some stems ending in root vowels have plurals of the form $C V t^{\varepsilon} \underline{3.4}:$
dò $g^{\circ} \quad$ dò $d^{\varepsilon}$ or dòt ${ }^{\varepsilon}$ dò- "hut, room; clan"

So too pōogol "farm, field", fūugg/ "clothing, shirt." The sg has a short vowel in
$z u \bar{q}{ }^{3 /}$
$z u \bar{t} t^{\varepsilon /}$
$z u \bar{q}-$
"head"
${ }^{*} C V g$-stems show $* g g \rightarrow k k$ in the sg, with $u a$ becoming $\rho$ before $-k^{\circ}$; ${ }^{*}$ Cag${ }^{*} C i a g$ - and ${ }^{* C u a g}$-stems delete ${ }^{*} g$ with vowel fusion in the cb and pl:

| $d \bar{v} k^{\text {/ }}$ | $d \bar{v} g \bar{u} d^{\varepsilon /}$ $d \bar{v} g u ̄ b d u ́ t^{\varepsilon}$ | $d \bar{v} g-$ | "cooking pot" <br> "cooking pots" SB |
| :---: | :---: | :---: | :---: |
| lāuk ${ }^{\text {a }}$ | lā'ad ${ }^{\text {c }}$ | là'- | "(item of) goods" |
| bi̇auñ̌k ${ }^{\text {a }}$ | biā̆̆̆'ad ${ }^{\varepsilon}$ WK | bi̇àn̆'- | "shoulder" |
|  | bi̇ān̆'adā SB |  |  |
| $l o ̀ k^{\circ}$ | $l$ lò'ad ${ }^{\text {¢ }}$ | $l u ' a ̀-$ | "quiver (for arrows)" |

Stems in $d$ show ${ }^{*} d d \rightarrow t t$ in the $\mathrm{pl}:$
ùdv̀ $g^{\supset}$ ùt ${ }^{\varepsilon}$ ùd- "(piece of) chaff"

Stems in $l$ show *ld $\rightarrow n n$ in the pl:

| $z \bar{l} l \bar{v} g^{\partial /}$ | $z \overline{\mathrm{j}} \mathrm{n}^{\mathrm{n} \varepsilon /}$ | $z \bar{l} \mathrm{l}-$ | "fool" |
| :--- | :--- | :--- | :--- |
| sìlù $g^{\rho}$ | $\sin ^{\mathrm{n} \varepsilon} /$ sìlìs $^{\varepsilon}$ | sìl- | "hawk" |

All stems in $m n$ after a short vowel use $\mathrm{pl} a a$ instead of $d \varepsilon$. The only $m n$ stems which use $-d \varepsilon$ are yammid "slavery" and CVVC root-stems:
làngávŋํ làngāamá làngāvŋ- "crab" or làngáam ${ }^{\mathrm{m} \varepsilon}$

So too màngáv $\eta^{3}$ "crab", the plural-only sūn̆-pêen $n \varepsilon$ "anger" and perhaps the placename Tèmpáan ${ }^{\text {ne }}$ "Tempane", if the second element is from pāalíg ${ }^{\mathrm{a}}$ "new."

Stems in $m n$ show ${ }^{*} m g \rightarrow \eta \eta$ and $* n g \rightarrow \eta \eta$ in the sg, with remodelled cbs:

| gbàu $\eta^{\circ}$ | gbànà | gbàn- or gbàup- | "letter, book" |
| :---: | :---: | :---: | :---: |
| zīnzāun ${ }^{\text {a/ }}$ | zīnzāná | zīnzáun- | "bat" |
| àn̆rù ${ }^{\text {º }}$ | àn̆rımà | àn̆rùn- | "boat" |
| nịn-gbị̀ $\eta^{\text {/ }}$ | nịn-gbịn ${ }^{\text {á }}$ | nịn-gbị̀- | "body" |

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 sg $r \varepsilon$. Only stems in -s- and -sım- have plurals, always with -aa:

| bū' $\theta s v ́ g^{\circ}$ | bū' $\theta s a ́$ | bū' $\theta s$ - | "question" |
| :--- | :--- | :--- | :--- |
| zàan̆sv́ク | zàan̆símà | zàan̆sv́ $\eta-$ | "dream" |

Gerunds of 3-mora $n$-stem verbs never assimilate $* n g \rightarrow \eta \eta$, and gerunds of 3mora $m$-stems only assimilate $* m g \rightarrow \eta \eta$ optionally: thus dìgını̀ $g^{\circ}$ "lying down",
 sàn̆'v $\eta^{\circ}$ or sàň'amù $g^{0}$ "destroying", kàrv̀̀ ${ }^{\circ}$ or kàrımù $g^{0}$ "reading."

The place name Dènù ${ }^{\circ}$ "Denugu" also fails to assimilate *ng.
An irregular $s \varepsilon \mathrm{pl}$ appears in
$p \bar{\varepsilon}{ }^{\prime} g^{2 /}$
$p \bar{\varepsilon}^{\prime} \varepsilon S^{\varepsilon /}$
$p \bar{\varepsilon}{ }^{\prime}-$
"sheep"

### 5.3.4 re|aa

| $k u ̄ g \bar{v} r^{\varepsilon /}$ | kūgá | kūg- | "stone" |
| :---: | :---: | :---: | :---: |
| yūgodīr ${ }^{\text {c }}$ | yūgvdā | yùgòd- | "hedgehog" |
| nóbìr ${ }^{\text {c }}$ | nōbá | nōb- | "leg" |
| bị'isì ${ }^{\text {c }}$ | bị'isà | bị'is- | "woman's breast" |
| bàlàjìr ${ }^{\text {c }}$ | bàlàmà | bàlàn- | "hat" |
| sāŋgúnnì ${ }^{\text {c }}$ | sāpgónnà | sāpgón- | "millipede" |
| sūmmīr ${ }^{\text { }}$ | sūmmā | sùm- | "groundnut" |

$C V V$ - and $C V^{\prime} V$-stems (for the allomorphs before pl-aa see $\underline{3.4}$ ):

| bịər $r^{\varepsilon /}$ | bi̇ēyá | bīā- | "elder same-sex sib" |
| :---: | :---: | :---: | :---: |
| $z u \bar{\theta} r^{\varepsilon}$ | zūēyā | zuà- | "hill" |
| пว̄วr ${ }^{\text {c/ }}$ | nธ̄yá | пラ- | "mouth" |
| $z \bar{u} v r^{\varepsilon}$ | $z \bar{v} y a ̄$ | $z \mathrm{v}^{-}$ | "tail" |
| tītā'ar ${ }^{\text {c }}$ | tītādā | tītá'- | "big" (adjective) |
| $\check{n} y \bar{\varepsilon}^{\prime} \varepsilon r^{\varepsilon /}$ | $\check{n} y \bar{\varepsilon} d a ́$ | $\check{n} y \overline{\varepsilon^{\prime}}$ - | "next-younger sibling" |
| pòn̆'or ${ }^{\text {c }}$ | pòňdà | pòn̆'- | "cripple" |
| $y \bar{u}^{\prime} v r^{\varepsilon /}$ | yūdá | $y \bar{v}^{\prime}-$ | "name" |
| $y u ̄ ' \theta r^{\varepsilon}$ | yưādā | yù'өr- $\underline{5.2}$ | "penis" |

Stems in *Cag- *Ciag- *Cuag- 3.7 may make forms with -d- by analogy:

| n̆yā'ar ${ }^{\text {e }}$ | n̆yā'a | n̆yà'- | "root" (*neg-) |
| :---: | :---: | :---: | :---: |
| sià'ar ${ }^{\text {c }}$ | sinà'a | sinà'- | "forest" |
| biā̆n̆'ar ${ }^{\text {c/ }}$ | bi̇án'a | bi̇ā̆̄̆'- | "wet mud, riverbed" |
| bà'ar ${ }^{\text {c }}$ | bà'a/bàdà | bà'- | "idol" (Farefare bàgrè) |
| mù'ar ${ }^{\text {e }}$ | mu'àa/mù'adà | mu'à- | "reservoir, dam" |
| zànkù'ar ${ }^{\text {® }}$ | zàpku'àa | zàjku'à- | "jackal" |
|  | zàpkù'adà |  |  |

Even in a case where the glottalisation is not derived from *g:
kị-dà'ar ${ }^{\varepsilon} \quad$ kị-dà'adà WK $\quad$ "bought-in millet"
Stems in deleted ${ }^{*} g$ after a long vowel include fusion verb gerunds 7.1 like

vú $r^{\varepsilon}$
vūáa
$v u ̄ \theta-$
"fruit of red kapok"

Some root-stems show $C V$ with a short vowel before $r \varepsilon$, with $c b C V r-\underline{5.2}$ :
$g b \bar{\varepsilon} r^{\varepsilon /} \quad g b \bar{\varepsilon} y a ́ \quad ~ g b \bar{\varepsilon} r-\quad$ "thigh"

Similarly kùk $r^{\varepsilon /}$ "voice", kpàk $\bar{v} r^{\varepsilon /}$ "tortoise", gān̆ $r^{\varepsilon /}$ "ebony fruit", gūmpūz $\bar{\varepsilon} r^{\varepsilon /}$ "duck", n̆yò-vūr ${ }^{\varepsilon /}$ "life", nā'-lórre "area in compound for tying up cows", wìd-l̄̄r ${ }^{\varepsilon /}$ "area for tying up horses."

Stems in $m n l r$ show $* m r \rightarrow m n \sim m m, * n r \rightarrow n n, * l r \rightarrow l l, * r r \rightarrow r:$

| $d u \bar{m}{ }^{\text {n } \varepsilon}$ | dūmā | dùm- | "knee" |
| :---: | :---: | :---: | :---: |
| yùvm ${ }^{\text {n }}$ | yv̀mà | yv̀vm- | "year" 3.4 |
| $k p a ̄ n^{\mathrm{n}}$ | kpānā | kpàn- | "spear" |
| $g \varepsilon \chi^{l}{ }^{1}$ | $g \bar{\varepsilon} l a ́$ | $g \bar{\varepsilon} l-$ | "egg" |
| kùkpàr ${ }^{\text {c }}$ | kùkpàrà | kùkpàr- | "palm fruit" |

Various irregularities are seen in

| dāar | dābá | dà- | "day" |
| :--- | :--- | :--- | :--- |
| $[$ Mampruli zari] | $z \bar{a}^{\prime}$ | $z \bar{a}-$ | "millet" |
| $y \grave{1} r^{\varepsilon /}$ | $y \bar{a}^{\prime}$ | $y \overline{\bar{l}^{-}}$ | "house" |

Language names 21.3 have the suffix $-l \varepsilon$ after stems ending in a root vowel. Only stems in final vowels and in $r$ have distinctive forms (with $* r l \rightarrow t t$ ):

| Kūsâal | Kusaal | K̄̄sâas | Kusaasi |
| :--- | :--- | :--- | :--- |
| $B \bar{a} t^{\varepsilon /}$ | Bisa language | Bārīs $^{\varepsilon /}$ | Bisa people |

### 5.3.5 fo|u

| mòlìfo | mòlı̀ | mòl- | "gazelle" |
| :--- | :--- | :--- | :--- |
| ňyịrífo | ňyịrí | nyyịr- | "egusi" |
| bv̄n-bv́vdìfo |  |  | "plant" |
| [Mooré muiifu] | mùi | mùì- | "rice" |

Plural -ll causes umlaut of the stem vowels aa iə to ii.

| náafo *naagfv | nịigí | $n \bar{a} '-\underline{3.4}$ | "cow" |
| :---: | :---: | :---: | :---: |
| wáafo * waagfv | wịigí | wā'- | "snake" |
| [Mampruli kaafu] | $k i!$ | kị- or $k \bar{a}$ - | "cereal, millet" |

Stems in $-n$ - show ${ }^{*} n f \rightarrow f$ with nasalisation of the preceding vowel:

| $n \grave{1} f^{\prime /}$ | nịn ${ }^{\text {á }}$ | $n \stackrel{1}{n}$ - or nị̂f- | "eye" |
| :---: | :---: | :---: | :---: |
| píln̆fo | pīıní | pīın- | "genet" |
| kịin̆f | kịiní |  | "millet seed" |
| $z$ v́vn̆fo | $z \bar{v}^{\prime}$ טní |  | "dawadawa seed" |
| mịifo | mịiní |  | "okra seed" |

Mịif ${ }^{\text {p }}$ is remodelled after the umlauted pl: cf má'an ${ }^{\text {n }}$ "okra."
In two words stem $-d$ - is lost in the sg:

| wịəfo | wịdı̀ | wìd- | "horse" |
| :--- | :--- | :--- | :--- |
| lā'afo | lịgıdī | là'- or lịg- | "cowrie" pl "money" |

Some words have fo|lı suffixes in only one number:

| zíin ${ }^{\text {a }}$ | zịmí | zịm- | "fish" |
| :---: | :---: | :---: | :---: |
| wālī $g^{\text {a }}$ | wālīs ${ }^{\text {e }}$ or wālí sic | wàl- | a kind of gazelle |
| sị̂bī $g^{\text {a/ }}$ | sịbí | sịb- | a kind of termite |
| sịiñf ${ }^{\prime \prime}$ or silin $g^{\text {a/ }}$ | SṬin̆ ${ }^{\text {¢/ }}$ | sịñ- | "bee" |
| sūn̆fol or sūun̆r ${ }^{\text {/ }}$ | sūn̄yá | sūn̄- | "heart" |
| $k p a ́ ' v \square^{\circ}$ | kpị̀'iní | kpā'- irreg | "guinea fowl" |

Pịinī "gift" reflects a class obsolete in Western Oti-Volta, with aa umlauted to ii by the flexion $u$ : cf Moba pāāb̀ "gift", pl pāānî́. It is used as sg, with cb p̣̣̀in-.

### 5.3.6 bo

Only three bo class nouns have been found which are not gerunds:

| $s a{ }^{\prime} a b$ | sà'- | "millet porridge, TZ" |
| :---: | :---: | :---: |
| kī'ı ${ }^{\text {/ }}$ |  | "soap" |
| tān̆p ${ }^{\text {a }}$ | tàn̆p- | "war" |

Cf Mooré tãpo pl tãbdo "bow, war."
All regular gerunds from 2-mora-stem dual-aspect verbs belong here 8.1.1: stems in $b$ show $-p$ - via $* b b \rightarrow p p$ : $s \bar{\jmath} p^{\jmath /}$ from $s \bar{\jmath} b^{\varepsilon}$ "write", $l \bar{\jmath} p^{J /}$ from $l \bar{\jmath} b^{\varepsilon}$ "throw stones at", and stems in $m$ show $* m b \rightarrow m m$ : $k \bar{\imath} m^{\mathrm{mo}}$ from $k i ̀ m^{\mathrm{m}}$ "tend a flock/herd", wūm ${ }^{\mathrm{m} \jmath}$ from wòm ${ }^{\mathrm{m}}$ "hear." Stems in $n$ do not assimilate, however: būnīb ${ }^{\circ}$ from bùn ${ }^{\varepsilon}$ "reap."
$Y i ̣ s^{\varepsilon}$ "make go/come out" has the expected gerund yịsī $b^{\nu / ;}$ the alternate form $y!̣ i i^{\varepsilon /}$ has yịiisíb ${ }^{0}$, the only 3 -mora stem in the bo class.

### 5.3.7 mm

Most words in this class are mass nouns. $M$-stems can be identified from cbs, plurals in -ma or $-m s^{\varepsilon}$, or non-initial H tonemes in Pattern L 3.8.1.

| dāam ${ }^{\mathrm{m} /}$ <br> mèlıgìm ${ }^{\mathrm{m}}$ |  | $d \bar{a}-$ | "millet beer, pito" |
| :---: | :---: | :---: | :---: |
|  |  |  | "dew" |
| $k \bar{u} d \bar{l} m^{\mathrm{m}}$ |  |  | "olden days" |
| dū'uním ${ }^{\text {m }}$ |  | dū'un- | "urine" |
| dàalìm ${ }^{\text {m }}$ |  |  | "masculinity" |
| yàarìm ${ }^{\mathrm{m}}$ |  | yàar- | "salt" |
| zāaňsím ${ }^{\text {m }}$ |  | $z a ̄ a n ̆ s-$ | "soup" |
| $z \overline{m^{\mathrm{m} /}}$ |  | $z \overline{\text { ºm- }}$ | "flour" |
| pūum ${ }^{\text {m/ }}$ |  | pūum- | "flowers, flora" |
| bị'isím ${ }^{\text {m }}$ |  |  | "milk" |
| dàalím ${ }^{\text {m }}$ | dàalímis ${ }^{\varepsilon}$ | dàalím- | "male sex organs" |
| pịim ${ }^{\text {m/ }}$ | pịmá | pịm- | "arrow" 3.4 |

P!̣im $\mathrm{m} /$ "arrow" is a remnant of an old "long, thin things" $\supset \mid \varepsilon$ class, preserved in e.g. the Gurma languages and Nawdm: cf Nawdm fímú "arrow", plural fímí.

## 6 Adjective flexion

Historically, the noun classes were grammatical genders; adjectives took the class suffix of the head noun, which preceded as a bare-stem combining form. Like most Western Oti-Volta languages, Kusaal has lost the agreement system, but most adjectives still show suffixes from more than one class, usually in free variation.

Thus from būvg ${ }^{\text {a }}$ "goat":

| bù-pị̀lì ${ }^{\text {a }}$ | bù-pịəliss ${ }^{\text {c }}$ | bù-pịəl- ( $\mathrm{ga\mid s} \mathrm{\varepsilon}$ ) | "white goat" |
| :---: | :---: | :---: | :---: |
| $b \grave{\text { beltal }}$ le | bù-pị̀là | bò-pị̀l- (r\&\|aa) | id |

A few traces of agreement remain, accounting for all cases with mm 12.6.1. There is some preference for $g a \mid s \varepsilon$ suffixes for human reference, as with nịn-sábilis ${ }^{\varepsilon}$ "Africans", where nịn-sábılà is accepted by informants but is much less common, and Zùà-wịis ${ }^{\varepsilon}$ "Red Zoose" (clan), where the adjective does not normally use $\mathrm{pl} s \varepsilon$. The suffixes $a \mid b a$ and $f \supset \mid \imath \imath$ appear only in set expressions; bo never occurs at all.

WK claims a difference in intensity in gradable adjectives with sg suffixes of different classes, consistently ranking them ga re go in decreasing order, so that fūpịəlìg "white shirt" is whiter than fū-pị̂l. DK specifically denied any difference.

Class suffixes are avoided when their combination with stem finals would give rise to unclear or ambiguous SFs. The availability of alternatives from three classes permits avoidance much more freely than with nouns. A further major constraint is that only two adjectives show suffixes from both the $g a \mid s \varepsilon$ and $g o \mid d \varepsilon$ classes:


Other adjectives are either ga- or go-type, along with $r \varepsilon \mid a a$ class suffixes; this probably reflects simplification of the old agreement system prior to its complete abandonment. Adjectives of the ga type include:

| wàbìg $^{\text {a }}$ | wàbìs |  |
| :--- | :--- | :--- |
| wàbìr | wàbà | wàb- |


| vènnìg ${ }^{\text {a }}$ | vènnis ${ }^{\varepsilon}$ | vèn- | "beautiful" |
| :---: | :---: | :---: | :---: |
| vènnìr ${ }^{\text {r }}$ rare | vènnà |  |  |


| vèňllì $g^{\mathrm{a}}$ | vèňllìs <br> vèňllà | "beautiful" |
| :--- | :--- | :--- | :--- |
| sābılíg <br> sābíl | sābılís <br> s | sābılá |

Similar are $w \bar{\varepsilon} n n i ̄ r^{\varepsilon}$ "resembling" pāalíga "new" záall $\varepsilon$ "empty" bàan̆lì $g^{\mathrm{a}}$ "slim" pịəlì $g^{\mathrm{a}}$ "white."
$\mathrm{Sg} r \varepsilon$ is not used with $g a$-type stems in $m n$ :
$d \bar{\varepsilon} \varepsilon \eta^{\mathrm{a}}$
$d \bar{\varepsilon} \varepsilon \check{n} s^{\varepsilon}$
$d \bar{\varepsilon} \varepsilon m \bar{l} s^{\varepsilon}$
$d \bar{\varepsilon} \varepsilon n \bar{a}$
dē६nā
$\mathrm{Pl} s \varepsilon$ is not used with 2-mora stems in $m n$, or with any stems in $s d$ :
$g i ̣ \eta^{\mathrm{a}} \quad$ gịmā gị̀- $\quad$ "short"
būgusíga būgūs- "soft"
būgusíré būgusá
$\begin{array}{llll}\text { pòodìg } \\ \text { pòjdir } & & \text { pòod- } & \text { "few, small" }\end{array}$

Similarly mā'asír $r^{\varepsilon}$ "cold, wet" mālısír $r^{\varepsilon}$ "sweet" tēbısír ${ }^{\varepsilon}$ "heavy" lābısír $r^{\varepsilon}$ "wide."
Adjectives of the go-type only show $\mathrm{pl} d \varepsilon$ in a few 2-mora stems ending in vowels or plosives:

| $\begin{aligned} & n \varepsilon ̀ o g^{\circ} \\ & n \varepsilon ̇ \varepsilon r^{\varepsilon} \end{aligned}$ | $\begin{aligned} & n \varepsilon ̀ \varepsilon d^{\varepsilon} \\ & \text { nèyà } \end{aligned}$ | $n غ \grave{-}$ | "empty" |
| :---: | :---: | :---: | :---: |
| wịug ${ }^{\text { }}$ | wịid ${ }^{\text {¢ }}$ | wị- | "red" |
| wịio ${ }^{\text {c }}$ | wịyà |  |  |
| $w \bar{s} k^{\text {a/ }}$ | $w a{ }^{\prime} \cdot a d^{\varepsilon /}$ | $w \bar{a} '$ ' or $w \bar{\jmath} k-$ | "long, tall" |
| wā'ar ${ }^{\text {c/ }}$ rare | wá'a |  |  |
| $k \bar{v} d \bar{v} g{ }^{\text {a }}$ | $k \bar{v} t^{\varepsilon}$ rare | kìd- | "old" |
| $k \bar{v} d \bar{i} r^{\varepsilon}$ | $k \bar{u} d \bar{a}$ |  |  |


| $b \check{\varepsilon} d \grave{v} g^{\circ}$ <br> bèdìr ${ }^{\varepsilon}$ rare | bèdà | bc̀d- | "great" |
| :---: | :---: | :---: | :---: |
| tītā'vg ${ }^{\text {a }}$ rare | tītādā | tītá'- | "big" |
| tītā'ar ${ }^{\text {c }}$ |  |  |  |

Adjectives of the $g o$-type with stems in $1 m n r s$ do not use $\operatorname{sg} r \varepsilon$, and accordingly end up with $\mathrm{sg} g o \mathrm{pl}$ aa only:

| sù ${ }^{\circ}$ | sùmà | sùn- | "good" |
| :---: | :---: | :---: | :---: |
| kísù ${ }^{\text {a }}$ | kịsá | kịs- | "hateful, taboo" |
| dà-zर̄mmúg ${ }^{\text {a }}$ | dà-zर̄mmá | dà-zēm- | "equal piece of wood" |
| tūolv́g ${ }^{\text {a }}$ | tōvlá | tūvl- | "hot" |
| lāllóg ${ }^{\circ}$ | lāllá | làl- | "distant" |
| mị'isù ${ }^{\text {a }}$ | mị'isà | mị'is- | "sour" |
| wàun ${ }^{\text {a }}$ | wànà | wàun- | "wasted, thin" |
| kpị' $o \eta^{\text { }}$ | kpị'əmā | kpị'on- | "hard, strong" |
| zùlı̀ ${ }^{\text {a }}$ | zùlımà | zùlòn- | "deep" |
| yị-pón̆rùg ${ }^{\text {a }}$ | yị-pón̆rà |  | "nearby house" |

Similarly yàlò $\eta^{\circ}$ "wide" n̆yālú $\eta^{\circ}$ "wonderful" yz̄l-nárù $\eta^{3}$ "necessary thing."
Perfective verbal adjectives 9.2.1.2 derived with *-lım- belong here. KT (but not WK ) also has forms without - m - in both sg and pl :

| kpịilv́n ${ }^{\circ}$ | kpịilímà | kpịilv́n- | "dead" | WK |
| :---: | :---: | :---: | :---: | :---: |
| nịn-kpịillò ${ }^{\text {a }}$ | nịn-kpịilìmà |  | "dead person" | KT |
| $g \bar{\varepsilon} \varepsilon \bar{n} l \chi^{\prime} \eta^{\circ}$ | $g \bar{\varepsilon}$ ¢n̆límà | $g \varepsilon \bar{\varepsilon}$ ň̆lón- | "tired" | WK |
| nịn-géع $n$ lù ${ }^{\text {a }}$ | nịn-gécn̆lìmà |  | "tired person" | KT |
| pè'عlv́n ${ }^{\text {a }}$ | pè'Elímà | pè'عlv́n- | "full" | WK KT |
|  | dūg-pć'clà |  | "full pots" | KT |

Imperfective verbal adjectives are derived with $d$, but the $d$ is often assimilated or dropped, so not all ipfv verbal adjectives are $d$-stems. They are $g a$-type for WK, but go-type for KT. In either case, the pl suffix is always $a a$, as expected:

| $k \bar{u} v$ dír $^{\varepsilon}$ | kv̄vdá | $k \bar{v} v d-$ | "murderous; |
| :---: | :---: | :---: | :---: |
| kv̄vdíg ${ }^{\text {a }}$ WK |  |  | liable to be killed" |
| kūvdúg ${ }^{\text {KT }}$ |  |  |  |
| $t \overline{m m i} r^{\varepsilon}$ | tūmmā WK | tòm- | "working, helpful" |
|  | tōmnā KT |  |  |


| sịnnír ${ }^{\text {e }}$ rare | sịnná | $s i ̣ n-$ | "silent" |
| :---: | :---: | :---: | :---: |
| sịnníg ${ }^{\text {a }}$ |  |  |  |
| mōr ${ }^{\text {¢/ }}$ | mōrá | $m \bar{r}$ - | "having" |
| kùg-d̄̄l ${ }^{1 \varepsilon /}$ | kùg-d $\bar{c} l \mathrm{lá}$ |  | "chair for leaning on" |

Stems in $g k \eta$ do not use the sg suffixes ga go:

| būn-túlıgì ${ }^{\text {® }}$ | būn-túlıgà |  | "heating thing" |
| :---: | :---: | :---: | :---: |
| n̆wị-tćkì ${ }^{\text {c }}$ | n̆wị-tćkà | $\check{n} w i ̣$-tćk- | "pulling-rope" |
| būn-súnìr ${ }^{\text {c }}$ | būn-súpà |  | "helpful thing" |

Adjectives derived from 4-mora stem verbs in -m in KT's speech take ga or go sg and $a a \mathrm{pl}$; they may drop the $-m$ - in the plural:

| nịn-pú'alì $\eta^{\mathrm{a}}$ | nịn-pú'alìmà | "harmful person" |
| :--- | :--- | :--- |
| nịn-záan̆sı̀ $\eta^{\circ}$ | nịn-záan̆sà | "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:

| $v \bar{u}^{\varepsilon /}$ | vūyá | $v \bar{v} r$ - | "alive" |
| :---: | :---: | :---: | :---: |
| dāug ${ }^{\text {a }}$ | dāad ${ }^{\text { }}$ | dà- | "male" |
| tōog ${ }^{\text { }}$ | $t$ ¢̄ว ${ }^{\varepsilon}$ | tò- | "bitter" |
| puāk ${ }^{\text {a }}$ | $p \bar{v}^{\prime} a s^{\varepsilon}$ | pu'à- | "female" (human) |
| ňyá'an ${ }^{\text {a }}$ | ňyá'as ${ }^{\text {c }}$ | n̆yā'aŋ- | "female" (animal) |
|  | n̆yā'amís ${ }^{\text {c }}$ |  |  |
| n̆yc̀esín ${ }^{\text {a }}$ | n̆yc̀ensís ${ }^{\text {® }}$ | n̆yèesín- | "self-confident" |

and similarly vèn̆llína "beautiful" mālısína "pleasant" lăllín $\eta^{\text {a }}$ "distant."
bị̣la ${ }^{\text {a }} \quad$ bịbīis ${ }^{\varepsilon} \quad$ bịl- or bị̀- $\quad$ "little"

The pl stem bib- is reduplicated. Sg -la is a diminutive class suffix: cf Farefare níĺlá "chick", pìillà "lamb", bùdíblá "boy", púglá "girl", kílilá "young guinea fowl", Mooré bìríblá "boy", bìpúglá "girl", bùllá "kid."

## 7 Verb flexion

Though written solid with the verb in traditional orthography, discontinuouspast $n^{\varepsilon}$ and the 2 pl subject ${ }^{\text {ya }}$ are not flexions but liaison enclitics 4.2.

### 7.1 Dual-aspect

Some $90 \%$ of verbs are dynamic 16.1 dual-aspect verbs, using the stem form for perfective aspect (with the dummy suffix $-l / \varepsilon$ after consonants) and adding $-d a$ for imperfective. Synchronically, -da is simply a flexion, but historically this represents 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 16.5.

Perfective, imperfective and -ma imperative are cited in order.
Straightforward examples include:

| $k \bar{v}$ | $k \bar{v} v d^{\text {a/ }}$ | kùvm ${ }^{\text {a }}$ | "kill" |
| :---: | :---: | :---: | :---: |
| $k p \varepsilon ̇ n ̆ ' ~$ | $k p \varepsilon ̇ n ̆ ' \varepsilon d^{\text {a }}$ | $k p \varepsilon ̇ n ̆ ' \varepsilon m^{\text {a }}$ | "enter" |
| kịà | kịəd ${ }^{\text {a }}$ | kịəm ${ }^{\text {a }}$ | "cut" |
| kūā | $k \bar{u} \theta d^{\text {a/ }}$ | kùөm ${ }^{\text {a }}$ | "hoe" |
| gòn̆ | gòon̆ ${ }^{\text {a }}$ | gòon̆m ${ }^{\text {a }}$ | "hunt" |
| $d \bar{v} g^{\varepsilon}$ | $d \bar{v} g \bar{u} d^{\text {a/ }}$ | dùgùm ${ }^{\text {a }}$ | "cook" |
| yùug ${ }^{\varepsilon}$ | yùugìd ${ }^{\text {a }}$ | yùugìm ${ }^{\text {a }}$ | "delay, get late" |
| $y a ̄ d i ̄ g g^{\varepsilon /}$ |  | yàdıgìm ${ }^{\text {a }}$ | "scatter" |
| pīăñ ${ }^{\text {'a }}$ | pîăn'ad ${ }^{\text {a/ }}$ | piàn̆'am ${ }^{\text {a }}$ | "speak; praise" |
| du'à ${ }^{\text {a }}$ | $d \grave{v} a^{\text {a }}$ | dò'am ${ }^{\text {a }}$ | "bear, beget" |
| nōk ${ }^{\text {¢ }}$ | nōkíd ${ }^{\text {a }}$ | nòkìm ${ }^{\text {a }}$ | "take" |
| $g a \overline{\eta^{\varepsilon /}}$ | gā $\mathrm{píd}^{\text {a }}$ | gàjìm ${ }^{\text {a }}$ | "choose" |
| kpàr ${ }^{\text {c }}$ | kpàrid ${ }^{\text {a }}$ | kpàrìm ${ }^{\text {a }}$ | "lock" |
| sūgūr ${ }^{\text {c/ }}$ | sūgvríd ${ }^{\text {a }}$ | sùgvrim ${ }^{\text {a }}$ | "forgive" |
| bàs ${ }^{\text {® }}$ | bàsì ${ }^{\text {a }}$ | bàsìm ${ }^{\text {a }}$ | "go/send away" |
| sịgıs ${ }^{\text {/ }}$ | sịgısíd ${ }^{\text {a }}$ | sịgısìm ${ }^{\text {a }}$ | "lower" |
| $k \bar{s} t^{\varepsilon /}$ | $k \bar{t} i^{\prime} d^{\text {a }}$ | kòtìm ${ }^{\text {a }}$ | "slaughter" |

Some root-stems ending in a vowel show a $C V$ - allomorph in both imperfective and imperative, with $-t$ - for $-d-\underline{3.4}$ :

| $d i ̀$ | $d i ̀ t^{\mathrm{a}}$ | $d i ̀ m$ | "eat" |
| :--- | :--- | :--- | :--- |
| $\check{n} y \bar{\varepsilon}$ | $\check{n} y \bar{\varepsilon} t^{\mathrm{a} /}$ | $\check{n} y \varepsilon ̀ m^{\mathrm{a}}$ | "see" |

and likewise lị̀/lù "fall", d̄̄ "go up", yị "go/come out", zò "run, fear."

Stems in - $d$ - show $-t$ - in the ipfv via $* d d \rightarrow t t$ :
$b v ̀ d^{\varepsilon}$
bùt ${ }^{\mathrm{a}}$
bùdìm ${ }^{\text {a }}$
"plant"
gàad ${ }^{\varepsilon}$
gàt ${ }^{\mathrm{a}} \underline{2.2}$
gàadìm ${ }^{\text {a }}$
"pass, surpass"

Stems in $l$ generate a cluster in the ipfv via $* l d \rightarrow n n:$

| $v \bar{u}]^{\varepsilon}$ | $v \bar{u} n^{\text {na/ }}$ | vòlìm ${ }^{\text {a }}$ | "swallow" |
| :---: | :---: | :---: | :---: |
| màal ${ }^{\text { }}$ | màan ${ }^{\text {na }}$ | màalìm ${ }^{\text {a }}$ | "make; sacrifice" |
| dī $\mathrm{g}^{\text {l }}{ }^{\varepsilon /}$ | dīgín ${ }^{\text {na }}$ | dìgılìm ${ }^{\text {a }}$ | "lay down" |

Only 2 -mora $b$-stems assimilate $* b m \rightarrow m m$ :

| $l{ }^{\text {l }}{ }^{\text {b }}$ | $l$ lèbì ${ }^{\text {a }}$ | lèm ${ }^{\text {ma }}$ | "return" |
| :---: | :---: | :---: | :---: |
| sōb ${ }^{\text {c }}$ | sōbīd ${ }^{\text {a/ }}$ | sòm ${ }^{\text {ma }}$ | "write" |
| $l i ̀ ̀ \partial b^{\varepsilon}$ | lịəbìd ${ }^{\text {a }}$ | lị̀biòm ${ }^{\text {a }}$ | "become" |
| $\bar{\varepsilon} \varepsilon n ̆ b^{\varepsilon /}$ | $\bar{\varepsilon} \varepsilon \overline{n ̌ b i ́ d ~}{ }^{\text {a }}$ | غ̀En̆bìm ${ }^{\text {a }}$ | "lay a foundation" |

Only 2-mora $n$-stems show *nd $\rightarrow n n$; only $k \bar{\varepsilon} \eta^{\varepsilon /}$ (below) shows $* n m \rightarrow m$ :

| bùn ${ }^{\text { }}$ | bùn ${ }^{\text {na }}$ | bùnìm ${ }^{\text {a }}$ | "reap" |
| :---: | :---: | :---: | :---: |
| mōn ${ }^{\varepsilon}$ | mōn ${ }^{\text {na/ }}$ | mònìm ${ }^{\text {a }}$ | "make porridge" |
| $g$ g̀'on ${ }^{\text {c }}$ | gò'onì ${ }^{\text {a }}$ | gò'onìm ${ }^{\text {a }}$ | "extend neck" |
| dìgìn ${ }^{\text {c }}$ | dìgını̀ ${ }^{\text {a }}$ | dìgınìm ${ }^{\text {a }}$ | "lie down" |

The nn-stem $\operatorname{sùn}^{\varepsilon}$ does not assimilate at all:
sùn ${ }^{\mathrm{n} \varepsilon} \quad$ sùnnìd ${ }^{\mathrm{a}} \quad$ sùnnìm ${ }^{\mathrm{a}} \quad$ "bow head"

4-mora $m$-stems always assimilate $* m d \rightarrow m n, m m$, 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.

| sịilìm ${ }^{\text {m }}$ | sịilìm ${ }^{\text {ma }}$ | sịilìm ${ }^{\text {ma }}$ | "quote proverbs" |
| :---: | :---: | :---: | :---: |
| lāním ${ }^{\text {m }}$ | lā ${ }^{\text {ám }}{ }^{\text {ma }}$ | làjı̀m ${ }^{\text {ma }}$ | "wander searching" |
| kàrim ${ }^{\mathrm{m}}$ | kàrı̀m ${ }^{\mathrm{m}}$ /kàrımid ${ }^{\text {a }}$ | kàrìm ${ }^{\text {ma }}$ | "read" |
| tōom ${ }^{\text {m/ }}$ | tóom ${ }^{\text {ma/ }}$ /̄̄omíd ${ }^{\text {a }}$ | tòom ${ }^{\text {ma }}$ | "depart" |
| tòm ${ }^{\text {m }}$ | tòm ${ }^{\text {ma }}$ | tùm ${ }^{\text {ma }}$ | "work" |

Like tùm ${ }^{\mathrm{m}}$ are wùm ${ }^{\mathrm{m}}$ "hear", kìm ${ }^{\mathrm{m}}$ "tend a flock or herd", dùm ${ }^{\mathrm{m}}$ "bite."

Stems in -mm- only assimilate in the imperative:
tàm $^{\mathrm{m}} \quad$ tàmmìd $^{\mathrm{a}} \quad$ tàm ${ }^{\mathrm{ma}} \quad$ "forget"
Like tàm ${ }^{\mathrm{m}}$ are $z a ̀ \mathrm{~m}^{\mathrm{m}}$ "cheat, betray", dàm ${ }^{\mathrm{m}}$ "shake", lغ̀m ${ }^{\mathrm{m}}$ "sip, taste"; the cognate Mooré verbs have -mb-: zãmbe "cheat", rãmbe "stir", lèmbe "taste".

Fusion verbs show deleted ${ }^{*} g$ after aa іә иө $a a n ̆ ~ \varepsilon \varepsilon \check{~}$ оэn̆ 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.

| fāen̆ ${ }^{\prime}$ | fāan̆d ${ }^{\text {a/ }}$ | fàan̆m ${ }^{\text {a }}$ | "save" |
| :---: | :---: | :---: | :---: |
| dị'el | $d i ̣ ' \partial d^{\text {a/ }}$ | dị'əm ${ }^{\text {a }}$ | "get, receive" |
| dūel | $d \bar{u} \theta d^{\text {a/ }}$ | dùөm ${ }^{\text {a }}$ | "rise, raise" |
| pūn̆'e' | $p u ̄ n ̆ ' \theta d^{\mathrm{a} /}$ | pùn̆'өm ${ }^{\text {a }}$ | "rot" WK |

Irregular dual-aspect verbs are few. Only two are irregular in the actual flexional suffixes taken:

| $k \bar{\varepsilon}$ | $k \bar{\varepsilon} t^{\mathrm{a} /}$ | $k \dot{\varepsilon} l^{\mathrm{a}}$ | "let, allow" |
| :--- | :--- | :--- | :--- |
| $k \bar{\varepsilon} \check{n}$ | $k \bar{\varepsilon} n^{\mathrm{a} /}$ | $k \dot{\varepsilon} m^{\mathrm{a}}$ | "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", jefila ipfv.

| wị $k^{\varepsilon}$ | wịid ${ }^{\text {a }} 3.4$ | wịkìm ${ }^{\text {a }}$ | "fetch water" |
| :---: | :---: | :---: | :---: |
| īān̆ ${ }^{\text {¢ }}$ | īān̆'ad ${ }^{\text {a/ }}$ | iàn̆kìm ${ }^{\text {a }}$ | "leap, fly" |
| gịlı $g^{\varepsilon /}$ | gị $n^{\text {na/ }}$ | gịlıgìm ${ }^{\text {a }}$ | "go around" |
| $k \bar{\varepsilon} \eta^{\varepsilon /}$ | $k \bar{\varepsilon} n^{\text {na/ }}$ | kèm ${ }^{\text {a }}$ | "go" |
| $y \bar{c} l^{\varepsilon}$ | yèt ${ }^{\text {a }}$ | yèlìm ${ }^{\text {a }}$ | "say" |
| $g \bar{\sim} s^{\varepsilon}$ | $g \overline{o s s ı} d^{\text {a/ }}$ | gòsìm ${ }^{\text {a }}$ | "look" |
|  | or $g \bar{\partial} t^{\text {a/ }}$ | gòm ${ }^{\text {a }}$ |  |
| $t i S^{\varepsilon}$ | tìsid ${ }^{\text {a }}$ | tisiom ${ }^{\text {a }}$ | "give" |
|  | or tit ${ }^{\text {a }}$ |  |  |

A perfective tì may appear before bound object pronouns, e.g. $t \grave{l}=f$ "give you."

### 7.2 Single-aspect

Single-aspect verbs have just one finite form, which is always imperfective. Each verb is either dynamic, behaving like the imperfective of a dual-aspect verb, or stative 16.1; transitive stative verbs typically express relationships, while intransitives have predicative adjectival meanings. Morphologically, there are three subgroups, but this division correlates only to a limited extent with meaning.

Six stative verbs consist of bare stems (with dummy suffixes after consonants):

| mī̀ | "know" | $z \bar{\imath}{ }^{\prime}$ | "not know" |
| :--- | :--- | :--- | :--- |
| bغ̀ | "be somewhere, exist" | kā'e | *kagı |
| "not be" |  |  |  |
| $t u ̄ n ̆ ' e ~$ | "be able" | nò $\eta^{\varepsilon}$ | "love" |

Uniquely among single-aspect verbs, nò $\eta^{\varepsilon}$ has a ma-imperative nòjı̀m ${ }^{\mathrm{a}}$ when the verb word carries the independency-marking tone overlay. As imperfectives, the forms are never followed by perfective yā 16.5, and the Pattern A verbs bè and nò $\eta^{\varepsilon}$ always have M tone before liaison and are followed by M spreading 4.4.

| M̀ nóy. | "I love him." (e.g. in reply to a question) |
| :--- | :--- |
| not |  |
| * $\grave{M}$ nóy yā | specifically stated to be impossible by WK |

Mit ka Zugsob tumtum a one noy zaba.
Mịt kà Zūg-sób tóm-tūm á ónì nòク zábāa=ø.
neg.Let.imp and Lord 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 nónī=f. $\quad$ "And she loves you."

The agent noun nòjì $d^{a}$ has Pattern $L$ instead of the expected $A$ :

Ò nòjìd 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 jehra ipfv "être debout" = Kusaal $z i!' e e^{y a}$, 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 dualaspect -da into a unitary flexion. In particular, when ${ }^{y} y$ has assimilated to a preceding root-final consonant, resulting in $n n \mathrm{~mm} \mathrm{ll}$ 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 $n n$ then behaves exactly like $n n$ derived from *nd, but $l l r(r)$ are subject to further assimilation just like single $l r$ 3.5.

Dynamic verbs with unassimilated $y$ mostly express stances:

| ị $g_{\text {ìya/ }}$ | "be kneeling" | dīgīya/ | "be lying down" |
| :---: | :---: | :---: | :---: |
| vābīya/ | "be prone" | làbìya | "crouch in hiding" |
| tàbìya | "be stuck to" | $z i ̣ ' e^{\text {ya }}$ | "be standing still" |
|  | "be sitting" | tị 'iya/ | "be leaning (object)" |
| gō'e ${ }^{\text {ya/ WK }}$ | "have neck extended" | wà'e ${ }^{\text {ya }}$ | "travel to" |

NT/KB tu'ae "approach" is perhaps tv'e $e^{y a}$ *togya.
Statives include transitive and intransitive types:

| àen̆ ${ }^{\text {ya }}$ | "be something/somehow" |  |  |
| :---: | :---: | :---: | :---: |
| $s \bar{U}^{\prime} e^{\text {ya/ }}$ | "own" | sōn̆'e ${ }^{\text {ya/ }}$ | "be better than" |
| t⿹̄⿺ ${ }^{\text {ya/ }}$ | "be bitter" | $v \bar{u} e^{\text {ya/ }}$ | "be alive" |

Stance verbs with unassimilated $y$ have derived inchoative and causative dualaspect verbs in $n$ and $l$ 9.1.1. They make perfective gerunds, and have agent nouns, ipfv verbal 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 zịn̆'i $n \bar{\varepsilon}$. | "She's sitting down." WK KT |
| :---: | :---: | :---: |
|  | Ò pūziņ̆'idā. | "She doesn't sit down" WK |
| but | Ò pū zịn'ıinìdā. | "She doesn't sit down." KT |
|  | Ò vàbì n̄ | "He's lying prone." |
|  | Ò pū vābıdá. | "He doesn't lie prone." WK |
| but | Ò pū vábını̀dā. | "He doesn't lie prone." KT |
|  | Ò dìgì $n \bar{\varepsilon}$. | "She's lying down." |
|  | Ò pū dìgıdá. | "She doesn't lie down" WK |
|  | Lì zị'ə $n \bar{\varepsilon}$. | "It's standing up." |
|  | Lì pū zị'ədā. | "It (a defective tripod) doesn't stand up." WK |
|  | Lì tị̀'i n $\bar{\varepsilon}$. | "It's leaning against something." |
|  | Lì tị'id. | "It can be leant against something." WK |
|  | Lì pū tị ìió. | "It's not leaning against something." |
|  | Lì pū tị'idá. | "It's not for leaning against something." WK |

Dynamic single-aspect verbs in $n n m m p r(r)$ include stance verbs and others:

| sịnna/ | "be silent" | $d \bar{\varepsilon} l^{\text {la/ }}$ | "be leaning (person)" |
| :--- | :--- | :--- | :--- |
| gùl la | "be hanging" | $g \bar{\jmath} l^{\text {la/ }}$ | KT | "have neck extended

Most make imperfective gerunds; in these and in agent nouns, ipfv verbal adjectives and instrument nouns, the stem is in $n n m m l l r(r)$ and $d$ is omitted. Similarly, they do not have distinct continuous, habitual or inchoative forms.

Stative verbs in $n n m m r(r)$ again include transitive and intransitive types:

| $n \bar{\varepsilon} n^{\text {na/ }}$ | "envy" | $\nu \varepsilon \chi^{\text {na }}$ | "be beautiful" |
| :---: | :---: | :---: | :---: |
| $w \bar{\varepsilon} n^{\text {na/ }}$ | "resemble" | kpị̀'əm ${ }^{\text {ma/ }}$ | "be strong" |
| $k p \bar{\varepsilon} \varepsilon \bar{n} m^{\mathrm{ma}}$ | "be older than" | zùlìm ${ }^{\text {ma }}$ | "be deep" |
| sòm ${ }^{\text {ma }}$ | "be good" | $g i ̣ m{ }^{\text {ma/ }}$ | "be short" |
| yàlìm ${ }^{\text {ma }}$ | "be wide" | $z \bar{\varepsilon} \mathrm{~m}^{\mathrm{ma} /}$ | "be equal to" |
| tàdìm ${ }^{\text {ma }}$ | "be weak" | wā'am ${ }^{\text {ma/ }}$ | "be long, tall" |
| vèñl ${ }^{\text {la }}$ | "be beautiful" | lāl ${ }^{\text {la/ }}$ | "be far from" |
| $t \bar{u} l^{\text {la/ }}$ | "be hot" | mōr ${ }^{\text {a/ }}$ | "have" |
| $t a ̄ r^{\text {a/ }}$ | "have" | dù ${ }^{\text {a }}$ | "be many" |
| kàr ${ }^{\text {a }}$ | "be few" | $n a \bar{r}{ }^{\text {a/ }}$ | "be necessary" |
| pòn̆ ${ }^{\text {a }}$ | "be near to" |  |  |

$M$-stems show single $m$ in most sources except after short root vowels $\underline{3.5}$.
A number of stative verbs end in -sa:

| mị̀ is ${ }^{\text {a }}$ | "be sour" | būgūs ${ }^{\text {a/ }}$ | "be soft" |
| :---: | :---: | :---: | :---: |
| mā'as ${ }^{\text {a/ }}$ | "be cool" | $t \bar{\varepsilon} \overline{b i}^{\text {s }}{ }^{\text {a/ }}$ | "be heavy" |
| mālīs ${ }^{\text {a/ }}$ | "be sweet" | lābīs ${ }^{\text {a/ }}$ | "be wide" |
| $\check{n y y ̇ ̀ z s ~}{ }^{\text {a }}$ | "be self-confident" | $k i ̣ s^{\text {a/ }}$ | "hate" |

The $s$ of these forms is a derivational suffix producing stative forms.
There is one intransitive stative verb in -da: pòsd ${ }^{\mathrm{a}}$ "be few, small."
Some dual-aspect imperfective forms have become independent stative verbs, e.g. bòsd ${ }^{\text {a }}$ "want, like" (bò "seek"), zòtª "fear" (zò "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.

Dual-aspect verbs form gerunds by adding the following class suffixes to the stem. 3-mora stems ending in underlying $* g$ replace the $-g o$ suffix with $-r \varepsilon$.

2-mora stems
3-mora stems in *g
[surface $\left.-g^{\varepsilon}-k^{\varepsilon}-\eta^{\varepsilon}-a e-i e-u e\right] \quad-r \varepsilon$
all others

| $k \bar{v} v b^{\prime /}$ | "kill (kū)" | $d \bar{v} g \bar{u} b^{\text {/ }}$ | "cook ( $d \bar{v} g^{\varepsilon}$ )" |
| :---: | :---: | :---: | :---: |
| $d \bar{v}^{\prime} a b$ | "bear, beget (dư'àa)" | $k a ̄ d i ̄ b^{\circ}$ | "drive off (kàd ${ }^{\text {e }}$ " |
| $p i ̣ l i ̄ b^{\circ}$ | "cover (pịl ${ }^{\text {c }}$ ) ${ }^{\text {c }}$ | $k p a ̄ r i ̄ b^{3}$ | "lock (kpàr $)^{\text {) }}$ |
| $b a ̄ s i ̄ b^{\text { }}$ | "go/send away (bàs ${ }^{\text {¢ }}$ )" | sōp ${ }^{\text {a/ }}$ | "write ( $s$ 万̄ ${ }^{\varepsilon}$ )" |
| lop ${ }^{\text {/ }}$ | "throw stones at (lōb ${ }^{\text {e }}$ ) | $k i m^{\text {mo }}$ | "tend flock/herd (kim ${ }^{\text {m }}$ )" |

2-mora $n$-stems do not assimilate $* n b \rightarrow m m$ : bùn ${ }^{\varepsilon}$ "reap", gerund $b \bar{u} n \bar{i} b^{\top}$.

| yùugòr ${ }^{\text {c }}$ | "delay (yùug) ${ }^{\text {¢ }}$ | nōkír ${ }^{\text {c }}$ | "take ( $n$ ¢ $k^{\varepsilon /}$ ) ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: |
| nị̀nì ${ }^{\text {c }}$ | "doing (nị̀n)" | gbán'ar ${ }^{\text {e }}$ | "grab (gbān̆'e) ${ }^{\text {a }}$ |
| dị' $\partial r^{\varepsilon}$ | "get ( $d \underline{1}{ }^{\text {e }} e^{\prime}$ )" | dúer ${ }^{\varepsilon}$ | "rise (dūe) ${ }^{\text {e }}$ |
| gàadù ${ }^{\text { }}$ | "pass ( gàad $^{\text {¢ }}$ ) ${ }^{\text {a }}$ | lị̀əbùg ${ }^{\text {a }}$ | "become (lị̀ ${ }^{\text {b }}$ )" |
| dīgılúgo | "lay down ( dī $_{\text {gī }} l^{\varepsilon /}$ )" | yāarúg ${ }^{\text {a }}$ | "scatter (yāar ${ }^{\text {c/ }}$ )" |
| sịgısúg ${ }^{\text {a }}$ | "lower ( $s i ̣ g$ ì $s^{\varepsilon /}$ )" | dàmmùg ${ }^{\text {a }}$ | "shake (dàm ${ }^{\text {m }}$ ) ( mm -stem) |

3-mora $n$-stems never assimilate $* n g \rightarrow \eta \eta:$
dìgınù ${ }^{\circ} \quad$ "lie down $\left(d i ̀ g ı n^{\varepsilon}\right) " \quad z i ̣ n ̌ ' i n u ̀ g^{\circ} \quad$ "sit down (zịn̆'in $\left.{ }^{\Sigma}\right)$ "

3-mora $m$-stems assimilate $* m g \rightarrow \eta \eta$ optionally:


```
sàn̆'v \(\eta^{\circ} \quad\) "destroy (sàn̆'am \({ }^{\mathrm{m}}\) )" or sàn̆'amùg \({ }^{\circ}\)
kàrùn \({ }^{\text {ºn }} \quad\) "read (kàrìm \({ }^{\mathrm{m}}\) )" or kàrımò \({ }^{\text {º }}\)
```

4-mora stems in -sım -lım follow the rule and use -go (always assimilating), but stems in ${ }^{*}$-gım drop the -m- and use -r $\varepsilon$ :

| sịilón ${ }^{\circ}$ | "cite proverbs (sịilìm ${ }^{\mathrm{m}}$ )" zàan̆sún ${ }^{\text {a }}$ | "dream (zàan̆sim ${ }^{\text {m }}$ )" |
| :---: | :---: | :---: |
| wànì ${ }^{\text {E }}$ | "waste away ( wànìm ${ }^{\mathrm{m}}$ )" lāpír ${ }^{\text {c }}$ | "wander (lāŋím ${ }^{\text {m }}$ )" |
| zàkìr ${ }^{\text {c }}$ | "itch (zàkìm ${ }^{\text {m }}$ )" |  |

2-mora stems regularly use -re instead of -bo in compounds:

| pu'à-dīır $r^{\varepsilon}$ | "marriage" | $n i ̣ n-k \hat{v} v r^{\varepsilon}$ | "murder" |
| :--- | :--- | :--- | :--- |
| dā-nûur | "beer-drinking" | mò- $p i ̄ 1 l^{1 \varepsilon}$ | "grass roof" |
| $f \bar{u}-y \hat{\varepsilon} \varepsilon r^{\varepsilon}$ | "shirt-wearing" WK |  |  |

Irregular gerunds are rare with stems of three or four morae. A few are formally plural 12.1, and y!̣iis ${ }^{\varepsilon /}$ "make emerge" has yịisíb ${ }^{0}$. Most irregular verbs have regular gerunds, e.g. $t i s^{\varepsilon}$ "give" $\rightarrow t \bar{i} s \bar{s} b^{\circ}, k \bar{\varepsilon}$ "let" $\rightarrow k \bar{\varepsilon} \varepsilon b^{J}$. However, in KED almost $20 \%$ of 2-mora-stem verbs use suffixes other than bo, especially stems in -m or -b. Most irregular gerunds are tonally regular, but forms with -go from Pattern A verbs are Pattern L unless variants with $g a$ or $s \varepsilon$ show that the word is $g a \mid s \varepsilon$ with LF remodelling 5.3.2.

| lịi ${ }^{\text {a }}$ | "fall (lị)" | $2 \overline{i n}]^{\varepsilon /}$ | "carry on head (zị)" |
| :---: | :---: | :---: | :---: |
| $b \bar{\varepsilon} \breve{n}^{\prime} \varepsilon s^{\varepsilon}$ | "fall ill (bèñ')" | $k \bar{\varepsilon} n^{\mathrm{n}} /$ | "come (k̄̄̆n)" |
| $z u ̄ a$ | "run (ż̀)" or zōog ${ }^{\text {ºm }}$ | vūug ${ }^{\text {/ }}$ | "make noise ( $v \bar{u}$ )" |
| pìàuňk ${ }^{\text {J }}$ | "speak (pīāñ'a)" | $b u \bar{l} \mathrm{l}^{\text {g }}{ }^{\text {a }}$ | "plant (bùd ${ }^{\text {e }}$ ) ${ }^{\text {or }}$ or $\bar{v} d \bar{v} g^{\circ}$ |
| yèlù ${ }^{\text {o }}$ | "say, tell (yغ̇l ${ }^{\text {c }}$ )" | kūlī $\mathrm{g}^{\mathrm{a}}$ | "go home (kūl ${ }^{\text {a }}$ ) ${ }^{\text {or }}$ kūlv$g^{\text {a/ }}$ |
| tàňsù ${ }^{\text {a }}$ | "shout (tàňs ${ }^{\text {¢ }}$ )" | són̆sì ${ }^{\text {a }}$ | "converse (sōñs ${ }^{\text {¢ }}$ " |
| gósì ${ }^{\text {a }}$ | "look ( $g$ ¢̄ $s^{\varepsilon}$ )" | sōsī $g^{\text {a }}$ | "pray, beg (sòs)" |
| kikị́rù ${ }^{\text { }}$ | "hurry (kị $r^{\varepsilon}$ )" or kịrīb ${ }^{\text {/ }}$ | $l \bar{\varepsilon} b \bar{h} g^{\text {a }}$ | "return (lغ̀ ${ }^{\text {¢ }}$ )" |
|  |  | $t \bar{\varepsilon} b \overline{\mathrm{i}} \mathrm{g}^{\text {a }}$ | "carry in both hands (tè $b^{\varepsilon}$ )" |
| $k a ̄ n ̆ b i ̄ r^{\varepsilon}$ | "scorch (kàn̆ ${ }^{\text {¢ }}$ ) ${ }^{\text {a }}$ | 万̄n̆bīr ${ }^{\text {c }}$ | "chew (òn̆ ${ }^{\text {® }}$ )" |
| $l u ̄ b i ̄ r^{\varepsilon /}$ | "buck (lū ${ }^{\text { }}$ ) ${ }^{\text {c }}$ | zàbìr ${ }^{\text {c }}$ | "fight (zà ${ }^{\varepsilon}$ )" |
| tèn̆bùg ${ }^{\text {a }}$ | "tremble (tèñ ${ }^{\text {¢ }}$ )" | tv̄ımā | "work (tòm ${ }^{\text {m }}$ )" |
| tìtōmī ${ }^{\text {® }}$ | "send (tòm ${ }^{\text {m }}$ " | $w \bar{u} m^{\text {mo }}$ | "hear ( wòm $^{\text {m }}$ )" |
|  |  |  | or wv̀mmùg ${ }^{\text {9 9.2.1.4 }}$ |

Dynamic single-aspect verbs in -ya where the $y$ is not assimilated form perfective gerunds from the root using various noun classes:

| $z i ̣ ̆ n ' i g{ }^{\text {a }}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $z i ̣ ' a$ | KED | "be standing (zị' $e^{\text {ya }}$ )" | or $z \overline{1} \cdot \partial g^{\text {a }}$ | KT (very irreg 3.7) |
| $d i \bar{k} \mathrm{k}^{\mathrm{a} /}$ | KT | "be lying ( $\mathrm{d}_{\mathrm{g}} \mathrm{gi} \mathrm{ya}$ ) $)^{\prime}$ | or dī $\overline{\mathrm{I}}^{\text {r }}{ }^{\varepsilon /}$ | WK |
| $\stackrel{1}{1} \mathrm{k}^{\mathrm{a} /}$ | KT | "be kneeling (ị $\mathrm{g}_{\mathrm{i}}^{\text {ya/ }}$ )" | or 1 ḷ $\mathrm{i}^{\text {r }}$ | WK |
| $v a \bar{a}{ }^{3}$ | KT | "be lying prone ( $v a \bar{b} \bar{i}$ | " or vābīr ${ }^{\text {// }}$ | WK |
| tị̀'ib ${ }^{\text {/ }}$ |  | "be leaning, of an obj | (tịi'iya/)" |  |

$G \grave{y} l^{\text {la }}$ "be hanging" uses $g \bar{v} l \bar{\imath} b^{3}$ from dual-aspect $g \grave{v} l^{\varepsilon}$. Tह̀n̆ $r^{\text {a }}$ "remember" and the stative $p \grave{n} n r^{a}$ "be near" have $t \bar{\varepsilon} \check{n} r i ̄ b^{3} p \bar{n} n ̆ r i ̄ b^{3}$ by analogy with dual-aspect verbs following the simplification $* r r \rightarrow r$. Stative $k i ̣ s^{\mathrm{a} /}$ "hate" has the gerund kị́svi $g{ }^{\text {. }}$

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.

| $\bar{\varepsilon} \varepsilon$ n̆bír ${ }^{\varepsilon}$ | "(physical) foundation" | $\bar{\varepsilon} \varepsilon \overline{n ̆ b u ́ g}{ }^{\circ}$ | "laying a foundation" |
| :---: | :---: | :---: | :---: |
| $d \bar{u} k^{\text {J/ }}$ | "cooking pot" | $d \bar{u} g u ̄ b^{3 /}$ | "cooking" |
| dà'a | "market" | dā'ab ${ }^{\text {a }}$ | "buying" |
| $k \bar{u} k^{\text {a }}$ | "chair" | $k \bar{v} g \bar{v} b{ }^{\circ}$ | "resting on something" |
| $z \bar{u} g-k \bar{v} g \bar{v} r^{\varepsilon}$ | "pillow" |  |  |
| sūāk ${ }^{\text {a/ }}$ | "hiding place" | $s \bar{u}^{\prime} a b^{\text {/ }}$ | "hiding" |
| sōbīr ${ }^{\text {c/ }}$ | "piece of writing" | sэ̄p ${ }^{\text {/ }}$ | "writing, orthography" |
| kūt ${ }^{\varepsilon}$ | "iron, nail" | $k u ̄ d \bar{v} b^{\text {a }}$ | "working iron" |
| kùesìm ${ }^{\text {m }}$ | "merchandise" | kùөsùg ${ }^{\text {a }}$ | "selling" |
| pèbısìm ${ }^{\text {m }}$ | "wind" | pèbısù ${ }^{\text { }}$ | "blowing of the wind; wind" |

$V a \bar{b} \bar{i} r^{\varepsilon /} l a \bar{b} \bar{i} r^{\varepsilon /} d \bar{l} g \bar{i} r^{\varepsilon /} \frac{l}{l} g \bar{i} r^{\varepsilon /}$, used by WK as gerunds, are used by KT as concrete nouns meaning "place for lying prone" etc, contrasting with the gerunds vāp ${ }^{2 /}$ etc.

From pịbìl ${ }^{\varepsilon}$ "cover", zàn̆bìl ${ }^{\varepsilon}$ "tattoo", màal $l^{\varepsilon}$ "sacrifice" are derived

|  | pịb ${ }^{\text {ana }}$ | pị̂bìn- | "covering" |
| :---: | :---: | :---: | :---: |
| $z a \bar{n} b \bar{b} n^{\text {ne }}$ | zān̆bınā | zàn̆bìn- | "tattoo" (NT "sign") |
| māan ${ }^{\text {ne }}$ | māanā | màan- | "sacrifice" |

The -n- in these words is simplified from *nn 3.5. Toende and Mooré have Pattern L instead of A: zãbín, màan. The *nn may represent *ld, with *d in instrument-noun sense: cf tūedī $r^{\varepsilon}$ "mortar", from tùà "grind in a mortar."

It is exceptional for regularly formed gerunds to acquire concrete meaning, but a clearcut example is $d \bar{\imath} \imath b^{0}$ "food."

### 8.2 Nominals from nominals

The partial association of noun class and meaning can be exploited to change the meaning of a stem, e.g. zùà "friend", zù $\theta d^{\varepsilon}$ "friendship"; sịiñ $f^{\rho /}$ "bee", sịiñ $d^{\varepsilon /}$ "honey"; wè $\varepsilon d^{\mathrm{a}}$ "hunter", wèog${ }^{\text {0 }}$ "deep bush."

Names of ethnic groups belong to the $a \mid b a$ or $g a \mid s \varepsilon$ classes, their languages belong to the $-l \varepsilon$ subclass of $r \varepsilon \mid a a$, and associated places have -go $\underline{21}$.

Tree names are almost all ga|sع class, like tìı $g^{\text {a }}$ "tree", while their fruits belong to classes $r \varepsilon \mid a a$ or $g o \mid d \varepsilon$.

| Tree | Fruit |  |
| :---: | :---: | :---: |
| $\bar{a} a n ̆{ }^{\text {din }}{ }^{\text {g }}$ | $\bar{a} a n ̆ d \bar{r} r^{\varepsilon}$ | Vitex doniana |
| dùan̆ | dòon̆g ${ }^{\text {a }}$ | dawadawa |
| gāan̆' | $g a ̄ n r^{\varepsilon /}$ | Nigerian ebony |
| gù ${ }^{\text {a }}$ | gòm ${ }^{\mathrm{m} \varepsilon}$ | kapok |
| kikkàn ${ }^{\text {a }}$ | kìkàm ${ }^{\text {m }}$ | fig tree |
| kpòkpàrì ${ }^{\text {a }}$ | kpùkpàr ${ }^{\text { }}$ | palm |
| lị́ə $\partial \eta^{\text {a }}$ | lị'əm ${ }^{\text {m }}$ | Ximenia americana |
| $p u \overline{s i} g^{\mathrm{a} /}$ | pūsīr ${ }^{\text {E/ }}$ | tamarind |
| sissịbì ${ }^{\text {a }}$ | sīsịbìr ${ }^{\varepsilon}$ | neem |
| tá'aj ${ }^{\text {a }}$ | tá'am ${ }^{\mathrm{m} \varepsilon}$ | shea butter |
| $t \overline{\text { che }}$ ¢ $g^{\text {a }}$ |  | baobab |
| vúө $\square^{\text {a }}$ | vúөr ${ }^{\varepsilon}$ | red kapok |

The strong association of the $m m$ class with abstracts can be used to convert adjective stems to abstract nouns. These nouns somewhat resemble gerunds, and can likewise be preceded by combining forms as generic arguments, but they cannot be used in the future construction with bòsd ${ }^{\mathrm{a}}$ "want", and unlike imperfective gerunds, which show the expected gerund Tone Patterns 3.8.4, they show the same tone patterns as their adjectives. The forms sometimes also appear as manner adverbs.

| $v \bar{u} \mathrm{~m}^{\mathrm{m} /}$ | "life" | sùm ${ }^{\mathrm{m}}$ | "goodness" |
| :---: | :---: | :---: | :---: |
| pòodìm ${ }^{\mathrm{m}}$ | "scarcity" | vÈnnì $\mathrm{m}^{\mathrm{m}}$ | "beauty" |
| vėn̆llìm ${ }^{\text {m }}$ | "beauty" | būgusím ${ }^{\text {m }}$ | "softness" |
| $t \overline{\text { ç }}$ ısím ${ }^{\mathrm{m}}$ | "weight" | mā'asím ${ }^{\text {m }}$ | "coolness, damp" |
| bāan̆lím ${ }^{\text {m }}$ | "quietly" | $z a ̄ a l i ́ m{ }^{\text {m }}$ | "emptily" |
| mālısím ${ }^{\text {m }}$ | "sweetness" | lābısím ${ }^{\text {m }}$ | "width" |
| pịəlìm ${ }^{\text {m }}$ | "brightness" | tītā'am ${ }^{\text {m }}$ | "multitude" |
| $k \bar{u} d \bar{l} m^{\mathrm{m}}$ | "old times" | pāalím ${ }^{\text {m }}$ | "recently" |
| $n \varepsilon ̀ \varepsilon m^{\text {m }}$ | "for free" (nè |  |  |

From n̆yè $\varepsilon s i ́ \eta$ a "self-confident" is derived n̆yè $\varepsilon s i m^{\mathrm{m}}$ "self-confidence."
The suffix -go makes abstract nouns when the sg adjective form also has -go:

| lāllóg ${ }^{\text {a }}$ | "distance" | z $\overline{\text { c }}$ mmúg ${ }^{\text {a }}$ | "equality" |
| :---: | :---: | :---: | :---: |
| kpị'op ${ }^{\circ}$ | "hardness, strength" | yàlò ${ }^{\circ}$ | "width" |
| mị'isùg ${ }^{\text {º }}$ | "sourness" | tōog ${ }^{\text {ºm }}$ | "bitterness" |
| zùlv̀ ${ }^{\circ}$ | "depth" | tūvlúg ${ }^{3}$ or | "heat" |

Some stems referring to people form abstract nouns with -mm or -go:

| gbányà̀'a | "lazy person" |  | "laziness" |
| :---: | :---: | :---: | :---: |
| dàmà'a | "liar" | dàmà'am ${ }^{\text {m }}$ | "lying" |
| sāan ${ }^{\text {a/ }}$ | "guest" | sáv ${ }^{\circ}$ | "hospitality" |
| $k p \bar{\varepsilon} \varepsilon \check{n} m^{\mathrm{m}}$ | "elder" | kpēon̆ ${ }^{\text { }}$ | "eldership" |
| sכ̄eñ ${ }^{\text {ya }}$ | "witch" | sว̄on̆ ${ }^{\text { }}$ | "witchcraft" |

Several stems form manner-adverbs with apocope-blocked -ga:

| sùjā' | "well; very much" | mā'asígā' | "coolly" |
| :---: | :---: | :---: | :---: |
| tōvlígā' | "hotly" | gị̀ $\bar{a}$ | "shortly" |
| būgusígā ${ }^{\prime}$ | "softly" | sàalínā' | "smoothly" |
| n̆yècsínā | "self-confidently" | yịigá | "firstly" |

## 9 Derivation by suffixes

Very productive suffixing processes derive agent nouns, adjectives and instrument nouns from verbs, and several less systematic processes derive nominals from other nominals. The derivational suffixes 3.3 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 $l m$. 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 $l m$.

For Tone Patterns in derivation see 3.8.4.

### 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 $C V V$ root + sım or lim, never $C V V C$ 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 -n derivatives are Pattern A regardless, but -l derivatives have the same Pattern as the base verb.

| Stance verb A |  | Assume-stance | Make-assume-stance |
| :---: | :---: | :---: | :---: |
| dīgīya/ | "be lying" | dìgìn ${ }^{\text {c }}$ | dīgī $l^{\varepsilon /}$ |
| vābīya/ | "be lying prone" | vàbìn ${ }^{\text {c }}$ | vābīl ${ }^{\varepsilon /}$ |
| ịgīya/ | "be kneeling" | ìgìn ${ }^{\text {e }}$ |  |
| làbìya | "be crouching hidden" | " làbìn ${ }^{\text {c }}$ | làbìl ${ }^{\text {c }}$ |
|  | "be sitting" | zịn̆'in ${ }^{\text {c }}$ | $z i ̣ n ̆ ' i l{ }^{\varepsilon}$ |
| $z \grave{1}{ }^{\prime} e^{\text {ya }}$ | "be standing" | $z \mathrm{l}^{\prime} ə n^{\varepsilon}$ | $z \grave{\prime}{ }^{\prime} ə l^{\varepsilon}$ |
| tị'i ${ }^{\text {ya/ }}$ | "be leaning" (of thing) | ) $t i ̣ ' i n^{\varepsilon}$ | tị'il ${ }^{\varepsilon /}$ |
| $g$ ̄̄'e ${ }^{\text {ya/ }}$ | "be looking up" WK | gò'on ${ }^{\text {c }}$ |  |
| sùr ${ }^{\text {a }}$ | "have bowed head" | sùn ${ }^{\text {ne }}$ | $\operatorname{sùn}^{\mathrm{n} \varepsilon}$ sic |
| - | "cover oneself" | lịgìn ${ }^{\varepsilon}$ | lịgìl ${ }^{\varepsilon}$ |
| - | "perch" (of bird) | $z u ̀ \theta n^{\varepsilon}$ | $z u ̀ \theta l^{\varepsilon}$ |
| - | "perch" (of bird) | yà'an ${ }^{\text {c }}$ | yà'al ${ }^{\text {e }}$ |
| $g u ̀ l^{\text {la }}$ | "be suspended" | gùl ${ }^{\text {c }}$ | gùl ${ }^{\varepsilon}$ |
| tàbìya | "be stuck to" | $t a ̀ b^{\varepsilon}$ | tàbìl ${ }^{\text {c }}$ |

Nawdm has exactly parallel formations, e.g. jehra ipfv "être debout", jefint pfv "se mettre debout", jefilg pfv, jefila ipfv "poser verticalement".

Some stance verbs correspond instead to a simplex dual-aspect verb for "assume the stance", and $d \bar{\varepsilon} l^{\text {la/ }}$ "be leaning" (of a person) has the idiosyncratic assume-stance derivative $d \grave{\varepsilon} l \grave{m} m^{\mathrm{m}}$. Some $-n$ and $-l$ derivatives lack a corresponding stance verb: thus "be perching" is expressed with the resultative perfective of zùe:

Nịiŋ lā zúo nē. Bird:SG ART perch FOC.
-I- derives causatives from nominals and from verbs expressing states or positions:

| ňyá'a ${ }^{\text {a }}$ | "behind" | n̆yā'al ${ }^{\text {/ }}$ | "leave behind" |
| :---: | :---: | :---: | :---: |
| $g \bar{\varepsilon} \circ g^{\circ}$ | "space between legs" | $g \bar{\varepsilon} \varepsilon 1^{\varepsilon /}$ | "put between legs" Tones sic |
| $l i ̣ k ~ k^{\text {a }}$ | "darkness" | lịgì ${ }^{\text {E }}$ | "cover up" |
| bān̆' | "ride" | bān̆'al ${ }^{\varepsilon /}$ | "put on a horse/bicycle etc" |
| $g u \overline{ }{ }^{\prime}$ | "guard" | $g u ̄ ' u l^{\varepsilon /}$ | "set someone on guard" |
| y¢̀ | "dress oneself" | $y \varepsilon ̇ \varepsilon \varepsilon^{\varepsilon}$ | "dress another person" |
| $m a ̄ ' e{ }^{\prime}$ | "get cool" | mā'al ${ }^{\text {/ }}$ | "make cool" |
| $p u \bar{n} ' e^{\prime}$ | "rot" | pōn̆'วา ${ }^{\text {/ }}$ | "cause to rot" |
| nịe | "appear" | nè $\varepsilon^{\varepsilon}$ | "reveal" |
| $m a ̄ ' e l$ | "get cool, wet" | mā'al ${ }^{\varepsilon /}$ | "make cool, wet" |
| $w \bar{u}^{\prime} v g^{\varepsilon /}$ | "get wet" | $w \overline{\text { co }}$ ¢ $l^{\varepsilon /}$ | "make wet" |
| ?? zà ${ }^{\varepsilon}$ | "fight" | zàbìl ${ }^{\text { }}$ | "cause to fight" |
| ?? dư'à ${ }^{\text {a }}$ | "bear, beget" | dì'al ${ }^{\text {c }}$ | "make interest (of a loan)" |

$\boldsymbol{s}$ - derives causatives from dynamic verbs for the most part:

| $k p \varepsilon ̇ \check{n}^{\prime}$ | "enter" | $k p \varepsilon ̇ n ̆ ' \varepsilon S^{\varepsilon}$ | "make enter" |
| :---: | :---: | :---: | :---: |
| nịe | "appear" | $n \varepsilon ̇ \varepsilon s^{\varepsilon}$ | "reveal" |
| $y \overline{1}$ | "go/come out" | $y \grave{i ̣ i s}{ }^{\varepsilon /}$ or yị $s^{\varepsilon}$ | "make go/come out" |
| dì | "eat" | dìs ${ }^{\text {c }}$ | "feed" |
| $n \bar{u}$ | "drink" | nūlīs ${ }^{\varepsilon /}$ | "make drink"; also nūlī $g^{\varepsilon /}$ |
| $s i ̣ g^{\varepsilon}$ | "go down" | sịgīs ${ }^{\text {/ }}$ | "lower" |
| $l \varepsilon ̇ b^{\varepsilon}$ | "return" | $l$ lèbìs ${ }^{\text {¢ }}$ | "make return; answer" |
| $m u{ }_{\sim}{ }^{\text {a }}$ | "suck" (of a baby) | mù' $a s^{\varepsilon}$ | "give to suck" |
| [Mooré tá | "arrive"] | $t a ̄ ' a s^{\varepsilon /}$ | "help to travel, walk" |
| $z \bar{\varepsilon} m^{\mathrm{ma}}$ | "be equal" | $z \bar{\varepsilon} m \bar{i} S^{\varepsilon /}$ | "make equal" |
| kpị̀ig ${ }^{\text {E }}$ | "go out (fire)" | $k^{\text {pịis }}{ }^{\text {® }}$ | "quench" |

-s- may have a pluractional sense:

| kj̀ | "break" | kò'os ${ }^{\text {c }}$ | "break several times" |
| :---: | :---: | :---: | :---: |
| tòn̆ | "shoot" |  | "hunt" |
| $p i ̀ ə b^{\varepsilon}$ | "blow (flute etc)" | $p \mathrm{c}$ bìs ${ }^{\text {e }}$ | "blow (wind)" |
| làbiya | "crouch in hiding" | làbìs ${ }^{\text {c }}$ | "walk stealthily" |
| $v \bar{u} e^{\text {ya/ }}$ | "be alive" | $v \bar{v}^{\prime} v s^{\varepsilon /}$ | "breathe, rest" |
| ìănk ${ }^{\text {¢/ }}$ | "fly, jump" | iān̆'as ${ }^{\text {/ }}$ | "leap, jump repeatedly" |
| $y a{ }^{\prime} e^{\prime}$ | "open mouth" | $y a ̄ ' a s^{\varepsilon /}$ | "open repeatedly" WK |
| dị'e ${ }^{\prime}$ | "receive" | $d \overline{1} \cdot \partial S^{\varepsilon /}$ | "receive (many things)" |
| $g u \overline{ }{ }^{\prime}$ | "guard" | $g u \bar{u} u s^{\varepsilon /}$ | "watch out; guard (many)" |

$-\boldsymbol{g}$ - attached to dynamic roots implies reversal:

| $y \varepsilon ̇$ | "dress oneself" | $y \varepsilon ̇ \varepsilon g^{\varepsilon}$ | "undress oneself" |
| :---: | :---: | :---: | :---: |
| $p \mathrm{p}^{\text {d }}{ }^{\text {d }}$ | "put (hat etc) on" | pịdì ${ }^{\varepsilon}$ | "take (hat etc) off" |
| $p i ̣ l l^{\varepsilon}$ | "cover" | pịli ${ }^{\text {g }}$ | "uncover" |
| 15 | "tie up" | lōdī $\mathrm{g}^{\text {E/ }}$ | "untie" |
| yò | "close" | yò'og ${ }^{\text {¢ }}$ | "open" |
| غ̀n̆ ${ }^{\varepsilon}$ | "block up" | غ̇n̆dì ${ }^{\varepsilon}$ | "unblock" |
| yà'al ${ }^{\varepsilon}$ | "hang up" | yàk ${ }^{\text {e }}$ | "unhang" |
| pà'al ${ }^{\text {c }}$ | "put on top" | pàk ${ }^{\text {c }}$ | "take off top" |
| pị̀ìl ${ }^{\text { }}$ | "cover up" | pịbì ${ }^{\varepsilon}$ | "uncover" |
| tàbìya | "be stuck to" | tàbì $g^{\varepsilon}$ | "unstick, get unstuck" |
| là'as ${ }^{\text {c }}$ | "gather together" | $\begin{aligned} & \text { lāk} k^{\varepsilon /} \\ & \text { cf lákè } \end{aligned}$ | "open" (eye, book); tone sic (Mooré) "un-stick together" |
| ?? lị̀b ${ }^{\text {c }}$ | "become" | lèbì ${ }^{\varepsilon}$ | "turn over" |
| ?? fān̆ | "rob, snatch" | fāen̆' | "save" ?? for "snatch back" |

Reversive $-g$ - is peculiar to Western Oti-Volta; other Oti-Volta languages show alveolar suffixes: Moba lōōń "close" lōōd́ "open", Byali byá "close" byērá "open." - $g$ - also forms a few causatives:

| dōl ${ }^{\text {la/ }}$ | "accompany" | dōlī $\mathrm{g}^{\text {¢/ }}$ | "make accompany" |
| :---: | :---: | :---: | :---: |
| gōra/ | "look up" DK | $g \overline{o ̄ d i ̄ ~} g^{\varepsilon /}$ | "make look up" DK |
| $t \bar{n} \mathrm{n}^{\text {a }}$ | "remember" | tịen̆ | "bring to mind, remind" |
| yùul ${ }^{\text { }}$ | "swing" intransitive | yùlìg ${ }^{\text { }}$ | "swing" transitive |
| kò | "break" intransitive | kò'og ${ }^{\text {® }}$ | "break" ambitransitive |
| $n u \overline{ }$ | "drink" | nūlī $\mathrm{g}^{\text {/ }}$ | "make drink"; also nūlīs ${ }^{\text {d/ }}$ |

- $g$ - has no clear meaning in

| sōn̆ | "rub" | sūen̆' | "anoint" |
| :--- | :--- | :--- | :--- |
| $n \overline{b^{\varepsilon}}$ | "get fat" | nōbī $g^{\varepsilon /}$ | "grow" (child, plant) |
| $n \bar{a}$ | "join" | nāel | "finish"; compare |
|  |  |  | Hausa gamàa "join, finish" |

-d- appears with a pluractional sense in $k \bar{\jmath} d \bar{\imath} g^{\varepsilon /}$ "slaughter one animal", $k \bar{\jmath} t^{\varepsilon /}$ "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:

| lè $b^{\varepsilon}$ | "return" | lèm | "again" |
| :--- | :--- | :--- | :--- |
| là' $a s^{\varepsilon}$ | "gather together" | là'am | "together" |
| $d \check{\varepsilon} \eta^{\varepsilon}$ | "go first" | dèŋı̀m | "first" |
| malig | (Toende) "do again" | màlıgı̀m | "again" |

-r- appears in

$$
\begin{array}{lll}
k a ̄ a b^{\varepsilon /} & \text { "offer, invite" } & k a ̄ b i ̄ r^{\varepsilon /}
\end{array} \text { "ask for admission" }
$$

The verbs may be back-formations from the nouns kābırí and sūgurv́ 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 differs in tonal behaviour from the ${ }^{*} y$ and ${ }^{*} d$ of dynamic verbs 3.8.4: primary Pattern L nominals correspond to Pattern A verbs but Pattern H and Pattern A nominals both correspond to Pattern H verbs. Historically, the all-M pattern of verbs corresponding to Pattern A nominals was also Pattern A, as reflected in the tonemes of e.g. $k p \overline{1}^{-1} \partial m^{\mathrm{ma} / ~ " b e ~ s t r o n g " ~(n o t ~ * k p i ̣ ' ~} \partial m^{\mathrm{ma} / \text { ), but the LF-final toneme is now }}$ always H; similarly, the original Pattern L type now changes to all-M in the irrealis mood just like dynamic Pattern A verbs: Ò nà vēn "She'll be beautiful."

L

$\nu \varepsilon ̀ n^{\text {na }} \quad$ "be beautiful"
vèn̆lla "be beautiful"
zùlìmma "be deep"
pòsd ${ }^{\mathrm{a}} \quad$ "be few, small"
mị̀is ${ }^{\mathrm{a}}$ "be sour"
sùm ${ }^{\text {ma }} \quad$ "be good"
yàlìm ${ }^{\text {ma }}$ "be wide"

H

| $b \bar{u} g u s i ́ r r^{\varepsilon}$ | "soft" |
| :---: | :---: |
| $v \bar{v} r^{\varepsilon /}$ | "alive" |
| mā'asír ${ }^{\text {¢ }}$ | "cool" |
| $t \bar{\delta}$ bısír ${ }^{\text {c }}$ | "heavy" |
| mālısír ${ }^{\text {E }}$ | "sweet" |
| lābısír ${ }^{\text {c }}$ | "wide" |
| z $\bar{\varepsilon} m m o ́ g^{\circ}$ | "equal" |
| lāllúg ${ }^{\text {º }}$ | "far" |


| $b u \bar{u} \mathrm{~s}^{\text {a/ }}$ | "be soft" |
| :---: | :---: |
| vv̄éya/ | "be alive" |
| mā'as ${ }^{\text {a/ }}$ | "be cool" |
| $t \bar{\varepsilon} b \bar{i} s^{\mathrm{a} /}$ | "be heavy" |
| mālīs ${ }^{\text {a/ }}$ | "be sweet" |
| lābīs ${ }^{\text {a/ }}$ | "be wide" |
| $z \bar{\varepsilon} \mathrm{~m}^{\mathrm{ma} /}$ | "be equal to" |
| lāl ${ }^{\text {la/ }}$ | "be far from" |

A

| $t \overline{o g} g^{\circ}$ | "bitter" |
| :---: | :---: |
| $g i ̄ \eta^{\text {a }}$ | "short" |
| $k p i ̣ ̀ o \eta^{\text {a }}$ | "strong" |
| $k p \bar{\varepsilon} \varepsilon \bar{n} m^{\mathrm{m}}$ | "elder" |
| $w \bar{\varepsilon} n n \bar{i} r^{\varepsilon}$ | "resembling" |

t̄̄ée ya/ "be bitter"
gịm ma "be short"
kpị̀ $\quad$ m ma " "be strong"
$k p \bar{\varepsilon} \varepsilon n ̆ m^{\mathrm{ma/}}$ "be older than"
$w \bar{\varepsilon} n^{\text {na/ }} \quad$ "resemble"

More complex stem changes occur in

| tūvlúg ${ }^{\text {a }}$ | "hot" | $t \bar{u} l^{\text {la/ }}$ | "be hot" |
| :---: | :---: | :---: | :---: |
| $\check{n y y ̇ ̀ ~} \operatorname{sí}^{\text {ma }}$ | "self-confident" | $\check{n y y ̇ ̀ ~} \varepsilon s^{\text {a }}$ | "be self-confident" |
| $w ⿹ 𠃌$ k ${ }^{\text {/ }}$ | "long, tall" | $w a ̄ ' a m^{\mathrm{a} /}$ | "be long, tall" |

### 9.1.2.2 Dual aspect

-g- attached to nominal/adjectival roots has the meaning "make/become ...":

| $\check{n} y$ ̄̄' s $^{\varepsilon /}$ | "smoke" | n̆yū'e' | "set alight" |
| :---: | :---: | :---: | :---: |
| ňwịi ${ }^{\text {a/ }}$ | "rope" | n̆wịi $\mathrm{g}^{\text {8/ }}$ | "make a rope" |
| tādīm ${ }^{\mathrm{m} /}$ | "weak person" | tàdī ${ }^{\text {® }}$ | "become weak" |
| kpị'a | "neighbour" | kpị'e | "approach" |
| $z u \bar{u} r^{\varepsilon}$ | "hill" | zùe | "get higher, more" |
| $\grave{A}-T \bar{u} l^{1 \varepsilon}$ | "Breech-Delivered" 21.2 | tùlìg ${ }^{\varepsilon}$ | "invert" |
| mā'asír ${ }^{\text {c }}$ | "cool, wet" | $m a ̄ ' e{ }^{\prime}$ | "get cool, wet" |
| $b \bar{u} g u s i r^{\varepsilon}$ | "soft" | $b \bar{u} k^{\varepsilon /}$ | "soften" |


| $t \bar{\varepsilon} b ı s^{\prime} r^{\varepsilon}$ | "heavy" | $t \bar{\varepsilon} b \bar{i} g^{\varepsilon /}$ | "get/make heavy" |
| :---: | :---: | :---: | :---: |
| $g i ̣ \eta^{\text {a }}$ | "short" | gị $\eta^{\varepsilon}$ | "scrimp" |
|  | "strong" | $k p \chi^{\prime} \eta^{\varepsilon}$ | "strengthen" |
| $v \bar{u} r^{\varepsilon /}$ | "alive" | $v \bar{v}^{\prime} v^{\varepsilon /}$ | "make/come alive" |
| pòjoì ${ }^{\text {a }}$ | "few" | pò'วg ${ }^{\text {e }}$ | "diminish, belittle" |
| pịəlì $\mathrm{g}^{\text {a }}$ | "white" | pèlìg ${ }^{\varepsilon}$ | "whiten" |
| sābılíga | "black" | sōbī $\mathrm{g}^{\text {g/ }}$ | "blacken" |
| nịn-múa | "concentration" | mù'e | "redden, become intense" |
| $k \bar{v} d \bar{v} g^{\circ}$ | "old" | kùdìg ${ }^{\text { }}$ | "shrivel up, dry out, age" |
| sù ${ }^{\text {a }}$ | "good" | sùj ${ }^{\text {c }}$ | "help" |
| tūolúg ${ }^{\text {a }}$ | "hot" | tūlī $\mathrm{g}^{\varepsilon /}$ | "heat up" |
| mị'isùg ${ }^{\text {a }}$ | "sour" | mị̀'ig ${ }^{\text {¢ }}$ | "turn sour" |
| zùlò ${ }^{\text { }}$ | "deep" | zùlìg ${ }^{\varepsilon}$ | "deepen" |
| lāllúg ${ }^{\text {a }}$ | "far" | lālī $\mathrm{g}^{\varepsilon /}$ | "get to be far, make far" |
| màuk ${ }^{\text {ºm }}$ | "crumpled up" | màk ${ }^{\text {c }}$ | "crumple up" |
| $d \bar{\varepsilon} \varepsilon \eta^{\text {a }}$ | "first" | $d \varepsilon \eta^{\varepsilon}$ | "precede" |
| $n \varepsilon$ ¢ $¢ r^{\varepsilon}$ | "clear, empty" | nịe | "appear" |
| sōn̆'e ${ }^{\text {ya/ }}$ | "be better than" | sūn̆'e' | "become better than" WK |

With $-m$ as a second derivational suffix:
wàū ${ }^{3}$ "wasted" wàjìm ${ }^{m}$ "waste away"
-lım- derives verbs from noun roots, meaning "act as ..." or "make/become ...":

| $p u ' \bar{a}^{\text {a }}$ | "woman" | pù'alìm ${ }^{\text {m }}$ | "cook" |
| :---: | :---: | :---: | :---: |
| pòn̆'or ${ }^{\text {c }}$ | "cripple" | pòn̆'olìm ${ }^{\text {m }}$ | "cripple, get crippled" |
| gìk ${ }^{\text {a }}$ | "dumb" | gìgılı̀m ${ }^{\mathrm{m}}$ | "become dumb" |
| wàbìr ${ }^{\text {c }}$ | "lame" | wàbulìm ${ }^{\text {m }}$ | "make, go lame" |
| $g \bar{v}^{\prime} u s^{\varepsilon}$ | "semi-ripe things" | gò'vlìm ${ }^{\mathrm{m}}$ | "become semi-ripe" |
| $b \bar{v} g \bar{v} d^{\text {a }}$ | "client of diviner" | bùgolìm ${ }^{\text {m }}$ | "cast lots" (cf bùk ${ }^{\text {e }}$ id) |

Miscellaneous denominal dual-aspect verbs formed with s mbare seen in

| zùà | "friend" | $z u ̀ \theta S^{\varepsilon}$ | "befriend" |
| :--- | :--- | :--- | :--- |
| $n \bar{\varepsilon} \varepsilon r^{\varepsilon /}$ | "millstone" | $n \bar{\varepsilon} \varepsilon m^{\mathrm{m} /}$ | "grind with a millstone" |
| yā'ad | "clay" | yà' $a b^{\varepsilon}$ | "mould clay" |
| 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 nominal formation shows more analogical levelling than derivational processes elsewhere, in keeping with the strong tendency to regularity and transparency in verb morphology. For Tone Patterns see 3.8.4.

### 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 $a \mid b a$ class, but those derived from ll- or $r(r)$-stem single-aspect verbs also show $r \varepsilon \mid a a$ forms 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 ipfv verbal 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 ipfv verbal 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.

| $m \dot{\varepsilon}$ | "build" | $m \bar{\varepsilon} \varepsilon d^{\text {a }}$ | "builder" |
| :---: | :---: | :---: | :---: |
| di | "eat" | $d \bar{i} t^{\text {a }}$ | "eater" |
| $g \bar{ว} s^{\varepsilon}$ | "look" | $g \overline{\text { a }}{ }^{\text {a/ }}$ | "seer, prophet" |
| $d \bar{v} g^{\varepsilon}$ | "cook" | $d \bar{v} g \bar{u} d^{\mathrm{a} /}$ | "cook" |
| $d u^{\prime} \grave{a}^{\text {a }}$ | "bear, beget" | $d \bar{v}^{\prime} a d^{\text {a }}$ | "elder relation" |
| kàd ${ }^{\text {c }}$ | "drive away" | sarịyà-kāt ${ }^{\text {a }}$ | "judge" |
| sōb ${ }^{\text {c }}$ | "write" | sōbīda/ | "writer" |
| bùn ${ }^{\text { }}$ | "reap" | būn ${ }^{\text {na }}$ | "reaper" |
| tùm ${ }^{\mathrm{m}}$ | "work" | tòm-tūm ${ }^{\text {na }}$ | "worker" |
| kpàr ${ }^{\text {e }}$ | "lock" | $k p a ̄ r i ̄ d^{\text {a }}$ | "lock-er" |
| $g b i ̣ s^{\varepsilon}$ | "sleep" | $g b i ̣ s i d^{\text {a/ }}$ | "sleeper" |
| siàk ${ }^{\text {¢ }}$ | "believe" | sîākī $d^{\text {a }}$ | "believer" |
| īă ${ }^{\text {a/ }}$ | "jump, fly" | iian' ${ }^{\text {a }}$ d ${ }^{\text {a/ }}$ | "flier" |
| sùj ${ }^{\text {c }}$ | "help" | $s \bar{u} \eta \bar{i} d^{\text {a }}$ | "helper" |


| $k \bar{\varepsilon} \eta^{\varepsilon /}$ | "go" | $k \bar{\varepsilon} n^{\text {na/ }}$ | "traveller" |
| :---: | :---: | :---: | :---: |
| gàad ${ }^{\varepsilon}$ | "pass" | tùөn-gāt ${ }^{\text {a }}$ | "leader" |
| màal ${ }^{\text {² }}$ | "sacrifice" | màal-māan ${ }^{\text {na }}$ | "sacrificer" |
| pà'al ${ }^{\text {c }}$ | "teach" | $p a \bar{\prime} a n^{\text {na }}$ | "teacher" |
| sūgūr ${ }^{\text {c/ }}$ | "forbear" | sūgvríd ${ }^{\text {a }}$ | "forgiver" |
| $y \bar{\chi}{ }^{\prime} \mathrm{vm}^{\mathrm{m} /}$ | "sing" | $y \bar{v} v m-y$ 'vm ${ }^{\text {na }}$ | "singer" |
|  |  | pl yōvm-yט̂'vmnìb ${ }^{\text {a }}$ |  |
| sàn̆'am ${ }^{\text {m }}$ | "spoil" | $p u$ 'à-sān' ${ }^{\text {a }}$ na | "adulterer" |
|  |  | pl pun'à-sāň'amīdīb ${ }^{\text {a }}$ |  |

Pattern H fusion verbs, which delete the H toneme of the stem in the imperfective 3.8.2, show the same form for the agent noun:

| nāel | "finish" | nāad |  |
| :--- | :--- | :--- | :--- |
| na/ | "someone who doesn't |  |  |
| give up easily" WK |  |  |  |

3-mora stems in -s consistently drop the $-d$ in the sg and cb :

| Sịgī $s^{\text {c/ }}$ | "lower" | Sịgīs ${ }^{\text {a/ }}$ | "lowerer" |
| :---: | :---: | :---: | :---: |
|  |  | pl sịgrsídìb ${ }^{\text {a }}$ |  |
| $k u ̀ S^{\varepsilon}$ | "sell" | kù $\theta S^{\text {a }}$ | "seller" |
|  |  | $\mathrm{pl} k u \bar{\theta}{ }^{\text {cio }}$ dī $b^{\text {a }}$ |  |
| $t u ̀ ' a s^{\varepsilon}$ | "talk" |  | "talker" |
|  |  | pl tv̀' $a s$-tv̄'asīdī $b^{\text {a }}$ |  |
| $d \bar{l}{ }^{\prime} \partial S^{\varepsilon /}$ | "receive" | nō-dị̂'əs ${ }^{\text {a }}$ | "chief's spokesman" |
|  |  | pl nō-dị́'əsìdìb ${ }^{\text {a }}$ | ("linguist") |

Some 2-mora stems also irregularly drop the -d in the sg and cb:

| zàb | "fight" | $z a ̀ b-z a ̀ b^{\mathrm{a}}$ | "warrior" |
| :--- | :--- | :--- | :--- |
| tìs | "give" | tìs ${ }^{\text {a }}$ | "giver" |
| sòs $^{\varepsilon}$ | "beg" | sòs $s^{\text {a }}$ | "beggar" |

Stems in -mm- form reduplicated agent nouns with nàm ${ }^{\text {a }}$ plurals:
dàm ${ }^{\mathrm{m}} \quad$ "shake" dàm-dàm ${ }^{\mathrm{ma}}$ "shaker"

The nn-stem sùn ${ }^{\text {ne }}$ (ipfv sùnnìd ${ }^{\mathrm{a}}$ ) "bow the head" has an agent noun stem in $-n n-$, but the tonemes show retention of the $-d$ - formant:

| sùn ${ }^{\mathrm{n} \varepsilon}$ | "bow head" | sūn |
| :--- | :--- | :--- |
| pl nūnnī $b^{\mathrm{a}}$ cb sùn- | "deep thinker, close |  |
| observer" WK |  |  |

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 $-\eta-$ :
$y a ̄ d \bar{i} g^{\varepsilon /} \quad$ "scatter"
$y a ̄ t^{a /}$
(a participant in a housebuilding ritual)

Various irregular formations in my materials include:

| $t \bar{\varepsilon} k^{\varepsilon /}$ | "pull" | $\check{n} w i ̣-t \varepsilon ́ k^{\mathrm{a}}$ | "rope-puller" |
| :---: | :---: | :---: | :---: |
|  |  | $\mathrm{pl} \check{n} w i ̣-t \varepsilon ́ k i ̀ d i ̀ b^{\text {a }}$ |  |
| nว̀ ${ }^{\text {® }}$ | "love" | nòjìd ${ }^{\text {a }}$ | "lover"; tones irreg |
| tị'əb ${ }^{\text {¢ }}$ | "heal" | $t \bar{l}{ }^{\prime} \partial b^{\text {a }}$ | "healer"; tones irreg |

For 4-mora stems KT has no agent nouns; WK drops the stem-final $m$.

| sịilìm ${ }^{\text {m }}$ | "cite proverbs" | sịinna | "speaker of proverbs" |
| :---: | :---: | :---: | :---: |
|  |  | pl Sịinnīb ${ }^{\text {a }}$ |  |
| pù'alìm ${ }^{\text {m }}$ | "harm" | $p \bar{u}^{\prime} a n^{\text {na }}$ | "harmer" |
| zàan̆sim ${ }^{\text {m }}$ | "dream" | $z a ̀ a n s^{\text {a }}$ | "dreamer" |
|  |  | $\mathrm{pl} z a \overline{a n} \breve{n}^{\text {a }}$ dī $b^{\text {a }}$ |  |

Single-aspect verbs with unassimilated $y$, and the bare-stem type, add - $d-$ :

| $z i ̣ n '{ }^{\prime} i^{\text {ya }}$ | "be sitting down" | $z i ̣ n ̆ ' i d{ }^{\text {a }}$ | "sitter" |
| :---: | :---: | :---: | :---: |
| $z \mathrm{li}^{\prime} \mathrm{e}^{\text {ya }}$ | "be standing still" | $\chi i ̣ ' \partial d^{\text {a }}$ | "stander" |
| mị̀' | "know" | mị'id ${ }^{\text {a/ }}$ | "knower" |
| $z \overline{1}{ }^{\prime}$ | "not know" | $z i ̄ ' ı d^{\text {a/ }}$ | "ignorant person" |
| $s \bar{u}^{\prime} e^{\text {ya/ }}$ | "own" | $s \bar{v}^{\prime} v d^{\mathrm{a} /}$ | "owner" |
| sōn̆'e ${ }^{\text {ya/ }}$ | "be better than" | sōn̆'od ${ }^{\text {a/ }}$ | "outdoer" |
| dì $\mathrm{g}_{\text {ìya/ }}$ | "be lying down" | dī $\mathrm{gī}^{\text {da/ }}$ | "lier-down" |
| ịgìya/ | "be kneeling" | $\underline{1} \mathrm{~g} \overline{\mathrm{i}}^{\text {d }}{ }^{\text {a/ }}$ | "kneeler" |
| vābīya/ | "be lying prone" | vābīd ${ }^{\text {a/ }}$ | "lier prone" |
| làbìya | "be crouching" | lābīd ${ }^{\text {a }}$ | "croucher in hiding" |
| àeñ ${ }^{\text {ya }}$ | "be something" | $\bar{a} a n{ }^{\text {d }}{ }^{\text {a }}$ | "someone who always is something" sic WK |

Stems in nn ll $r(r)$ drop - $d$ throughout. Those in $l l r(r)$ may use $r \varepsilon \mid a a$ class suffixes, coinciding in form with ipfv verbal adjectives 5.3.1.

| $\operatorname{sịn} n^{\text {na/ }}$ | "be silent" | $n \grave{n}$-sị́n ${ }^{\text {na }}$ | "silent person" |
| :---: | :---: | :---: | :---: |
| $n \bar{\varepsilon} n^{\text {na/ }}$ | "envy" | nịn-nćn ${ }^{\text {na }}$ | "envious person" |
| dōl ${ }^{\text {la/ }}$ | "be with" | n̆yà'an-dòl ${ }^{\text {la }}$-dòl ${ }^{\text {le }}$ | "disciple" (irreg. tone) |
| $z a ̄ n ̆ l^{\text {la/ }}$ | "be holding" | nō-zán̄ll ${ }^{\text {la }}$-zán̆l ${ }^{\text {l }}$ | "holder of hens" |
| $d \bar{\varepsilon} \mathrm{l}^{\text {la/ }}$ | "be leaning" | $n \stackrel{̣}{n}$-dél ${ }^{\text {la }}$ | "person prone to lean" |
| $m \bar{o} r^{\text {a/ }}$ | "have" | $b$ ט̀-m̄̄r ${ }^{\text {a/ }}-m \bar{\nu} r^{\varepsilon /}$ | "owner of goats" |
| $t a r^{\text {a/ }}$ | "have" | bò-tā $r^{\text {a/ }}-t \bar{a} r^{\varepsilon /}$ | "owner of goats" |

The simplification to single $s r$ leads to analogical formations with - $d$ - in

| $k i{ }_{\text {in }}{ }^{\text {a/ }}$ | "hate" | kịs ${ }^{\text {a/ }}$ or kị $s i d^{\text {a/ }}$ | "hater" |
| :---: | :---: | :---: | :---: |
| tèn̆ $r^{\text {a }}$ | "remember" | tēn̆rīd ${ }^{\text {a }}$ | "rememberer" |
| $g u ̄ r^{\text {a/ }}$ | "be on guard" | $g u ̄ r i ̄ d^{\text {a/ }}$ | "guard" |
|  |  | $z a ̀ '-n \overline{-}-g u r^{\text {a }}$ | "gatekeeper" |

### 9.2.1.2 Adjectives

Imperfective verbal adjectives in principle have the same stem as the agent noun, but drop the $-d$ formant more readily. 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: sūm-dúgvdà "cooked groundnuts" WK, ziīdvgida = zịì-dv́gvdà "cooked fish" (Lk 24:42), beside the more usual sense in ni'im dvgida = nị̀m-dúgodà "meat for cooking" (1 Sm 2:15.)

Without a preceding cb, these adjective forms have the same meaning as agent nouns: $k \bar{v} v d i ́ r^{\varepsilon} \mathrm{pl} k \bar{v} v d a ́ ~ " k i l l e r " ~=k \bar{v} v d^{\mathrm{a} /} \mathrm{pl} k \bar{v} v d i ́ b^{\mathrm{a}}$. After a cb the meanings differ: $p u{ }^{\prime} a ̀-k \bar{v} v d^{\mathrm{a} / ~ " w o m a n-k i l l e r, ~ k i l l e r ~ o f ~ w o m e n " ~ v s ~ p u ' a ̀-k u ̄ v d i ́ r ~}{ }^{\varepsilon}$ "woman killer, murderous woman." Accordingly, ipfv verbal adjectives will be cited with a preceding cb.

With dual-aspect verbs, 2 -mora stems all retain the ${ }^{*} d$ :

| gòn̆ | "hunt" | $p u ' a ̀-g \overline{o n}$ n̆dī $r^{\varepsilon}$ | "prostitute" |
| :---: | :---: | :---: | :---: |
| là' | "laugh" | pư'à-lā'adīr $r^{\text {c }}$ | "woman prone to laughter/ woman to be laughed at" |
| $\check{n} y \bar{\varepsilon}$ | "see" | būn-n̆yćtì $r^{\varepsilon}$ | "visible object" |
| kuā | "hoe" |  | "ox for ploughing" |
| $y \varepsilon ̀$ | "don clothes" | $f u ̄-y \varepsilon ́ \varepsilon d i ̀ r^{\varepsilon}$ | "shirt for wearing" WK |
|  |  | $f u ̄-y \varepsilon ́ \varepsilon d v ̀ g^{\circ}$ | KT |


| $k \bar{v}$ | "kill" | tì-kūvdím ${ }^{\text {m }}$ | "poison" ("killing medicine") |
| :---: | :---: | :---: | :---: |
| $d u{ }^{\prime}{ }^{\text {a }}$ | "bear/beget" | $t \varepsilon ̇ \eta-d \bar{v}^{\prime} a d i ̄ g^{\text {a }}$ | "native land" |
| $d \bar{v} g^{\varepsilon}$ | "cook" | sūm-dúgodà | "cooked groundnuts" WK |
| sị $g^{\varepsilon}$ | "descend" | yị-sígıdìr ${ }^{\text {e }}$ | "lodging-house" |
| su'ā ${ }^{\text {a }}$ | "hide" | $y \bar{\varepsilon} l$-sú'adìr ${ }^{\varepsilon}$ | "confidential matter" |
| j̀n̆ ${ }^{\varepsilon}$ | "chew" | būn-ón̆bıdà | "solid food" |
| bùn ${ }^{\text {c }}$ | "reap" | būn-búnnìr ${ }^{\text {e }}$ | "thing for reaping" |
| tòm ${ }^{\text {m }}$ | "work" | būn-tómmì ${ }^{\varepsilon}$ | "useful thing" |
| $v \bar{u}]^{\varepsilon}$ | "swallow" | tì-vōnním ${ }^{\text {m }}$ | "oral medication" |
| $g b i ̣ s^{\varepsilon}$ | "sleep" |  | "woman always sleeping" |

3-mora stems in *g drop -d unless *g is deleted in the imperfective:

|  | $t \bar{u} l \bar{l} g^{\varepsilon /}$ | "heat up" | $b \bar{n}$-tólıgì $r^{\varepsilon}$ | "heater, thing for heating" |
| :---: | :---: | :---: | :---: | :---: |
|  | pèlìg ${ }^{\text {E }}$ | "whiten" | būn-pélıgì ${ }^{\text {c }}$ | "whitening thing, whitener" |
|  | pàk ${ }^{\text {c }}$ | "surprise" | $y \bar{\varepsilon} l-p a ́ k i ̀ r^{\varepsilon}$ | "disaster" |
|  | $t \bar{\varepsilon} k^{\varepsilon /}$ | "pull" | n̆wī-tćkìr ${ }^{\text {c }}$ | "rope for pulling with" |
|  | sùj ${ }^{\text {c }}$ | "help" | bōn-súpì ${ }^{\varepsilon}$ | "helpful thing" |
|  | nò ${ }^{\text {¢ }}$ | "love" | bị-nònìr ${ }^{\text {c }}$ | "beloved child" |
| but | $k \bar{\varepsilon} \eta^{\varepsilon /}$ | "go" | bùn-kēnnír ${ }^{\text {c }}$ | "donkey that doesn't sit still" |
|  | gịli $\mathrm{g}^{\text {// }}$ | "go around" | pu'à-gịnníg ${ }^{\text {a }}$ | "prostitute" |
|  | sūen̆' | "anoint" | $k p a ̄$-sóon̆dìm ${ }^{\text {m }}$ | "anointing oil" |
|  | $y a ̄ d i ̄ g g^{\varepsilon /}$ | "scatter" | būn-yátì ${ }^{\text {c }}$ | "scattering thing" (cf yāt ${ }^{\text {a// }}$ ) |
|  |  | "fly, jump" | būn-íáñ'adì ${ }^{\varepsilon}$ | "flying creature" |

3-mora stems in -m retain the $-d$, forming the consonant cluster -mm-:
sàn̆'am ${ }^{\mathrm{m}} \quad$ "destroy" $\quad$ bì-sān̆'ammīr ${ }^{\varepsilon} \quad$ "scapegoat" WK

3-mora stems in -s all drop the $-d$ :

| pèlìs ${ }^{\varepsilon}$ | "sharpen" | būn-pélısìr $r^{\varepsilon}$ | "sharpening thing" |
| :--- | :--- | :--- | :--- |
| kù $_{\theta}{ }^{\varepsilon}$ | "sell" | būn-kú $\theta \grave{i} r^{\varepsilon}$ | "item for sale" |

4-mora stems (all from KT) drop -d (whereas agent nouns drop stem-final -m):

| sịilìm ${ }^{\text {m }}$ | "cite proverbs" | būn-sịilvón ${ }^{\text {a }}$ | "thing relating to proverbs" |
| :---: | :---: | :---: | :---: |
| pù'alìm ${ }^{\text {m }}$ | "harm" | nịn-pó'alì $\eta^{\text {a }}$ | "harmful person" |
|  |  |  | "harmful woman" |
| zàaňsìm ${ }^{\text {m }}$ | "dream" | nịn $\mathrm{-}$-záan̆sù ${ }^{\text { }}$ | "dreamy person" |
|  |  |  | "dreamy woman" |

Dynamic single－aspect verbs show the same stem as the agent noun：

| dīgī̀ ${ }^{\text {ya／}}$ | ＂be lying＂ |  | ＂donkey that lies down a lot＂ |
| :---: | :---: | :---: | :---: |
| vābīya／ | ＂be prone＂ | bv̀n－vābıdír ${ }^{\text {c }}$ | ＂donkey always lying prone＂ |
| $z i ̣ n ' i y^{\text {ya }}$ | ＂be sitting＂ | $k u \overline{g-z i ̣ n ̃ ' i d i ̀ ~}{ }^{\varepsilon}$ | ＂stone for sitting on＂ |
| zān̆ ${ }^{\text {la／}}$ | ＂be holding＂ | nō－zán̆l ${ }^{\text {l }}$ | ＂hen for holding＂ |
| $d \bar{c} l^{\text {la／}}$ | ＂be leaning＂ |  | ＂person you can lean on＂WK |
|  |  | kùg－d $\bar{\varepsilon} l^{1 \varepsilon /}$ | ＂chair for leaning on＂ |
|  | ＂be hanging＂ | $b \bar{n}$－gúl ${ }^{\text {l }}$ | ＂thing for suspending＂ |

Perfective verbal adjectives are only derived from verbs which can use the perfective in a resultative sense 16．1．2；it is not clear how productive the formation is．Almost all such verbs are either intransitive or patientive ambitransitive，and the adjectives are not passive participles，but express resulting states．There are no pfv verbal adjectives from stance－verb roots meaning e．g．＂seated＂，＂standing＂or from passives，like＂eaten．＂The formant－lım－either deletes a preceding derivational suffix or is added only to roots；for the flexion see $\underline{6}$ ．

| kpị | ＂die＂ | kpịilún ${ }^{\text {a }}$ | ＂dead＂ |
| :---: | :---: | :---: | :---: |
| $g \bar{\varepsilon} \check{n}$ | ＂get tired＂ | $g \bar{\varepsilon} \varepsilon \bar{n} l ⿱ ㇒ 日 勺{ }^{\circ}$ | ＂tired＂ |
| $p \dot{\varepsilon}^{\prime} \varepsilon \varepsilon^{\varepsilon}$ | ＂fill＂ | pè＇$\frac{1}{}{ }^{\text {cón }}$ | ＂full＂ |
| kò | ＂break＂ | kòolúp ${ }^{\text {a }}$ | ＂broken＂ |
| $y$ ¢̀ | ＂wear＂ | yèclúp | ＂worn＂（of a shirt） |
| yò | ＂close＂ | yòolón ${ }^{\text {a }}$ | ＂closed＂ |
| pù＇alìm ${ }^{\text {m }}$ | ＂harm＂ | pò＇alón ${ }^{\text {a }}$ | ＂damaged＂ |
| àen̆ | ＂tear＂ | àan̆lón ${ }^{\circ}$ | ＂torn＂ |

## 9．2．1．3 Instrument nouns

Instrument nouns can be created freely by adding $-m$ to ipfv verbal adjective stems in $d t$ or $s$ ．All are $g a \mid s \varepsilon$ ．The meanings may overlap with those of agent nouns．

| $k \bar{v}$ | ＂kill＂ | kv̄vdín ${ }^{\text {a }}$ | ＂thing for killing with＂ |
| :---: | :---: | :---: | :---: |
| しう | ＂tie＂ | sinà－lōodín ${ }^{\text {a }}$ | ＂belt＂（＂waist－tying thing＂） |
| $d \bar{v} g^{\varepsilon}$ | ＂cook＂ | dūgodín ${ }^{\text {a }}$ | ＂cooking utensil＂ |
| $s \bar{\partial} b^{\varepsilon}$ | ＂write＂ | sōbıdín ${ }^{\text {a }}$ | ＂writing implement＂ |
| kpàr ${ }^{\text {c }}$ | ＂lock＂ | $k p a ̄ r ı d i ̄ \eta \eta^{\text {a }}$ | ＂thing for locking＂ |
| n̆wà＇e | ＂cut wood＂ | $\check{n} w a{ }^{\prime}{ }^{\text {adī }} \eta^{\text {a }}$ | ＂axe＂ |
| pịe ${ }^{\text {／}}$ | ＂wash self＂ | pịədín ${ }^{\text {a }}$ | ＂thing for washing oneself＂ |
| sò | ＂bathe＂ | sūvdī ${ }^{\text {a }}$ | ＂sponge＂ |


| $g \bar{s} s^{\varepsilon}$ | "look" | nịn-gótì $\eta^{\text {a }}$ | "mirror"; nịn-gótìs ${ }^{\text {® }}$ "glasses" |
| :---: | :---: | :---: | :---: |
| bùd ${ }^{\varepsilon}$ | "plant" | $b u ̄ t i ̄ \eta^{\text {a }}$ | "cup" (originally "seed cup") |
| pị̀s ${ }^{\varepsilon /}$ | "clean" |  | "cleaning implement" |
| $k u ̀ S^{\varepsilon}$ | "sell" | $k u \bar{s}{ }^{\text {a }} \eta^{\text {a }}$ | "professional salesperson" |
| dā'el | "push" | dā'adín ${ }^{\text {a }}$ | "pusher (person or thing)" |
|  | "be sitting" | zịn'idīı ${ }^{\text {a }}$ | "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 8.1.1. Other single-aspect verbs which make gerunds add -lım- after root vowels and -m- after nn ll r(r); the forms are mm-class.

| $s \bar{u}^{\prime} e^{\text {ya/ }}$ | "own" | sū'olím ${ }^{\text {m }}$ | cf so'olimkan Mt 12:25, 1996 |
| :---: | :---: | :---: | :---: |
| mī̀' | "know" | mị̀ilím ${ }^{\text {m }}$ |  |
| $z \chi^{\prime}$ | "not know" | zī'llím ${ }^{\text {m }}$ |  |
| àeñ̆ ${ }^{\text {ya }}$ | "be something" | àan̆lím ${ }^{\text {m }}$ |  |
| $b$ ¢̀ | "be somewhere" | bèlím ${ }^{\text {m }}$ | sic |
| kā'e | "not be" | kā'alím ${ }^{\text {m }}$ |  |
| $w \bar{\varepsilon} n^{\text {na/ }}$ | "resemble" | wēnním ${ }^{\text {m }}$ | [tones show this is deverbal] |
| $\operatorname{sịn}{ }^{\text {na/ }}$ | "be silent" | sịnním ${ }^{\text {m }}$ |  |
| $n \bar{\varepsilon} n^{\text {na/ }}$ | "envy" | n̄̄nním ${ }^{\text {m }}$ |  |
| dō ${ }^{\text {la/ }}$ | "accompany" | dōllím ${ }^{\text {m }}$ |  |
| $z a ̄ n l^{\text {la/ }}$ | "hold in hand" | zān̆llím ${ }^{\text {m }}$ |  |
| $d \bar{c} l^{\text {la/ }}$ | "be leaning" | déllóg ${ }^{\text {a }}$ or | çllím ${ }^{\text {m }}$ |
| mōr ${ }^{\text {a/ }}$ | "have" | mōrím ${ }^{\text {m }}$ |  |
| tār ${ }^{\text {a/ }}$ | "have" | tārím ${ }^{\text {m }}$ |  |
| nār ${ }^{\text {a/ }}$ | "be necessary" | nārím ${ }^{\text {m }}$ |  |
| $g \bar{u} r^{\text {a/ }}$ | "guard" | gūrím ${ }^{\text {m }}$ |  |

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 16.1.3 also form imperfective gerunds; the tonemes show that these are not $m$-stems:

```
bòodìm" "will" (Pattern L, unlike bōodīr r "desirable")
g\grave{on̆dìmm "wandering" (gòn̆ "hunt")}
zòtìm"m "fear" [ṀM zót n\overline{\varepsilon "I'm afraid."]}
```

Cf wùmmù ${ }^{\circ}$ *wvmdvgo "hearing" from wùm ${ }^{\mathrm{m}}$ "hear."

Some deverbal abstract nouns from 3-mora verb stems in -s- are imperfective gerund forms with dropping of $-d-$ as in agent nouns and ipfv verbal adjectives.

| pù'vs | "greet, thank" | pò'vsìm $\mathrm{m}^{\mathrm{m}} /$ pù'vsù $^{\text {o }}$ |
| :--- | :--- | :--- |

Unequivocal imperfective gerund forms with -m- derived from almost all agentive verbs occur as predependents of the bound noun

$$
-t a ̄ a \quad-t a ̄ a s^{\varepsilon} \quad \text {-tà- or }-t \bar{a}-\quad \text { "companion in ..." }
$$

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:

| $m i ̄ '$ | "know" | mī'ilí́m-tāa | "partner in knowledge" |
| :--- | :--- | :--- | :--- |
| $z \bar{l} '$ | "not know" | zī'llím-tāa | "partner in ignorance" |
| $b \varepsilon ̀$ | "exist" | bèlím-tāa | "partner in existence" WK |
| $d \bar{y} l^{\text {la }}$ | "be with" | dōllím-tāa | "fellow-companion" |

For the irregular stative verb nò $\eta^{\varepsilon}$ WK has two forms with different nuances:

| nò $\eta^{\varepsilon}$ | nòjìlím-tāa | "fellow liker" |
| :---: | :---: | :---: |
|  | or nòjìdím-tāa | "fellow lover" |

Dual-aspect verbs add -m- to ipfv verbal adjective stems, with gerund tones:

| $m \varepsilon ̀$ | "build" | mèzdím-tāa | "fellow-builder" |
| :---: | :---: | :---: | :---: |
| $d i ̀$ | "eat" | ditím-tāa | "messmate" |
| $p \bar{\nu}$ | "share" | pūvdím-tāa | "fellow-sharer" |
| $k p \varepsilon ̇ n ̆{ }^{\prime}$ | "enter" | kpèñ'عdím-tāa | "fellow-resident" |
| $z a ̀ b^{\varepsilon}$ | "fight" | zàbıdím-tāa | "opponent" |
| $d \bar{v} g^{\varepsilon}$ | "cook" | dūgudím-tāa | "fellow-cook" |
| fän̆ | "snatch" | fāan̆dím-tāa | "fellow-robber" |
| tòm ${ }^{\text {m }}$ | "work" | tòmmím-tāa | "co-worker" |
| $p u ̀ ' v S^{\varepsilon}$ | "worship" | pù'vsím-tāa | "fellow-worshipper" |
| dìs ${ }^{\text {c }}$ | "feed" | dìsím-tāa | "fellow-feeder" |
| sù $\square^{\varepsilon}$ | "help" | sùním-tāa | "fellow-helper" |
|  |  | sòjìdím-tāa |  |
| sìàk ${ }^{\varepsilon}$ | "agree" | sìàkím-tāa | "fellow in agreement" |

Stance verbs may use -dım- or -lım- or -nım-:

| ịgīya/ | "be kneeling" | ịgrlím-tāa |  | "fellow-kneeler" |
| :---: | :---: | :---: | :---: | :---: |
|  |  | ịgıdím-tāa | WK |  |
|  | "be sitting" | zịn̆'ilím-tāa |  | "fellow-sitter" |
|  |  | zịň'idím-tāa |  |  |
| vābīya/ | "lie prone" | vābılím-tāa |  | "fellow lier-prone" |
|  |  | vābıdím-tāa |  |  |
| làbìya | "be crouched" | làbılím-tāa |  | "fellow croucher in hiding" |
|  | "be stood" | zị'əlím-tāa |  | "fellow-stander" |
|  |  | zị'ədím-tāa | WK |  |
| $d i ̄ g i ̄ \mathrm{ya} /$ | "be lying" | dīgılím-tāa |  | "fellow-lier" |
|  |  | dìgıním-tāa |  |  |

### 9.2.1.5 Other derivatives

| dīgīya/ | "be lying down" | dīgısá | "lairs" |
| :---: | :---: | :---: | :---: |
| $d \bar{v}$ | "go up" | dūvsá | "steps" |
| $z \grave{ }$ | "run" | $z \bar{\jmath} m^{\text {m }}$ ¢ | "refugee" |
| $k p$ ̣̀ | "die" |  | "corpse" |
| tưà | "grind in a mortar" | $t u \bar{\theta}$ dī $r^{\varepsilon}$ | "mortar" |
| $k p$ ̣̀ | "die" |  | "orphan" |
| dà' | "buy" | dà'abìr ${ }^{\text {c }}$ | "slave" |

### 9.2.2 From nominals

-s- and -I- form adjectives from adjectival roots:

| $m a{ }^{\prime} e^{\prime}$ | "cool down" | mā'asír ${ }^{\text {c }}$ | "cold, wet" |
| :---: | :---: | :---: | :---: |
| $b u ̄ k^{\varepsilon /}$ | "weaken" | būgusír ${ }^{\text {E }}$ | "soft" |
| $t \bar{\varepsilon} b^{\prime} g^{\varepsilon /}$ | "get heavy" | $t \overline{\text { chbısír }}$ | "heavy" |
| mị'ig ${ }^{\text {e }}$ | "get sour" | mị'isùg ${ }^{\text {a }}$ | "sour" |
| $s \overline{b^{\varepsilon}}$ | "get dark" | sābılíga | "black" |

-d- is seen in yūgudī $r^{\varepsilon}$ "hedgehog", lā'af "cowrie" pl lị̆gıd̄̄ "money", pùgvdìb ${ }^{\text {a }}$ "father's sister." It can form abstract nouns from human-reference words:

| pu'à-sādīr $r^{\text {ع/ }}$ | "young woman" | pu'asatim | "girlhood, virginity" |
| :---: | :---: | :---: | :---: |
| būn-kúdv̀g ${ }^{\text {a }}$ | "old man" | bonkvttim | "old age" |
| gedvg | "fool" | getim | "folly" |
| $p$-̇-kòon̆r ${ }^{\varepsilon}$ | "widow" | poksntim | "widowhood" |
| bā'-bị̂ig ${ }^{\text {a }}$ | "brother" | ba'abiidvg | "brotherhood" |

-m- is seen in several unanalysable 3-mora stems, e.g. yūgúm $\mathrm{n} \varepsilon$ "camel" (ultimately from Berber), gbīgīm ${ }^{\text {n } \varepsilon}$ "lion", zìlìm ${ }^{\text {m } \varepsilon}$ "tongue, àn̆rù $\eta^{3}$ "boat", zùlù $\eta^{3}$ "deep", ňyālón $\eta^{3}$ "wonderful", yàlù $\eta^{\supset}$ "wide." It also derives both human-reference and mass nouns:

| $b \bar{̣}$ 'a | "bad" | bị'əm ${ }^{\text {m }}$ | "enemy" |
| :---: | :---: | :---: | :---: |
| tàdì ${ }^{\text {g }}$ | "become weak" | tādīm ${ }^{\mathrm{m} /}$ | "weak person" |
| án̆sì ${ }^{\text {a }}$ | "mother's brother" | ān̆sín ${ }^{\text {a }}$ | "sister's child" |
| bị'isì ${ }^{\text {c }}$ | "breast" | bị'isím ${ }^{\text {m }}$ | "milk" |
| $n a ̀ ' a b^{\text {a }}$ | "chief" | nā'am ${ }^{\text {m }}$ | "chiefship" |
| $z ⿹ ̄ \ \bar{u} g^{\text {/ }}$ | "fool" | z⿹̄¢ımís ${ }^{\text {® }}$ | "foolishness" |

Added to adjectival stems, -m- produces no change of meaning: thus with pfv verbal adjective stems in -l- or -lım- $\underline{6}$; vèn̆llı̀ $g^{\mathrm{a}}$ or vèn̆llín $\eta^{\mathrm{a}}$ "beautiful"; mālısíg or mālısín $\eta^{\mathrm{a}}$ "pleasant"; lāllv́g${ }^{3}$ or lāllín $\eta^{\mathrm{a}}$ "distant." It may appear only in the adjective or only in the corresponding stative verb:

| $\check{n ̌ y \varepsilon ̀ \varepsilon s ~}{ }^{\text {a }}$ | "be self-confident" | $\check{n ̌ y \varepsilon ̀ \varepsilon s i ́ n ~}{ }^{\text {a }}$ | "self-confident" |
| :---: | :---: | :---: | :---: |
| $n a \overline{r^{\text {a/ }}}$ | "be necessary" | nàrùn ${ }^{\circ}$ | "necessary" |
| $w \overline{\mathrm{j}} \mathrm{k}^{\text {/ }}$ | "long, tall" | wā'ama/ | "be long, tall" |

Sometimes -m- seems to be introduced to avoid $* g g \rightarrow k k$ : yáa ${ }^{\text {a }}$ "grandchild", pl yáas ${ }^{\text {* yaagsı, yáab }}$ *yaagba "grandparent"; vúө ${ }^{\text {a }}$ "red kapok", vúөr ${ }^{\varepsilon}$ vuөgrı "red kapok fruit" ( pl vūөmís ${ }^{\varepsilon}$ "red kapoks" would have to be analogical); bèrì $\eta^{\mathrm{a}} \mathrm{pl}$ bèrıgìs ${ }^{\varepsilon}$ Hibiscus cannabinus, bērıgā cb bèrı̀g-pl leaves of bèrì $\eta^{\mathrm{a}}$.
-l- and -lım- derive abstract nouns from nouns and adjectives. The suffix -lım- 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" | dàalìm ${ }^{\text {m }}$ | "masculinity" |
| :---: | :---: | :---: | :---: |
| pu'āa | "woman" | pù'alìm ${ }^{\mathrm{m}}$ | "femininity" |
| bịig ${ }^{\text {a }}$ | "child" | bịilím ${ }^{\text {m }}$ | "childhood" |
| tītā'al ${ }^{\text {l }}$ | "proud person" | tītā'alīm ${ }^{\text {m }}$ | "pride" |
| gị $\eta^{\text {a }}$ | "short" | gịin̆lím ${ }^{\text {m }}$ | "shortness" |
| wōk ${ }^{\text {a/ }}$ | "long, tall" | wā'alím ${ }^{\text {m }}$ | "tallness" |
| sāan ${ }^{\text {a/ }}$ | "guest, stranger" | sáannìm ${ }^{\mathrm{m}}$ | "strangerhood" |
| tīrâan ${ }^{\text {a }}$ | "neighbour" | tīrâannìm ${ }^{\mathrm{m}}$ | "neighbourliness" |
| $g i ̣ \eta^{\text {a }}$ | "short" | gịņilím ${ }^{\text {m }}$ | "shortness" |

## 10 Noun prefixes

For the prefixes seen in numbers see 12.4.1; in manner-adverbs, 13.3.
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. They usually have no identifiable meanings, though 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 $C V(n)$, where $V$ shows only the three-way $a \imath v$ vowel distinction of affix vowels; the $\tau / v$ distinction itself and realisations as [i] or [u] are predictable 3.3. There is also a complex reduplicated type CVsın or CVlın. 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.

Some complex stems have first elements unlike the usual prefix forms; they may also contain unusual consonant clusters, or show tonal anomalies like the initial H of gbán̆yà'a "lazy person" (cf Dagbani gbinyayli "laziness.") Most are found in loanwords, but many names of ethnic groups and clans are also of this kind, like Kūsâas ${ }^{\varepsilon}$ "Kusaasi", Ňwāmpūrīs ${ }^{\varepsilon /}$ "Mamprussi", Kùtāmma/ "Kotamba" (WK's clan.)

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 12.5 .1 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 $\imath$ by default, but $v$ after labials, labiodentals and labiovelars; $v$ replaces $\imath$ before root $u / v / 0$ and $\imath$ replaces $v$ before root $i / \imath / \varepsilon$. A few forms show Ca. No cases occur with voiced stops or voiced fricatives.

| kùkōr ${ }^{\text {c/ }}$ | "voice" | kùkòm ${ }^{\text {m }}$ ( | "leper" |
| :---: | :---: | :---: | :---: |
| kìkà ${ }^{\text {a }}$ | "fig tree" | kìkịrī ${ }^{\text {a/ }}$ | "tutelary spirit" |
|  | "palm tree" |  | "merchant" |
| tītā'ar ${ }^{\text {c }}$ | "big" | tàtàl ${ }^{\text {l }}$ | "palm of hand" |
| pīpịrī $g^{\mathrm{a} /}$ | "desert" | sissì'əm ${ }^{\text {m }}$ | "wind" |
| lìlāalín ${ }^{\text {a }}$ | "swallow" | mìmịilím ${ }^{\mathrm{m}}$ | "sweetness" |
| mìmịilv́g ${ }^{\text {a }}$ | "sweetness" | kpàkūr ${ }^{\text {/ }}$ | "tortoise" |
| tìtōmīs ${ }^{\text {® }}$ | "sending" | fūfūm ${ }^{\text {m } \varepsilon}$ | "envy"; "stye" |
| $z a ̀-s i ̀ s o ̄ b i ̄ r ~ \% / ~$ | "evening" (zà | f zàam ${ }^{\text {m }} \mathrm{e}$ | , sōb ${ }^{\text {e }}$ "get dark") |

More complex is a similar type with a final nasal consonant; voiced stops and fricatives do occur with this type:

| dòndùug ${ }^{\text {a }}$ | "cobra" | dìnd $\mathrm{c}_{\text {og }}{ }^{\text {/ }}$ | "chameleon" |
| :---: | :---: | :---: | :---: |
| bimbìm ${ }^{\text {m }}$ | "altar" | bùmbàrì $\mathrm{g}^{\text {a }}$ | "ant" |
| kìnkà ${ }^{\text {a }}$ | "fig" | tīntōn̆ríga | "mole" |
| zīnzāun ${ }^{\text {a/ }}$ | "bat" | sīnsáan̆ | a kind of tiny ant |
| nōb-pómpàup ${ }^{\text {a }}$ | "foot" |  |  |
| gìngōm ${ }^{\text {m } \varepsilon}$ | "kapok material" (gòm ${ }^{\mathrm{m} \varepsilon}$ "kapok fruit") |  |  |
| zùnzò ${ }^{\text {a }}$ | "blind" (zū'өm ${ }^{\text {m/ "go/make blind") }}$ |  |  |
| pòmpōog ${ }^{\text {º }}$ | "housefly" (tàmpūa id) |  |  |

An even more complex type follows the reduplicated $C V$ with -sın or -lın:

| kpìsìpkpịl ${ }^{1 \varepsilon}$ | "fist" | tàsìntàl ${ }^{\text {l }}$ | "palm of hand" |
| :---: | :---: | :---: | :---: |
| sīlīnsị̂un̆g ${ }^{\text {a }}$ | "spider" | sīlīnsị̂ug ${ }^{\text {a }}$ | "ghost" |
| zīlīnzîog ${ }^{\circ}$ | "unknown" cf $z$ ī' "not know" |  |  |
| vòlìnvùun̆1 ${ }^{\text {l }}$ | "mason wasp" |  |  |
| wàsìnwàl ${ }^{\text {l }}$ | parasitic gall on trees ("mistletoe" in local English) |  |  |
| $n \bar{s} s i ̄ n n \bar{\varepsilon} o g^{0 /}$ | "envious person" cf nē ${ }^{\text {na/ "envy" WK }}$ |  |  |

Prefixes may also be of the form $C a(n)$, where $C$ is $d b n m l s$ or $z$.

| dàyūug ${ }^{\text {/ }}$ | "rat" | dàwān ${ }^{\text {ne/ }}$ | "pigeon" |
| :---: | :---: | :---: | :---: |
| dàtìu ${ }^{\circ}$ | "right hand" | dàgòbìg ${ }^{\text {a }}$ | "left hand" |
| dànkj̀ ${ }^{\text {a }}$ | "measles" | dàwàlì ${ }^{\text {a }}$ | "humid season" |
| dàyáam ${ }^{\text {ma }}$ | "woman's parent-in-law" |  |  |
| dàtāa | "enemy" cf nịn-tāa "co-wife", Ghanaian "rival" |  |  |
| dàmà'a | "liar" cf mà "lie" |  |  |
| dàkịig ${ }^{\text {a }}$ | "sibling-in-law via wife" |  |  |
| dārúk ${ }$ | a kind of large pot, cf d $\bar{v}^{\text {d/ "pot" }}$ |  |  |
| bàlànìr ${ }^{\text {c }}$ | "hat" | bàlàar ${ }^{\text { }}$ | "stick, staff" |
| bānāa | traditional s |  |  |
| bālērūga/ | "ugly" cf $l \bar{\varepsilon} r^{\varepsilon}$ | ugly" |  |
| bàyčog ${ }^{\text {/ }}$ | "betrayer of | ts" cf y $\bar{\varepsilon} \varepsilon s^{\varepsilon /}$ | a secret" |
| nānzū'us ${ }^{\varepsilon /}$ | "pepper" | màngávŋ | "crab" |
| làngávŋ | "crab" |  |  |
| sākárùg ${ }^{\text {ºb }}$ | "fox" | sàbùa | "lover, girlfriend" |
| sāmán ${ }^{\text {ne }}$ | "courtyard" | sāŋgónnìr ${ }^{\text {e }}$ | "millipede" |
| $z a ̀ \eta k v ̀ ' a r^{\varepsilon}$ | "jackal" | Zàngbèog ${ }^{\circ}$ | "Hausa person" |

Này!̣iga "thief" is written na'ayiig in NT/KB as if with the cb nā'- "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 $a \mid b a$ class $g$-stem: pl này!̣ig-nàm ${ }^{\mathrm{a} ;} \mathrm{cf}$ này!̣iigīm ${ }^{\mathrm{m}}$ "thievery." There is an analogical ga|sع pl nàyịis ${ }^{\varepsilon}$. The Farefare cognate is nàyị̀gà, pl nayigba or nayigsi; Dagbani has nayiza pl nayizsi and also tayiza.

Some prefixes are connected with the verb negative particles $p \bar{v} k \grave{v}$ :

| kùndù'ar ${ }^{\text {e }}$ | "barren woman"; cf du' ${ }^{\prime} \mathrm{a}^{\text {a }}$ "bear, beget" |
| :---: | :---: |
| $n \bar{̣} n-p \bar{v}-n a \bar{n}{ }^{\text {na/ }}$ | "disrespectful person"; cf nān ${ }^{\varepsilon}$ "love, respect" |
| tùb-pū-wv́mnìb ${ }^{\text {a }}$ | "deaf people" (Rom 11:7) cf tùbòr ${ }^{\text {e }}$ "ear", wòm ${ }^{\text {m }}$ "he |

However, most cases show no identifiable negative meaning:

| kùndùクa | "jackal" | gūmpūzz̄$r^{\varepsilon /}$ | "duck" |
| :--- | :--- | :--- | :--- |
| dāmpūsāar | "stick" | bān-kúsćl | "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.

Nịn- "body" is accepted by WK as cb of nịina nịiis ${ }^{\varepsilon}$ [= Mooré yĩnga] but the word is rare; it appears in nịn-tāa "co-wife" and nị̀n-gbị̀ $\eta^{\text {J/ }}$ "human skin; body."

Dà- "man" has been replaced as regular cb by forms segmentally remodelled on sg and pl dàu-, dàp-, but dà- is seen in dà-pāala/ "son, boy" (pāalíg "new") and dàkòon̆ré "son, bachelor" (cf àràkón̆' "one.")

Pù- "woman" (cf pư'āa "woman" cb pứà̀-) appears in pì-kòon̆r ${ }^{\varepsilon}$ "widow"; cf Mooré pùgkõoré "widow" along with pùgsádà "young woman" = Kusaal pun'à-sādīr $r^{\varepsilon /}$.
 appears in $p \bar{v}-k p \bar{a} a d^{\mathrm{a} /}$ "farmer" ( $=k p \bar{a} a d^{\mathrm{a} / ~ i d) ; ~ t o n a l l y, ~ i t ~ b e h a v e s ~ a s ~ a ~ M ~ p r e f i x ~ 3.8 .1 . ~}$

Nà'- "chief"(?) appears before a number of nouns signifying animals and insects: nà'-zòm ${ }^{\mathrm{m} \varepsilon}$ "locust", nà'-dàwānn $\mathrm{n} /$ "pigeon" (=dàwānn ${ }^{\mathrm{n} / /}$ ) and WK's nà'$n \bar{\varepsilon} s i ̄ n n \bar{\varepsilon} o g^{\jmath /}$ "centipede" ( $n \bar{\varepsilon} s i ̄ n n \varepsilon \bar{\varepsilon} o g^{\jmath /}$ "envious person" WK; others: "centipede.")

The cb perhaps relates to traditional folklore; cf à-kōrā-dị̂əm ma "praying mantis" ("hyena's parent-in-law") and animal and bird names which incorporate the personifier particle, like à-dàalv́n ${ }^{\circ}$ "stork", à-gâvn̆ $g^{\supset}$ "pied crow", à-mús ${ }^{\varepsilon}$ "cat."

## 11 Loanwords

Nouns are much the largest group of identifiable loans. They often deviate from typical Kusaal noun structure, but are fitted into the noun class system by analogy where possible, otherwise making nàm ${ }^{\text {a }}$ plurals:

| ga\|sع: àràzàk ${ }^{\text {a }}$ | àràzà'as ${ }^{\text {® }}$ | àràzà'- | "riches" |
| :---: | :---: | :---: | :---: |
| màliàk ${ }^{\mathrm{a} /}$ | màliā'as ${ }^{\text {/ }}$ | màlilā'- | "angel" DK |
| $g \supset \mid d \varepsilon: g a ̄ d \bar{v} g^{\text {a/ }}$ | $g a ̄ t^{\varepsilon /}$ | gād- | "bed" |
| lòmbòn̆'og ${ }^{\text {º }}$ | lòmbòn̆'od ${ }^{\text {® }}$ | lòmbòn̆'- | "garden" |
| relaa: lór ${ }^{\text {e }}$ | lóyà or lóom ${ }^{\text {ma }}$ | lór- | "car, lorry" ( ff M万̄r ${ }^{\text {¢/ }}$ ) |
| àlópì ${ }^{\text {c }}$ | àlópìyà |  | "aeroplane" SB |
| wādīr $r^{\varepsilon /}$ | wādá | wād- | pl "customs, law" |
| kદ̀¢k̇̀ | kèzkè-nàm ${ }^{\text {a }}$ | kغ̀¢kغ̀- | "bicycle" |
| Nàsāarā | Nàsàa(r)-nàm ${ }^{\text {a }}$ | Nàsàa(r)- | "European" |

Loans ending in L or H toneme show M spreading after sg , but not cb:
dv́'atà nâ'ab
dv́'atà-nà'ab
"a doctor's chief"
"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: dūnıyā "world", dūnıyá-kàmā "this world."

Initial $\grave{a}$ - in loans is usually treated tonally as fixed-L 4.4.
Borrowed verbs are much less common; they are subject to the usual constraints on verb shapes 9.1. In addition, several function words are loans.

Most identifiable loanwords come from Hausa, used as a lingua franca by millions in the savanna zone of West Africa. Alongside the many nouns, borrowed verbs include dàam ${ }^{\mathrm{m}}$ "disturb, trouble", Hausa dàamaa; bìg ${ }^{\varepsilon}$ "get drunk", Hausa bùgu, literally "get thoroughly beaten." Function words probably taken from Hausa include àsé $\varepsilon$ "except", Hausa sai; kv̄v "or", Hausa koo; báa "not a...", Hausa bâa.

Though loans from Hausa have travelled far in West Africa, words with Hausa counterparts did not necessarily originate in Hausa, itself a great borrower. Some are panregional, like hālí "even", Hausa har, Kikara Songhay hálì, possibly from Arabic ћattaa (Heath 2005.) With làbìya "be crouching behind something", Hausa la6èe "crouch behind something to eavesdrop", Kikara Songhay lá:bú "hide behind or under something", the match of form and meaning is striking; if làbìya is a loan, its flexion


Arabic loanwords, frequent throughout the Sahel and Savanna, are likely to have reached Kusaal predominantly through Hausa. Words of Arabic origin include among many others Kusaal láafiyà, Hausa laafiyàa, Mooré làafí, Kikara Songhay Pàlà:fíyà "health", Arabic Pal-faafiya "the wellness"; Kusaal àràzàk ${ }^{\text {a }}$, Hausa arzikii, Mooré àrzéká "riches", Kikara Songhay Párzúkù "good luck", Arabic Par-rizq "the livelihood" pl Parzaaq; àràzánà "heaven, sky", Hausa àljannàa, Mooré àrzãnà, Kikara Songhay Pàljánnà "heaven, paradise", Arabic Pal-fanna "the garden, paradise"; Kusaal yàddā/ "assent", Hausa yàrda (verb) "consent", Kikara Songhay yárrè "consent", probably from the Arabic yard$a a, ~ 3 s g$ masculine ipfv of radiya "be satisfied"; Kusaal Tàláatà, Hausa Tàlaatàa, Arabic Pa日-ӨalaaӨaa? "Tuesday."

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. Christian missionary work among the Kusaasi began in Haute Volta (now Burkina Faso) and used Mooré materials, leading to borrowing and calquing.

Arabic words have reached Mooré from several West African languages widely used by Muslims other than Hausa, including Dyula and the Songhay languages. Thus màlía $k^{\mathrm{a} /}$ "angel" (malek in NT versions prior to 2016) is derived from the Arabic mal?ak, and the vocalism suggests transmission via Mooré màlćkà; the forms clearly do not match Hausa màlaa'ikàa, which is from the Arabic plural malaaPika. Similarly, Sv̄táanà "Satan" matches Mooré Svtãana rather than Hausa shàidân, which is a learned borrowing of the Arabic Sayt ${ }^{〔}$ aan.

Wínnà'am ${ }^{\mathrm{m}}$ (WK) Wínà'am ${ }^{\mathrm{m}}(\mathrm{NT} / \mathrm{KB})$ is "God" in Christian materials, though the Creator of traditional religion often appears simply as $W i n^{n \varepsilon /}$. Tone and the prevalence of the form Wínà'am with single $n$ show that the word is not an Agolle Kusaal compound of $w i ̄ n n$ n $/$. Direct borrowing of Mooré Wểnnàám would not explain the glottalised $a^{\prime} a$, and the immediate source is probably Toende Kusaal Wínā'am.

Fāan̆gíd ${ }^{\mathrm{a}}$ "saviour" (NT/KB) is exceptional in preserving $g$ in an environment where it is normally deleted; the only other cases in my data are fāan̆gír ${ }^{\varepsilon}$ "salvation"
 noun of fāe/ "save" is fāan̆d ${ }^{\mathrm{a} /}$, identical to the agent noun of fän̆ "snatch", NT/KB faand "robber"; WK confirmed that fāan̆da/ has both meanings in his idiolect. Fāan̆gíd is probably another loan from Toende Kusaal, which often retains $* g$ in this position: Niggli has fãagıt and fãat for "saviour", with fãat also glossed "robber." Older NT
 malek (Toende màlćk, Mooré màlékà) for màliāka/ "angel", but KB has anrvp and maliak throughout, matching both the 1996 audio and the usage of my informants.

A clear Mampruli loanword is WK's kịibú cb kịib- "soap", which he uses instead of Kusaal $k \bar{l}^{\prime} \imath b^{J /}$. The length and quality of the vowels identify the source as Mampruli kyiibu: contrast Farefare kí'íbó, Dagbani chibo. Other words with singulars ending in $\begin{aligned} & \text { or } \\ & \text { or } \\ &-v \text { also probably originated as loans from Mampruli or Mooré. }\end{aligned}$

Loanwords of Songhay origin include bùrkìna "honest person", Mooré bùrkĩná "free, noble", Dagbani bilchina "free, not slave", cf Kikara Songhay bòrkǐn "noble (caste)" and bàunvì, used only in kpèn̆' bàunv̀ "get circumcised" (kpèn̆' "enter"), Mooré kẽ bãongó id, cf Kikara Songhay bàngù "pool, spring", à húró bàngù "he entered the pool", i.e. "he was circumcised."

Loans from Twi/Fante ("Akan"), the major lingua franca of southern Ghana, include kj̄dv́ "banana", Twi kwadu; sāafi "lock, key", Twi safẽ "key" (from Portuguese chave); būrıyá "Christmas", Twi bronya.

English loanwords sufficiently naturalised to be used by speakers unfamiliar with English have often undergone considerable changes: àlópìr $r^{\varepsilon}$ "aeroplane", perhaps a back-formation from [alopılin] taken as a locative àlópìrī=n $n^{\varepsilon /}$; dv́'atà "doctor" (cf Dagbani dóyté id); tóklàe "torch" ("torchlight"); lór $r^{\varepsilon}$ "car, lorry" (often borrowed even in Francophone Africa: cf Mooré lórè, Nawdm lòóŕ); postim (Jer 20:10) "complain about officially" ("report.")

English stress may be represented by a H toneme which remains fixed throughout the paradigm: lóyà "cars", not *lōyá.

Some words of English origin have probably been transmitted via Hausa: kótù "court", Hausa kootù; téعbùl ${ }^{\varepsilon}$ "table", Hausa teebùr; wādá "law", Hausa oodà , from English "order", with sg wādī $r^{\varepsilon /} \mathrm{cb}$ wād- created by back-formation.

A clear French loan in Agolle Kusaal is làmpō (i.e. l'impôt) "tax", as in làmpō$d \underline{1} \hat{1}^{\prime} \partial s^{\mathrm{a}}$ "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 kàs $\bar{\varepsilon} t^{\text {a/ "witness, testimony", Mooré }}$ kàsétò "testimony, proof", as in kàsét sébrè "receipt" ("evidence writing.") The ultimate origin is probably French cachet in the sense "seal (of authenticity)", with -tperhaps introduced from the corresponding verb: il cachète "he seals." Mooré and Farefare kàsétò 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.

## 12 Noun phrases

A nominal phrase may be either a noun phrase (NP) or an adverb 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 16.9.)

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.
dāū lā bútì $\eta$
sālımā bútì $\eta$
"the man's cup" ("cup of the man")
"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 17.3.2 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:

| būvg | "goat" | bv̀-pì̀lìg | "white goat" |
| :--- | :--- | :--- | :--- |
| bì-kàjā | "this goat" | bv̀-pịəl-kàpā | "this white goat" |

Compounds with non-referential cbs as dependents are also common:

$$
\begin{array}{lll} 
& \text { nà'ab lā wíd-zv̄vr } & \text { "the chief's horse-tail" } \\
\text { vs nà'ab lā wį̣̂ zôvr } & \text { "the chief's horse's tail" }
\end{array}
$$

Regardless of which element precedes, the last stem shows the noun class suffixes which mark number for the head. The preceding stem has a dummy suffix if it ends in a consonant, but in any case undergoes apocope; analogical remodelling of such combining forms 5.1 is common, however, and regular with some stem types.

For the tone sandhi rules which affect the component following the combining form see 4.4 4.5. 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:

| [bì-pị̀l-]kànā | "this [white goat]" |
| :---: | :---: |
| [nịn-wók-]pịəlìg | "white [tall person]" |
| [zà'-nj-]pịəlìg | "white gate" ("white [compound-mouth]") |

A compound may appear as generic argument to a following deverbal noun:

$$
\begin{aligned}
& \text { [zà'-nj̄-]gúr } \\
& \text { [[zà'-nō-]gúr-]kà }
\end{aligned}
$$

```
"gate-keeper"
"this [gate-keeper]"
```

Noun-adjective compounds can be used as bahuvrihi adjectives 12.6.1.1:
kùg-[nōb-wók] "[long-legged] stool"

Compounds may contain uncompounded elements within their structure. Determiners always bind looser than modifiers. Cbs as modifiers bind tighter to following than preceding words, but cbs as generic arguments bind closer to preceding modifiers than to the following word:
[sālımā bv́tìn-]kànā
[[sālımā lá'-]màan-]kàyā
ò [[sālımā lá'-]māan]
sālımā [zá'-nōor]
zūgó=n [nịf-gbáun ]
ānzúrıfà nē sālımā lâ'ad
[ānzúrıfà lá'-]māan
[ānzúrıfà ne sālımā lá'-]māan
"this [gold cup]"
"this [[gold-item]-maker]"
"her [[gold-item]-maker]"
"golden gate" ("golden [compound-mouth]")
"upper eyelid" ("upper [eye-skin]")
"silver and gold goods"
"silversmith" ("[silver goods]-maker")
"silver- and goldsmith"

Adjective cbs can only be used before an adjective or a dependent pronoun: a noun-adjective compound as a generic argument must adopt a sg or pl form:

```
    [fū-z\varepsilońn̆dà] kù0s "seller of red (i.e. dyed) cloth"
not *fü-z\varepsilońn̆'-kùөs
```

For coordination, "and" in NPs and AdvPs is $n \bar{\varepsilon}$, identical to the preposition "with." $N \bar{\varepsilon}$ can only link clauses if they have been nominalised. It cannot be omitted in series of three or more items, and it cannot join two words with the same referent:

```
À-Win né À-Bv̄gv̄r n\varepsiloń À-Nà'ab "Awini, Abugri and Anaba"
dv́'atà n\overline{\varepsilon}nâ'ab "a doctor and a chief" (two people)
```

The particles for "or" are $b \bar{\varepsilon} \varepsilon$ or $k \bar{v} v$, synonymous in this usage. By default they are taken as exclusive "or" but can admit the inclusive interpretation "or both":

Dāu lā n̆yé bị-díbìn kv̄v bị-púnàa=ø?
Man:SG ART see child-boy:SG or child-girl:SG=PQ?
"Did the man see a boy or a girl?"

Bịig lā kv̄v dāu lā kúv bà wv̄sā
child:SG ART or man:SG ART or 3PL all
"The man, or the child, or both" WK

Coordinated heads may not share determiners:
$\boldsymbol{m}$ ba'abiis ne $\boldsymbol{m}$ saamnama
$\grave{m}$ bā'-bịis né $\grave{m}$ sàam-nàmā $=\varnothing$
1SG father-child:PL with 1SG father-PL=VOC
"my siblings and [my] fathers!" (Acts 7:2)
$p u{ }_{\text {'a }} \quad$ lā $n \bar{\varepsilon} \quad d a \bar{u} u \quad$ là $\quad$ "the woman and the man"
woman:SG ART with man:SG ART

An exception is ỵ̣iigá "firstly" used as a predependent for "first" 12.5.3:
yiiga saygbauŋ ne teygbaun ne atzuk
yịigá sàŋ-gbàunך n̄̄ tév-gbàunך né àtiunk
firstly heaven-skin:sG with earth-skin:SG with sea:SG
"the former heaven and earth and sea" (Rv 21:1)

Coordinated heads may share modifiers by ellipsis:

Kūsâal sólımà n̄ sịilímà "Kusaasi stories and [Kusaal] proverbs"
Kusaal story:PL with proverb:PL

Kūsâas kûeb nē yịrr "Kusaasi farming and [Kusaasi] housing"
Kusaasi:PL hoeing with house:sG

| sālımā bútìıs nē díısímà | "gold cups and [gold] spoons" |
| :--- | :--- |
| gold cup:PL with spoon:PL | ("all of them gold", KT) |

However, KT WK both agreed that sālımā lâ'ad nē būtīıs must mean "gold goods and [not gold] cups", WK offering the correction
sālımā lâ'ad né ò būtīıs "gold goods and (gold) cups" WK
gold item:PL with 3AN cup:PL (for ò referring to sālımā see 12.2)

Tony Naden notes that "cups" being a subtype of "goods" impairs the parallel between the coordinated units, making it less natural to supply the ellipsis.

Coordinated heads may even occur before an adjective:

Ka $m$ nye saygbaun ne teygbaung paal.
Kà m̀ n̆y $\bar{\varepsilon}$ sáy-gbàun- nē tév-gbàun $-p a ́ a l$
And 1sg see heaven-skin- with earth-skin-new:sg.
"And I saw a new heaven and a new earth." (Rv 21:1)

However, cbs as dependents may not be coordinated:

*[b̄̄ŋíd nē kị] kûes $\quad$|  | not possible for "seller of $b \bar{\varepsilon} \eta i ́ d ~ n \bar{\varepsilon}$ |
| :--- | :--- |
| (bị" |  |

Dependent NPs or AdvPs can naturally include coordinated components:
o nya'andolib pii ne yi "his twelve disciples" (Mt 26:20)
ò n̆yà'an-dòllìb pịi $n \bar{\varepsilon} \quad y!̣ i ́ ' ~$
3AN disciple:PL ten with two
dv́'atà n̄ nâ'ab lā lóyà "Doctor's and the chief's cars"
doctor:SG with chief:SG ART car:PL
sālımā n̄ ānzúrıfà 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:

dú'atà (lóyà) nē nâ'ab lā lóyà<br>sālımā (lâ'ad) ne ānzúrıfà lâ'ad<br>vs [dv́'atà nē nâ'ab lā] lóyà<br>[sālımā nē ānzúrıfà] lâ'ad

"[Doctor's cars] and [the chief's cars]"
"[gold goods] and [silver goods]"
"the cars of [Doctor-and-the-chief]"
"[gold-and-silver] goods"

This is impossible if the ellipted element would have been a cb: an elliptical reading of ānzúrıfà nē sālımā lá'-māan "silver- and goldsmith" would have to mean "a smith made of silver and a smith made of gold."

NPs can be combined by apposition; for relative clauses see 17.3.2. NPs may precede personal names in apposition: mān Paul "I, Paul." As the NP is not a dependent, a following personifier particle is not omitted 12.5.1.

Li pu nar ye fu di fu ba'abiig po'a Herodiase.
Lì pū nār yé fù dí fù bā'-bị̂ig pư'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 lèbìs $y \bar{\varepsilon}, \bar{\varepsilon} \varepsilon$ n̆, ò zùà $\grave{A}$-Sị̂bıgī $n$ kābıríd.
...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

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 5.2. The 1996 NT has Nonaar Paal for 1976 Nonapaal N̄̄-ná-páal "New Testament", Siig Sup for Sisup Sì-sù "Holy Spirit", but the audio NT has Sìıg-sùn (Sîıg-sù $\eta$ with M spreading) or Sì-sùך, never *Sīıg-sún.

### 12.1 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 12.6.

Count nouns distinguish sg/pl, unlike mass nouns, which characteristically refer to liquids, substances or abstractions. Count nouns may be abstract:

| $z \bar{\circ} g^{\text { }}$ | $z \overline{\text { ¢ }}{ }^{\text {c }}$ |  | "race" |
| :---: | :---: | :---: | :---: |
| bū'өsúg ${ }^{\text {a }}$ | bū'өsá | $b u ̄ ' ө s$ - | "question" |
| zàan̆súท ${ }^{\circ}$ | zàan̆símà | zàan̆sv́n- | "dream" |

The count/mass distinction affects the choice of quantifiers 12.4 , the form of plurals with nàm ${ }^{\mathrm{a}} \underline{5.1}$, and the meaning of NPs as predependents $\underline{12.5 .2}$.

Typical underived mass nouns belong to the bo and mm noun classes, but gerunds of 3-mora-stem verbs regularly show sg $r \varepsilon$ or $g 0$. A number of words referring to uncountables or abstracts, along with several irregularly formed deverbal abstract nouns, are formally plural but construed as singular.

| bān̆'as ${ }^{\text {c }}$ |  |  | bàn̆'- | "disease" |
| :---: | :---: | :---: | :---: | :---: |
| n̆yō'os ${ }^{\text {/ }}$ |  |  | n̆yō'- | "smoke" |
| tàdımís ${ }^{\text {E }}$ |  |  |  | "weakness" |
| zōlımís ${ }^{\text {c }}$ |  |  |  | "foolishness" |
| $m \bar{\varepsilon} t^{\varepsilon /}$ |  |  | $m \bar{\varepsilon}$ t- | "pus" |
| kūt ${ }^{\text {c }}$ |  |  | kùt- | "iron"; also "nail" |
| $z u ̀ \theta d^{\varepsilon}$ |  |  |  | "friendship" |
| $b \bar{v} d^{\varepsilon}$ |  |  |  | "innocence" |
| sịind ${ }^{\text {¢/ }}$ |  |  |  | "honey" |
| nịn-p̂̂vd ${ }^{\varepsilon}$ |  |  |  | "pus" |
| wāad ${ }^{\text {/ }}$ |  |  |  | "cold weather" |
| $s u \bar{n}-p \varepsilon \hat{\varepsilon} \varepsilon n^{\mathrm{n}} \varepsilon$ |  |  |  | "anger" |
| $k u ' a ̀-n u ̄ u d^{\varepsilon /}$ |  |  |  | "thirst" |
| sālımā |  |  | sàlìm- | "gold" |
| sìdà |  |  | sid- | "truth" |
|  | "madness" |  | bùdımís ${ }^{\text {e }}$ | "confusion" |
| tìtūmīs ${ }^{\varepsilon}$ | "sending" |  | zịìd ${ }^{\varepsilon /}$ | "carrying on the head" |
| $v u ̄ u d^{\varepsilon /}$ | "noise" |  | $k \bar{\varepsilon} n^{\mathrm{n} /}$ | "arrival" |
| dị'əmà | "festival" |  |  |  |
| pi̇àn'ad ${ }^{\varepsilon}$ | "speech" | cf | pi̇àuňk ${ }^{\text {a }}$ | "word" |
| tūvmā | "work" | cf | $t \bar{v} m^{\text {m }}$ ¢ | "deed" |
| tēn̆'عsá | "thought" | cf | $t \overline{\text { n̄' 'esá yīnní }}$ | "one thought" |

A single object may be referred to by a plural naming its components, as with dà-pūvdá "cross", pl dà-pūvdá nàma (cf dà-pv̄vdíre "cross-piece.")

A Kusaal plural may just happen to correspond to an English mass noun:

| lāunk | lā'ad | "piece of goods" |  |
| :--- | :--- | :--- | :--- |
| lā'af | lịgıdī | là'- or lị̀g- | "cowrie" pl "money" |

Mass nouns can be used in count senses: dāam nám "beers"; some count nouns can have mass senses:

fūug dôog<br>dàad bún-nám

"tent" (cloth hut): fūug "item of clothing, shirt" "wooden things": dàad "pieces of wood"

### 12.2 Gender

Gender is marked only in pronouns. For convenience the genders are labelled animate and inanimate, but the basic principle is that entities regarded as persons, to whom first or second person pronouns might in principle apply, are "animate." Specifically human/non-human distinctions are lexical rather than syntactic. Thus, although without a context, my informants rejected e.g. *Ò à nē náaf for "It is a cow", sources often do use animate pronouns for higher animals:

Ka wief ya'a sigi li ni, li zulvך na paae o salibir.
Kà wịə yá sịgí lì nī, lì zùlòn ná pāe ò sàlıbìr.
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." (Rv 14:20)

Even body parts have animate gender when represented as speaking in

Nobir ya'a yelin ye, "Man ka' nu'ug la zug, m ka' nipgbip la nii," lin kv nyani ke ka o ka' ningbiy la nii.
Nóbìr yá' yèlī=n yē, Mán kā' nû'ug lā zúg, m̀ kā' nịn-gbị̄ lā Leg:sG if say=DP that 3AN:NZ NEG.be hand:SG ART upon, 1SG NEG.BE body:SG ART níl=ø, līn kú ňyāŋī Ø ké kà ò kā' nịn-gbị̄plā níl=ø. LOC=NEG, DEM.IN NEG.IRR prevail CAT cause and 3AN NEG.BE body: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 are personal in the traditional world view:

Tiig wela bigisid on a si'em.
Tìıg wélà bịgısìd ón àn̆ sị'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:

Ò/Lì à n $\bar{\varepsilon}$ bị́lịa a. $\quad$ "He/she/it is a baby."
3AN/3IN COP FOC child-baby:SG.

There is no gender distinction in the plural:

Bà à n̄ kūgá. "They are stones."
3PL COP FOC stone:PL.

In older sources (as in older Dagbani) inanimate pronouns as heads could be used indifferently for sg or pl, but with dependent pronouns even the 1976 NT always uses bàmmáal bàn ${ }^{\varepsilon} s i ̣ ̀ b b \bar{a}$ for inanimate plural.

In unselfconscious utterances animate pronouns often appear for inanimate; speakers correct the gender to inanimate if their attention is drawn to it.

Nịf-kápā, $\bar{n}$ sâñ'am n $\bar{\varepsilon}$.
Eye-demst.sg, 3AN.CN spoil foc.
"This eye, it's spoilt." KT (Overheard)
$\grave{M} p \bar{v} \quad \check{n} y \bar{\varepsilon} o ́=o=\varnothing . \quad$ "I can't find it [a stethoscope]" (Overheard)
1SG NEG.IND see=3AN=NEG.
sālımā lâ'ad né ò būtīıs "gold stuff and (gold) cups" WK
gold item:PL with 3AN cup:PL

The dummy subject pronoun "it" is always $l i$, never ò.
The inanimate sg pronoun subject $l i ̀$ is not changed to animate $\grave{o}$ to agree with an animate complement of the copula àeň ${ }^{\text {ya }}$ :

Li ane Zugsob la.
"It is the Lord." (Jn 21:7)
Lì à nē Zūg-sób lā.
3IN COP FOC Lord ART.

### 12.3 Pronouns

### 12.3.1 Personal

| Sg | 1st | Right-bound $\dot{m}$ | Enclitic $m^{\mathrm{a}}$ | Free mān SF mánè LF | $\begin{aligned} & \text { Subject+ǹ } \\ & \text { mán } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2nd | fò | $f^{5}$ | fūn SF fúnè LF | fón |
|  | 3 rd an | ò | o | $\bar{\square} n^{\varepsilon}$ | ón |
|  | 3 rd inan | lì or dì | $l$ | $\underline{\text { lin }}{ }^{\varepsilon}$ or $\mathrm{di}^{\text {n }}{ }^{\varepsilon}$ | lín or dín |
| Pl | 1st | ti | $t ı$ | tīnám ${ }^{\text {a }}$ | tīnámì |
|  | 2nd | yà | ya | yānám ${ }^{\text {a }}$ | yānámì |
|  | 3rd | bà | ba | $b a ̄ n^{\varepsilon}$ | bán |

"an"= animate, "inan" = inanimate. Mām occurs for 1 sg in any role. The 2 pl subject has an enclitic form ya used after imperatives in direct commands with the allomorph ní before liaison.

Toende Kusaal has $\tilde{v}$ for $\grave{o}$ (* $\overparen{\eta m} v)$ and ton nam for tīnám yānám.
There are no special honorific usages.
The bound forms are non-contrastive; they are all liaison words 4.2. The liaison enclitic pronouns are used for VP objects, right-bound for all other roles. Personal pronouns are never dependent: in e.g. $\grave{m}$ bịig "my child", $\grave{m}$ is the head of its own NP, and it is this $N P$ which is the predependent of bịìg "child", exactly like nà'ab lā "the chief" in nà'ab lā bị̂ig "the chief's child."

Free forms are contrastive wherever bound forms could be used. Free forms must be used in isolation, apposition, coordination, and before relative pronouns:

| Mánغ̀? | "Me?" | mān Paul |
| :--- | :--- | :--- |
| tīnám nē fōn | "us and you" |  |

Fon kane buoli fo mey ... "You who call yourself ... (Rom 2:17)
Fūn-kánì bùelì fù mē...
2SG-REL.SG call 2SG self ...

Focussed pronouns must be contrastive, and contrastive pronouns are normally focussed if syntactically permissible:

Mane an konbkem sup la.
Mānīø án̆ kón̆b-kìm-sìn lā.
1SG.CN CAT COP animal-tender-good:SG ART.
"I am the good shepherd." (Jn 10:11)

The " $+\grave{n}$ " forms are used as subjects in $\grave{n}$-clauses 17.3.
2 sg is used in proverbs for a generic "one":

Bung ya'a bood ye o lubuf, fu po nyeti o tubaa.
Bòn yá' bòod yé ò lūbv́=f, fù pū দ̆y $\bar{\varepsilon} t i ́ ~ o ̀ ~ t u ̀ b a ̄ a=\varnothing . ~$
Donkey:SG if want that 3AN throw.off=2SG, 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.")

3 pl is used as a non-specific "they" for turning passive constructions actively:

Bà yòodī=f súŋàa $=\varnothing$ ?
3PL pay:IPFV=2SG 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 17.2.1, e.g.

Diib wusa nari ba di.
Dīıb wūsā nárì Øø bà dí.
Food all must cat 3PL eat.

There are formal means of distinguishing different third persons by the use of pronoun ellipsis $17 \underline{16.7 .1}$ and logophoric use of the free pronouns 17.4.2.

### 12.3.2 Demonstrative

| Long | Animate sg j̀クā ${ }^{\prime}$ | Inanimate sg |  | Plural bàmmā ${ }^{\prime}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | lìnä ${ }^{\prime}$ | far |  |
| Short | òn ${ }^{\text {® }}$ | $l i n^{\varepsilon}$ | far | bàn ${ }^{\text { }}$ |
| Long |  | nē'pá | near |  |
| Short |  | $n \bar{E}^{1 /}$ | near | né'-nám ${ }^{\text {a }}$ NT |
| Long | kànā' | kàjā' |  |  |
| Short | kàn ${ }^{\text {² }}$ | kàn ${ }^{\text {² }}$ |  |  |

Note the tone difference between $\dot{\operatorname{jn}} n^{\varepsilon} l i n^{\varepsilon} b a ̀ n^{\varepsilon}$ and free 3rd person pronouns.
"Short" demonstratives are used as the basis of relative pronouns 17.3.2.2, for discourse deixis, and for interrogative "which?":

Fone an dau kan la!
Fv̄nīøø án̆ dáư-kàn lā!
2SG.CN CAT COP man-DEM.SG ART!

Lìnc̀?
Nịf-kánغ̀?
"You are that man!" (2 Sm 12:7)
[i.e. in the story just related.]

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 $l \bar{a} /$ and "this" by a following ňwà (cf French là ci.)

sān-kápā<br>dàu-kàmā sâam<br>dàu-kàŋā lā sâam<br>dàư-kàpā n̆wá sâam

"at this/that time"
"this/that man's father"
"that man's father"
"this man's father"
 however, bàmmā $\bar{a}^{\prime}$ bàn ${ }^{\varepsilon}$ can be used either uncompounded or after a cb.

Kàn ${ }^{\varepsilon} k a ̀ \eta \bar{a}^{\prime}$ 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.) Kàn ${ }^{\varepsilon}$ may also follow a free personal pronoun, and àràkón̆' "one", but no other quantifiers. NT avoids kànā $\bar{a}^{\prime} k a ̀ n^{\varepsilon}$ for animate gender.

```
dv́'atà lā lór-kà\etaā "this car of the doctor's"
bv̀-kà\etaā lā
n\overline{-pị̂ol-kà\etaa}
fūn-kánì bùol ...
```

"this car of the doctor's"
"that goat"
"this white hen"
"you who call ..."

### 12.3.3 Indefinite

| Animate sg | Inanimate sg | Plural |
| :---: | :---: | :---: |
| $s{ }^{\text {ō' }}$ | $s i ̣ ' \partial l^{\text {a }}$ | sịəbā (unglottalised vowel) |
| Sİ'a | sị'a |  |

Sō' Sị'əla sị̀əbā may be heads or dependents, and may follow cbs. Ṣ̣̀ $a$ is only dependent; for NT WK (not KT) it is much commoner than sị' $\partial l^{\text {a }}$ as dependent. WK feels sị' $a$ for people is pejorative. For indefinites in relative clauses see 17.3.2.1.

The sense is indefinite but specific: "some, someone, something, a certain", and often "another, a different":

```
yà bị-sō' "a certain child of yours"
2PL child-INDF.AN
```

Mecri one an Magdalen ne Mecri so'
Meeri ónì àn̆ Magdalen n̄̄ Meeri-sō'
Mary rel.an cop Magdalen with Mary-Indf.an
"Mary who was Magdalen and another Mary" (Mt 28:1)

M̀ ná $t \bar{\imath}=f \quad t i ́-S i ̣ ' a . \quad$ "I'll give you a different medicine." WK
1SG IRR give $=2$ SG medicine-INDF.IN.

Indefinite pronouns can be used in presentational constructions, but often still imply "another, a different": Dāu dāa bé ... "Once there was a man ...", but

Dàù-sō' dāa bé ... "There was a certain/another man ..."
Man-INDF.AN TNS EXIST ...

Sō'/sị̄'əl mé-kàmà means "anyone, anything, everyone, everything":

O nipid si'el mekama sv'vŋa.
Ò nị̀jìd sị'əl mé-kàmà súpā.
3AN do:IPFV INDF.IN also-whatever good:ADV.
"He does everything well." (Mk 7:37)

With negatives the indefinites mean "nobody, nothing":

Ka so' kudin ku len nyee li ya'asa.
Kà sō' kv̄dīm kv́ l̄̄m n̆ý́ $\varepsilon=l \bar{l} y a ́ ' a s a ̄=\varnothing$.
And indF.an ever neg.IRR again see=3in again=NEG.
"Nobody will ever see it again." (Rv 18:21, 1996)

## Sō' $k a ̄ ' e=\varnothing$.

INDF.AN NEG.BE=NEG.
$\grave{M} p \bar{u} \quad y \varepsilon ́ l$ Sị̀'əlā=ø. $\quad$ "I didn't say anything."
1SG NEG.IND say INDF.IN=NEG.

### 12.3.4 Interrogative

| Animate | Inanimate |  |
| :--- | :--- | :--- |
| ànô'on | "who?" | $b \bar{y}$ | "what?"

Plurals with nàm ${ }^{\text {a }}$ may be used if a specifically plural answer is being sought. B̄̄ kịmm "what exactly?" with the ideophone kịmm is common in KB. The initial à- of ànô'on ${ }^{\varepsilon}$ behaves like the manner-adverb prefix in liaison 4.2:
... keך tisi ano'onc? "to go to whom?" (1 Sm 6:20)
... $k \bar{\varepsilon} \eta$ Ø $\varnothing$ tísì ànó'כn $\varepsilon=\varnothing$ ?
... go cat give who=cQ?
$B \bar{\jmath}$ can be used after a cb as a dependent interrogative "what?":

```
nā'-bó?
bù-bò?
dā-bó?
```

"what cow?" WK DK (náaf bó can only mean "What, of a cow's?") "what goat?"
"what beer?"

The compound bj̀-būudī "what kind of?" can also be used as a dependent:
nā'-bó-bùudì?
dā-bó-bùudi?
"what kind of cow?"
"what kind of beer?"

Fò á nē bó-bùudì=ø?
"What ethnic group do you belong to?" 2SG COP FOC what-sort=CQ?

Ḃ̀- can be used as a predependent, querying a description: "what sort of ...?"

Fù túm bó-tòvmà=ø? "What kind of work do you do?"
2SG work:IPFV what-work=CQ?

Bo yir ka ya na me' $n$ tis mane?
Bj̀-yị́r kà yà ná mē $n$ tís mánह̀=ø?
What-house:sG and 2PL IRR build Cat give 1SG.CN=CQ?
"What kind of house will you build for me?" (Acts 7:49, 1996)

### 12.3.5 Reciprocal

Tāabā "one another" appears as tāab clause-medially for some speakers. It can be used after a cb, meaning "fellow-": ò tùm-tòm-tāabā "his fellow-workers."

Sùクımī=ø tāabā. "Help one another."
Help:IMP=2PL.SUB each.other.

Tì yûug n̄̄ tāabā. "It's been a long time." KT
1pl delay with each.other.

Bà dòl n̄ tāabā. "They went together." (dōlla/ "accompany")
3PL follow with each.other.

### 12.3.6 Reflexive

$M \bar{\varepsilon} \eta^{\mathrm{a} /}$ "self" always has a predependent. It is used indifferently for $\mathrm{sg} / \mathrm{pl}$ :
nà'ab lā mév
chief:Sg ART self

Bà n̆yć $\smile$ bà $m \bar{\varepsilon} \eta$. 3PL see 3PL self.

Fv̀ mē $\eta$ kv̄v bị́lị̀àa=ø? "Yourself or the baby?"
2SG self or child-baby:SG=CQ? ("Which of you needs the doctor?"; overheard)
"Self" forms must be used for complements referring to the clause subject:
$\grave{M} \check{n} w \varepsilon ́ \varepsilon \_m$ m $\bar{\eta} \eta$. $\quad$ I hit myself."
1SG hit 1 SG self. $\quad \operatorname{not} * \grave{M} \check{n} w \hat{\varepsilon} ' \varepsilon m$ or * ${ }^{M} \check{M} n \hat{c}^{\prime}$ mān.

Kusaal uses a pronoun possessor with body parts acted on by their owner; where ordinary pronouns would have been permissible, using $m \bar{\varepsilon} \eta$ implies contrast:

Ba pu piesidi ba nu'us wvo lin nar si'em la ka ditta.
Bà pū pịəəsídí bà nû'us wv̄v lín nār sị̀əә 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)
$\grave{M}$ pị́ə $\grave{m} m \bar{\varepsilon} \eta$ nû'us. $\quad$ "I washed my own hands." 1SG wash 1SG self hand:PL.

### 12.3.7 Dummy head

Sōb ${ }^{\mathrm{a}}$ is a dummy head for a preceding NP or AdvP dependent; it specifies number and gender but is otherwise semantically empty.

| Animate | sg | $\operatorname{sōb}^{\mathrm{a}}$ |
| :--- | :--- | :--- |$\quad \mathrm{pl} \mathrm{dìm}{ }^{\mathrm{a}}$

Ò sōb ${ }^{\text {a }} / \bar{n} n$ s ${ }^{\text {b }}{ }^{\text {a }}$ mean "the last person mentioned."
NP predependent constructions have their usual meanings 12.5.2:
$m a ̄ n$ dínne $^{\mathrm{n}}$
À-Win dím ${ }^{\text {a }}$
pò-pịəlìm sób ${ }^{\text {a }}$
pl pù-pị̀lìm dím ${ }^{\mathrm{a}}$
dūnıyā ní dìn ${ }^{\text {ne }}$
Bj̀k dím ${ }^{\text {a }}$
yịigá sōba
"my one, mine"
"Awini's family"
"holy person" (pì-pịəlìm ${ }^{\mathrm{m}}$ "holiness")
"earthly one" (1 Cor 15:44)
"Bawku people"
"first (person)" beside yịig-sóba id

Fūn píân̆'ad nē tīnám dín. "You're speaking ours [language]." 2SG.CN speak:IPFV FOC 1PL.CN NULL.IN.

Cb predependents occur in set expressions:

| yị-sób ${ }^{\text {a }}$ | pl yị-sób-nàm ${ }^{\text {a }}$ | "householder" | (yị $i^{\varepsilon /}$ "house") |
| :---: | :---: | :---: | :---: |
| yị-dím ${ }^{\text {a }}$ |  | "members of the | ousehold" |
| $n \grave{\text { nifsób }}{ }^{\text {a }}$ |  | "miser" | (nịfo/ "eye") |
| tàn̆p-sōb ${ }^{\text {a }}$ |  | "warrior" | (tān̆p ${ }^{\text {"war") }}$ |
| $z u \bar{g}$-sób ${ }^{\text {a }}$ | $\mathrm{pl} z \bar{u} g$-sób-nàm ${ }^{\text {a }}$ | "boss" NT "Lord" | (zūg ${ }^{\text {/ }}$ "head") |

### 12.4 Quantifiers

Formally, quantifiers resemble noun sg or pl forms, frequently with apocopeblocking; most number words are also preceded by number prefixes.

Quantifiers are count or mass 12.1, but the distinction is only of significance if the quantified noun is mass type, in which case a count quantifier is ungrammatical:

```
            nịdīb b\varepsilońdvgvo or nịdīb bábıgā
                    kù'өm b\varepsilońdvgv̄
not *kù'өm bábıgā
"a lot of people, many people"
"a lot of water"
*"many water"
Mass quantifiers are
\begin{tabular}{llll} 
bદ̀dvgōr & "a lot" & pāmm LF pāmné & "a lot" \\
fịiň & "a little (liquid)" & bī'əlá & "a little" \\
\(w \bar{v} v\) & "all" & wūsā & "all"
\end{tabular}
```

Beside number words, count quantifiers are

| bàbıgāl | "many" | kàlıgā' | "few" |
| :--- | :--- | :--- | :--- |
| fāan̆ | "every" | zān̄'a | "every" |

Kàma "every" occurs by itself as a quantifier and also before others: sāŋá kám = sāŋá kám zān̄'a "all the time."

Quantifiers appear typically as determiners in NPs 12.6.2, but like pronouns they may also be heads of NPs; they can pluralise with nàm ${ }^{\text {a }}$ :

Pāmm ké nā.
Bèdugū ké nā.
Bèdvgū lā ké nā.
Ày!̣í' ké nā.
Àyị́' là ké nā.
màlìāk-nám túsà pịìgā nám
"Many came."
"Many came."
"The crowd came"
"Two came."
"The two came."
"tens of thousands of angels"

A quantifier head after a dependent NP is a partitive construction 12.5.2.
Quantifier heads may be followed by dependent pronouns; as quantifiers have no combining forms, there is no compounding:

Ka ti ye ti nye diib yaani moogin nwa diis nidib bedego bama nwa?
Kà tì yć tì n̆ȳ̄ d̄̄ıb yáa ní mōog $\bar{v}=n ~ \check{n} w a ́$
And 1PL that 1PL find food where loc grass:SG=loC this
$\varnothing$ dìıs nịd $d \bar{\imath} b \quad b$ ćdvgū bámmā n̆wá= $\varnothing$ ?
Cat feed person:PL many DEMST.PL this=CQ?
"Where are we going to find food in this wilderness to feed this crowd of people?" (Mt 15:33, 1996: KB nimbama nwa wusa "all these people")

Quantifiers have corresponding proforms: demonstrative àlá "so much/so many"; indefinite sị̀'əm ${ }^{\mathrm{m}}$ "some amount"; interrogative àlá "how much/how many?" In these words $\grave{a}$ - is the number prefix 4.2.

### 12.4.1 Numbers

The numbers in their core role as quantifiers take the forms

| 1 | yinnní | 10 | pịigà | 100 | kòbıgā |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | ày!í' | 20 | pịsị́ [pisi] | 200 | kòbısị [kobisi] |
| 3 | àtán̆' | 30 |  | 300 | kj̀bìs tán̆' |
| 4 | ànāasí | 40 | pịs nāasí | 400 | kòbìs nāasí |
| 5 | ànū | 50 | $p i ̣ s ~ n u ̄$ | 500 | kòbìs nū |
| 6 | àyúөbò | 60 | $p i ̣ s ~ y u ́ e b o ̀ ~$ | 600 | kòbìs yúebì |
| 7 | àyópòe | 70 | pịs yópòe | 700 | kòbìs yópòe |
| 8 | ànịi | 80 | pịs nịi | 800 | kj̀bìs nịi |
| 9 | àwāe | 90 | pịs wāe | 900 | kòbìs wāe |

The quantified noun is normally plural, except with yīnní, but may be singular with units of measure: yōlvgá àtán̆' " $\$ 600$ [cedis]."

The forms for 20 and 200 are not apocope-blocked but combinations with the stem of àyị'. Kòbıgā irregularly has identical LF and SF.
"Thousand" is a regular re|aa class noun, tūsīr $r^{\varepsilon /}: t u \overline{s a ́ ~ a ̀ t a ́ n ̆ ' ~ " 3000 . " ~ " H a l f " ~ i s ~}$ $p \bar{v}-s v^{2} k^{\mathrm{a}} \mathrm{pl} p \bar{v}$-súgùs ${ }^{\varepsilon}$. Other numbers are formed with $n \bar{\varepsilon}$ "with, and": kòbìs táň' n $\bar{\varepsilon} p \bar{i} s$ yú $\theta b \grave{v} n \bar{\varepsilon} n \bar{u}$ "three hundred and sixty-five." 11 to 19 have the special contracted forms pịi n̄̄ yīnní, pịi n̄̄ yị́', pịi nē tán̆' ... pịi n $\bar{\varepsilon}$ wāẹ (or pịi nā yīnní, pịi nā yị' ...)

The prefix $\grave{a}$ - 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 àyínāà àtáyāl mean "two, three exactly." If I have four children
$\grave{M}$ mór bịiisá àtán̆'. "I have three children."
1SG have child:PL NUM:three.
but M̀ mór bịisá àtáyā. "I have exactly three children." is false.

These forms can also be used after $n \bar{\varepsilon}$ "and", as in $p i ̣ i ~ n \bar{\varepsilon} y i ̣ i n a ̄ ~ " t w e l v e ~ e x a c t l y . " ~$ They are exceptional in not permitting focus with the particle $n \bar{\varepsilon} \bar{\varepsilon}^{\prime}$ 19.1.2.

Yīnní can also be construed with a preceding cb: kūg-yínnì "one stone" vs kūgūr yīnní "one stone." Dà-pịigā is "ten days", but pịigā is not used after other cbs.

Number-prefix à- represents * $\eta a$-, the old agreement flexion for $r \varepsilon \mid a a \mathrm{pl}$. Animate-gender bà- has been supplanted by $\grave{a}$ - after nouns, but remains regular after personal pronouns: tì bàtán̆' "we three", yà bàyópj̀e "you seven", bà bày!̣! "they two."

1 to 9 have different forms used in counting, lacking apocope-blocking and using the number prefix $\grave{n}$ - instead of $\grave{a}-$. This represents the old agreement for the $m m$ class, in its "abstract" sense. Nawdm, which preserves class agreement for numbers (nídbá bàtáh "three people") uses the agreement prefix for its cognate mclass for counting: mtáf "three" mnàà "four" mnù "five" etc (Babakima 2013, p51.)

| 1 | yźoŋ or àràkón' ${ }^{\text {' }}$ | 6 | ǹyûeb |
| :---: | :---: | :---: | :---: |
| 2 | ǹy! ${ }^{\text {a }}$ | 7 | ǹpòe [tone sic] |
| 3 | ǹtán̆' | 8 | ǹnịi |
| 4 | ǹnāas | 9 | ǹwāe |
| 5 | ǹnū |  | uing pīìgā, pīi |

Àràkón̆' can also be used as a quantifier: búvg àràkón̆' "one goat." The forms k̄̄n̆' and $k \bar{\jmath} n ̄ ' o k \bar{\jmath}$ appear as postpositions: $\grave{m} k \bar{\jmath} n ̆ ' ~ " b y ~ m y s e l f . " ~$ In performing arithmetic the quantifier forms are used:

Àyịí námá $\_a ̀ y!̣ i ́ ~ a ́ ~ n \bar{\varepsilon}$ nāasí.
NUM:two PL NUM:two Cop FOC four.
"Two twos are four."

The only ordinal adjective, as in sōb-dêc $\quad$ "first census" (Lk 2:2, 1976) is

```
d\overline{\varepsilon}\varepsilon\eta\mp@subsup{\eta}{}{\textrm{a}}d\overline{\varepsilon}\varepsilon\check{n̆}\mp@subsup{s}{}{\varepsilon}d\overline{\varepsilon}\varepsilon\eta- "first"
    or d\overline{\varepsilon}\varepsilonmīs}\mp@subsup{}{}{\varepsilon}\mathrm{ or dहैहnā
```

"First" can also be expressed by yịigá "firstly" as a predependent:
line da an yiiga dabisir
līnī ø dá àn̆ yịìigá dàbısìr.
3in.CN CAT TNS COP firstly day:Sg.
"That was the first day." (Gn 1:5)

Other ordinal expressions use relative clauses with pàas ${ }^{\varepsilon}$ or $p \varepsilon^{\prime} \varepsilon s^{\varepsilon}$ "add up to", or NPs consisting of numbers as predependents before dāana "owner of ...":

```
dàu_-kànì p\varepsiloǹ'\varepsilonsà` ày!̣' lā
man-Rel.SG add.up.to NUM:two ART
"the second man" ("man who has added up to two")
lìni pàasà` àtán̆' lā "the third one"
REL.IN add.up.to NUM:three ART
ày!̣i' dāan lā "the second one"
bv̄vgá àtán̆' dāan lā "the third goat"
```

Yịigá dāan may be used for "first." "Third, fourth, fifth ..." in counting appear without apocope-blocking in KSS p35: atan'-daan ... ka anaas-daan ... ka nu-daan ... ka yuob-daan ... ka poi-daan ... ka nii- daan ... ka wai-daan ... ka piig-daan.

Note the adjective

$$
\begin{array}{llll}
y \bar{\imath} m m i ́ r & \text { yīmmá } & y \bar{i} m- & \text { "solitary, unique" }
\end{array}
$$

There are two words meaning "one of a pair": ňyàuk $k^{\top} \mathrm{pl} \check{n} y a ̀ ' a d^{\varepsilon}$ is only used for eyes, while ȳ̄ū $\eta^{J /}$ pl yīná is used for other normally paired body parts: nōb-yíun "one leg", nū'-yíụŋ "one hand", nịf-ňyáunk "one eye", tùb-yīunך "one ear."

Multiplicatives answer àbùlá? "how many-fold?" They are yīmmú "straight away, at once", àbùy!̣' "twice", àbìtán̆' "three times", àbùnāasí "four times", and so on, with apocope-blocking like quantifiers, up to bùpịigā "ten times." The prefix bù- is an old bo or mm agreement; $\grave{a}$ - is the manner-adverb formant, preceded by LF-final $-l$, so its attachment only to 2-9 is presumably analogical.

Answers to nōorá àlá "how many times?" have forms of the pattern nōor yīnní "once", nōorá àtán̆' "three times", or alternatively nōorím bùtán̆' "three times" etc. This nōor is not "mouth" (Mooré nóorè) but corresponds to Mooré náooré "pied, fois"; Toende uses nó'วt "leg": noba ayi/no'ot ayi "deux fois."

Distributives "two by two" etc are (as SFs):

| 1 | yīn yīn | 10 | pịi pị̂ig | 100 | kj̀bìg kóbìg |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | ày!í yịí | 20 | pịsị pịsí | 200 | kòbısị kóbısị or kòbìs yị́' yị' |
| 3 | àtán̆' tán̆' | 30 | pịs tán̆' tán̆' | 300 | kòbìs tán̆' tán̆' |
| 4 | ànāas nāas | 40 | pịs nāas nāas |  | etc |
| 5 | ànū nū | 50 | $p$ pịs nū nū | 1000 | tūsīr túsìr |
| 6 | àyûөb yûөb | 60 | $p i ̣ s ~ y u ̂ \theta b ~ y u ̂ e b ~$ |  |  |
| 7 | àyópòe póe | 70 | pịs yópòe póe |  |  |
| 8 | ànịi nịi | 80 | pịs nịi nịi |  |  |
| 9 | àwāe wāe | 90 | pịs wàe wàe |  |  |

Intermediate forms are of the pattern pịs nū n $\bar{\varepsilon} n a \overline{a s}$ nāas "by fifty-fours." There may be a predependent NP: dābá àyópòe póe "weekly" ("by sevens of days.")

### 12.5 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. The personifier particle precedes all other predependents; then specific dependents precede generic, with cbs last:

Wínà'am [pú'vsv̀g [fûug dôog]] "tabernacle" (God's [worship [cloth hut]])

For the rules regarding M dropping after predependents see 4.5.

### 12.5.1 Personifier

Kusaasi personal names 21.2 are always preceded by the personifier particle: $\grave{A}$ - by default, but $\grave{N}$ - before adjective stems; $\dot{N}$ - is syllabic but assimilates to the point of articulation of a following consonant. Names do not take adjectives or the article, but occur with other determiners. $\grave{A}$ - is deleted after a predependent, but $\grave{N}$ - remains.
 "more than one person called Awini" or "Awini and his people."

| $\grave{A}-W_{1} n$ | "Awini" | tı̀ $W_{1} n$ | "our Awini" |
| :---: | :---: | :---: | :---: |
| À-Win-káyā | "this Awini" | À-Win nám | "Awinis" |
| N-Dāvg | "Ndago" | tì N -Dāvg | "our Ndago" |

The Kusaal Bible versions use foreign names without $\grave{A}$-, but it is usual in speech: À-Mūusā "Moses", À-Yịisā "Jesus", À-Sịimôon "Simon." In stories with talking animals, animal names take $\grave{A}$-: $\grave{A}$-Bāa "Mr Dog"; NT has $\grave{A}$-Sàn̆'v ${ }^{\text {"Abaddon." }}$

Some animal and bird names incorporate the personifier as part of the common noun, with no implication of personification, e.g. à-dàalv́ $\eta^{3}$ "stork", à-gâvn̆g ${ }^{\circ}$ "pied crow", à-k̄̄rā-dị̂əm ${ }^{\text {ma }}$ "praying mantis", à-mús ${ }^{\varepsilon}$ "cat." Thus
$\grave{M}$ n̆yé à-dàalv́n. $\quad$ I've seen a stork."
1SG see PERS-stork:SG.
but m̀/mān dáalv́n "my stork"
1SG/1SG.CN stork:SG
dāu lā dáalv́y "the man's stork"
man:SG ART 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; $\grave{a}$ - thus occupies a predependent slot.

When verb phrases are nominalised by $\grave{a}-$, it behaves as a subject pronoun "someone who ..." This is particularly common in proverbs.

Atom so'
À-tùm sō'
PERS-send INDF.AN
"Siloam" (Jn 9:7)
("Someone sent someone")

Apv-kpen'-baŋv dim
À-pū kpéñ' bàunŋù dím
PERS-NEG.IND enter circumcision nULL.PL
"the Uncircumcised" (Eph 2:11)

À-dāa yćl $k \bar{a}^{\prime} \quad$ tîımm=ø.
PERS-TNS say NEG.HAVE medicine=NEG.
"Did-say has no remedy." (No use crying over spilt milk.)

PERS-see with eye:SG be.better.than PERS-hear ear:PL
"Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)
$\grave{A}$-Kịdıgī $\varnothing$ Bū'өs "Crossed over and asked"
PERS-cross cat ask (name of the constellation Orion.)

Apozotyel
"Doesn't-fear-trouble", character in KSS p35.
À-P $\bar{v}-z o ́ t-y z ̄ l$
PERS-NEG.IND-run:IPFV-thing:SG

As a predependent of a clause subject $\grave{a}-$ means "someone whose ...":

Bà kèn né À-nà kúv_m̀ nūa yị́r, kà bà pū kén 3PL go:IPFV FOC PERS-IRR kill 1SG chicken:SG house:SG and 3PL NEG.IND go:IPFV À-n̄̄os $\quad b \varepsilon ́ \quad y i!r \bar{\varepsilon}=\varnothing$. 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.")

Nominalisations with à- can pluralise with nàmá

À-zī' $\quad \varnothing$ kpị nàm kpịidd né kà tén̆bìd.
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.")

### 12.5.2 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. For $m \bar{\varepsilon} \eta^{\mathrm{a} /}$ "self" and $s \bar{\partial} b^{\mathrm{a}}$ after predependents see 12.3.6 12.3.7.

If the head is a demonstrative, indefinite or interrogative pronoun, a quantifier, or a relative clause, the construction with a predependent is partitive:

| nịn-síabà | "certain people" | sịəbā | dependent |
| :---: | :---: | :---: | :---: |
| yà sō' | "some one among you" | $s{ }^{\text {º' }}$ | head |
| nịdīb lā sịəbà | "certain of the people" | sịəbā | head |
| nịdīb sị́əbà | "certain ones among people" | sịəbā | head |
| nịdıbá àyị' | "two people" | ày!̣' | dependent |
| nịdıbá àyị́ lā | "the two people" | àyí' | dependent |
| nịdīb lá àyịí | "two of the people" | àyị' | head |

Pa'alimi ti nidiba ayi' nwa fon gat so'
Pà'alìmī=tí nịdıbá àyỵ̂' ňwá fún gāך sō'
Teach:IMP=1PL 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. nịdīb lā gígìs must mean "the dumb ones belonging to the people", not "among the people" (WK.)

Abstract indefinite NPs as predependents ascribe a quality to the head:

## nā'am kúk

nā'am sú'vlìm
pù'vsùg dôog
tūlıgír bún
dūgūb dút
lịgıdī túvmà

```
"throne" ("chieftaincy chair")
"kingdom" ("chieftaincy possession")
"temple" ("worship house")
"heater" ("heating thing" = būn-túlıgìr`)
"cooking pots"
"expensive work" (lị̆g\imathdī "money")
```

There are sometimes alternate forms with cbs:

|  | tàn̆p-sōb | "warrior" | (tān̆p ${ }^{\text {P "war") }}$ |
| :---: | :---: | :---: | :---: |
|  | pò-pị̀l-sōb | "holy person" | (Rom 3:10, 1996) |
| but | pù-pịəlìm sób | "holy person" | (Mt 10:41, 1996) |
|  | pù-pịəl-tūvmā | "holy actions" | (Rom 6:13, 1996) |
| but | pù-pị̀lìm túvmà | "holy actions" | (Mt 5:10, 1996) |

Language names may appear as abstract nouns describing an ethnic group:

Kūsâal yị́r nē kūөb
Nàsāal búgúm
"Kusaasi houses and agriculture"
"electricity" ("European fire")

Concrete indefinite mass NPs as predependents express the material of which the head consists; count nouns may appear if used in mass senses. Unlike dependent cbs, such predependents can be pronoun antecedents (cf CGEL pp400ff p1458.)
sālımā bútìn
sālımā nē ānzúrıfà lâ'ad
fūug dôog
dàad bún-nám
sālımā lâ'ad né ò būtīıs
"golden cup"
"gold and silver goods"
"tent" (cloth hut)
"wooden things" (dàvg "piece of wood")
"gold goods and [gold] cups" WK

The cb first element of ku'à-ňwịig "current" ("aquatic rope") suggests that the construction with unbound concrete mass predependents is limited to the specific sense "made of ...", so that *kù'өm n̆wịig would be "rope made of water."

With count and/or definite heads, meanings include kin relations, body parts, and ownership:
m̀ bịìg
dāu lā bị̂ig
dāu lā bị̂ər bịig nâaf zùvr
Kūsâas wádà
"my child"
"the man's child"
"the man's elder brother's child's cow's tail"
"customs of the Kusaasi"

Nimbe'og yir na san'am.
Nịn-bê'og yị́r nà sān̆'am.
Person-bad:Sg house:SG IRR spoil.
"The house of a wicked person will be destroyed." (Prv 14:11)

A contrast with a non-referential predependent cb:
nà'ab lā wị̂əf zûvr
nà'ab lā wíd-zūvr
"the chief's horse's tail" (the chief has a horse) "the chief's horse-tail" (the chief may not own a complete horse at all)

Dāan ${ }^{\mathrm{a}}$ "owner of ..." (nàm ${ }^{\mathrm{a}} \mathrm{pl}$ ) always has a predependent NP, representing a concrete possession or a quality:

būvg dâan<br>kù'өm dâan<br>dāam dâan<br>tìəク dâan<br>pōog lā dâan

```
"goat owner"
"water owner"
"beer owner"
"bearded man"
"the owner of the field" (Mt 21:40)
```

Zu-wok daan po gangid bugum.

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-pịəlìm dâan
būgusígā dâan
"holy person"
"softly-softly sort of person" WK

See 12.4.1 on the use of dāan ${ }^{\mathrm{a}}$ with numbers to make ordinal expressions. A cb predependent appears before dāan ${ }^{\mathrm{a}}$ in a few set expressions:

```
yị-dâan
"householder" = yị-sób
tèn-dāan
(literally "land-owner"): traditional earth-priest
```

Before gerunds and other abstract nouns describing events or processes, NP predependents refer to subjects. Generic-object cbs, adjunct AdvPs and VP-final particles may appear. Such NPs are used as verb arguments and before postpositions.

```
Dāun lā kúlv̀g dāa mālısí=m.
Man:SG ART go.home:GER TNS be.sweet=1SG.
"The man's return home pleased me."
ya antu'a morim koto ni ne taaba la
yà àntư'à-mōrím kótv̀ ní n\overline{\varepsilon tāabā 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 lebvg la na
Nịn-sâal Bị̂ig lā lébv̀g lā nā
Human:sg child:Sg ART return:GER ART hither
"the return of the Son of Man" (Mt 24:27)
```


### 12.5.3 Adverb phrases

Predependent AdvPs may not be proadverbs. Most are locative, or phrases with the postposition y $\bar{\varepsilon} l a ́$ "about", or depend on the specialised head dāan ${ }^{\mathrm{a}}$ 12.5.2.

| dūnıyā ní nị̀n-gbịn | "earthly body" |
| :---: | :---: |
| $k o ̄ l ı g i ̄=n ~ n o ́-d a ̂ v g ~$ | "crayfish" ("in-the-river cock") |
| Bòk dím | "Bawku people" |
| dàgòbìg nịf | "left eye" |
| $z u \overline{g v ́}=n$ nịf-gbáung | "upper eyelid" |
| $t \bar{\varepsilon} \eta \overline{\mathrm{i}}=\mathrm{n}$ nịf-gbáun | "lower eyelid" |
| Kūsâas kûeb nē yị̀r yćlà gbàun dàun-kàmā lā yćlà gbàunך | "A book about Kusaasi houses and agriculture" "a book about that man" WK |

Ba da mor mosgin bunkonbid ne ba buudi, yin bvnkonbid ne ba buudi ... Bà dà mòr mōogū=n bún-kón̆bìd né bà būudī, yị́n bún-kón̆bìd 3PL TNS have bush:SG=LOC thing-hair:PL and 3PL kind, house:SG:LOC thing-hair:PL né bà būudī ...
and 3PL kind ...
"They took wild animals with their kind, tame animals with their kind ..." (Gn 7:14)

Yịigá "firstly" appears as a predependent meaning "first" 12.4.1.

### 12.5.4 Combining forms

A combining form as a predependent is always generic and non-referential. Compounds with a predependent cb can be freely created, but resemble the compounds seen in other languages more closely than those with cb heads preceding adjectives and dependent pronouns. Specialised lexical meanings often occur with dependent cbs, rarely with head cbs before adjectives and never before pronouns.

If the head is a deverbal noun, it may be preceded by a combining form representing an argument, with count or mass meaning:
dā-nûur $\quad$ "beer-drinking" $\quad g \bar{\varepsilon} l-k u ̂ \theta s^{\mathrm{a}} \quad$ "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:

| nịn-k ${ }^{\text {che }}{ }^{\text {a }}$ | "murderer" | $b i ̀-k \bar{v} v d^{\text {a/ }}$ | "goat-killer" |
| :---: | :---: | :---: | :---: |
| $n \bar{\jmath}-k \hat{v} v d^{\text {a }}$ | "hen-killer" | $p u ' a ̀-k \bar{v} v d^{\text {a/ }}$ | "woman-killer" |
| nō-záňl ${ }^{\text {l }}$ | "holder of hens" | wìd-kù ${ }^{\text {a }}{ }^{\text {a }}$ | "horse-seller" |
| $b v ̀-k u ̀ \theta s^{\text {a }}$ | "goat-seller" | sàlìm-kùes ${ }^{\text {a }}$ | "gold-seller" |
| dā-nûud ${ }^{\text {a }}$ | "beer-drinker" | dà-kịəd ${ }^{\text {a }}$ | "wood-cutter" |
| zịm-gbân̆'ad ${ }^{\text {a }}$ | "fisherman" ("fish-catcher") |  |  |
| nō-dị̂ə ${ }^{\text {a }}$ | "chief's spokesman" ("command-receiver") |  |  |
| tàn-mē $\varepsilon d^{\text {a }}$ | "builder" (tān ${ }^{\text {n }}$ "earth") |  |  |
| làmpō-dị̂'əs ${ }^{\text {a }}$ | "tax collector" (French l'impôt) |  |  |
| gbàn-mị̀i'id ${ }^{\text {a/ }}$ | "scribe" NT ("book-knower") |  |  |
| $p u{ }_{\text {'à }}$-sān̆'am ${ }^{\text {ma }}$ | "adulterer" ("woman-spoiler") |  |  |
| $z a ̀ '-n \bar{o}-g u ́ r^{\text {a }}$ | "gate-keeper" (zà'-n̄̄oré "gate") |  |  |
| kj̀n̆b-kīm ${ }^{\text {na }}$ | "herdsman" (kj̀n̆b- cb of būn-kón̆bùg ${ }^{\text {"animal") }}$ |  |  |
| bùl-sịgīd ${ }^{\text {a/ }}$ | "well-diver" (bùl | a "well") |  |
| tùөn-gāt ${ }^{\text {a }}$ | "leader" (Ȯ gàad | ûөn "He's gon | ad") |
| n̆yà'an-dòl ${ }^{\text {la }}$ | "disciple" (ňyá'a | "behind", dō | company") |
| $p$ un'à-lā'ad $^{\text {a }}$ | "laugher at wom <br> (Ò là'ad pū'ab | " WK <br> e laughs at w |  |

My informants freely create and cite agent nouns in isolation; NT/KB has $b \bar{a} \eta \overline{1} d^{\mathrm{a}}$ "wise man", sinākī $d^{\mathrm{a}}$ "believer", sū $\bar{\imath} d^{\mathrm{a}}$ "helper", fāan̆ $d^{\mathrm{a} /}$ "robber", "Saviour." However, a preceding cb is usual. It may be just a reduplication of the noun stem:

| màal-māan ${ }^{\text {na }}$ | "sacrificer" | $z i ̄-z i ̣ i d d^{\text {a }}$ | "carrier-on-head" |
| :---: | :---: | :---: | :---: |
|  | "talker" | $z a ̀ b-z a ̀ b^{\text {a }}$ | "warrior" (tone sic) |
| $z \grave{t}$-zōt ${ }^{\text {a }}$ | "racer, athlete" | tòm-tūm ${ }^{\text {na }}$ | "worker" |

Cbs occur before deverbal instrument nouns in object or adverb senses:

| sìà-lōodí $\eta^{\mathrm{a}}$ | "belt" (waist-tying thing) |
| :--- | :--- |
| nị̄n-gótì $\eta^{\mathrm{a}}$ | "mirror" (eye-looking thing) |
| nịn-gótìs ${ }^{\varepsilon}$ | "spectacles" |

If the head is a gerund, a predependent cb may represent a subject or complement. Gerunds in -bo here replace the suffix with -re 8.1.1.

If the underlying verb is transitive, a predependent cb cannot be a subject. It is most often an object, but may represent an AdvP:

| $f u \overline{-y \varepsilon ̂ \varepsilon r ~}{ }^{\varepsilon}$ | "shirt-wearing" (nonce-form created by WK) |
| :---: | :---: |
| pu'à-dīır ${ }^{\text {c }}$ | "marriage" (Ȯ dì pu'ā "He's married a wife") |
| nịn-kôvr ${ }^{\text {c }}$ | "murder" |
| $d \bar{a}-n u ̂ u r^{\varepsilon}$ | "beer-drinking" |
| Sāmán-pịər ${ }^{\varepsilon}$ | traditional New Year ("Courtyard Cleaning") |
| bùgóm-tōon̆r ${ }^{\text {c }}$ | Fire Festival ("Fire Throwing") |
| n̄̄-lôor ${ }^{\text {e }}$ | "fasting" ("mouth-tying") |
| n̄̄-pôor ${ }^{\text {c }}$ | "oath" ( $p \overline{\text { º }}$ "swear") |
| nō-nâar ${ }^{\text {e }}$ | "covenant" (nā "join") |
| nịn-bâal-z̄̄or ${ }^{\text {c }}$ | "pity" (Ò zòtō nịn-báalìg. "He has pity on him") |
| mò-pịl ${ }^{1 \varepsilon}$ | "grass roof" ("covering with grass") |
| kùm-vv̄'vgír ${ }^{\varepsilon}$ | "resurrection" (Ò vò'vg kūmī=n. "He revived from death.") |

Cbs as subjects are seen only with gerunds from intransitive or patientive ambitransitive verbs:

| $n \bar{b} b-k \hat{o p r}{ }^{\text {c }}$ | "breaking a leg" (kò is intransitive) |
| :---: | :---: |
| $n u \overline{\text { '-módìr }}{ }^{\varepsilon}$ | "swelling of the hand" |
| wịn-lı̣ir ${ }^{\text {c }}$ | "sunset" (Wịnnìg lị yā. "The sun has set/fallen.") |
| sūn̆-sân̆'v ${ }^{\text { }}$ | "sorrow" (M sūn̆f sân̆'am n̄̄. "My heart is spoilt") |
| $s u \bar{\square}-p \hat{\varepsilon} \varepsilon n^{\mathrm{n} \varepsilon}$ | "anger" (Ṁ sūn̆f pélìg n $\bar{\varepsilon}$. "My heart is white.") |

A dependent cb before a deadjectival abstract noun may have a sense much like an argument, corresponding to the subject of a related verb:

```
pù-pịəlìm}\mp@subsup{}{}{\textrm{m}}\quad\mathrm{ "holiness" ("inside-whiteness")
sūn̆-kpị̂'o\eta}\mp@subsup{}{}{3}\quad\mathrm{ "boldness" ("heart-strength")
sūn̆-má'asìm}\mp@subsup{}{}{m}\quad\mathrm{ "joy" ("heart-coolness": M̀ sūn̆f má'e yā. "I'm joyful.")
nịn-tv̄llímm}\mp@subsup{}{}{\textrm{m}}\quad\mathrm{ "fever" ("body-heat")
wīn-tôog}\mp@subsup{}{}{3}\mathrm{ "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 ${ }^{\text {/ }}$ | "children's shirt" (i.e. suitable for children) |
| :---: | :---: |
| wìd-zūvr ${ }^{\text {e }}$ | "horsetail" |
| wāb-móog $\bar{v}=n^{\varepsilon /}$ | "in elephant-bush, where there are elephants" WK |
| zà'-nכ̄or ${ }^{\text {c/ }}$ | "gate" ("compound-mouth") |
| mà-bịig ${ }^{\text {a }}$ | "sibling" ("child by [same] mother") |
| $b a \bar{\prime}-$ bịil ${ }^{\text {a }}$ | "half-sibling" ("child by [same] father") |
|  | "native" ("child of a country") |
| nàsàa-sìlù ${ }^{\text {º}}$ | "aeroplane" (European hawk) ILK |

WK has náaf-bị'isím ${ }^{\mathrm{m}}$ "cow's milk", būvg-bị'isím ${ }^{\mathrm{m}}$ "goat's milk", where the dependent has singular form and tone, but the tone sandhi is that of a compound.

### 12.6 Dependents after the head

Dependents follow a head noun in the order adjective(s), quantifier, dependent pronoun or AdvP, article or n̆wà "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 $5 \underline{5.2}$.

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 kàn ${ }^{\varepsilon}$ kàjā ${ }^{\prime}$.

### 12.6.1 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 16.7.2. Generally, compounds with nịn- "person" or būn"thing" are used instead: nịn-sú $\eta^{3}$ "good person", būn-vúr ${ }^{\varepsilon}$ "living thing" etc. Būnn ${ }^{\mathrm{n} \varepsilon /}$ can make a regular re|aa class plural būná or pluralise with nàmá

```
Bōn-námá`àlá kà fù n̆yz̄tá=ø?
Thing-PL NUM:how.many and 2SG see:IPFV=CQ?
"How many things do you see?" SB
```

$B \bar{v} n$ also occurs with abstract and AdvP predependents:

```
tūlıgír búnn\varepsilon "heating thing, heater" = būn-tv́lıgìr }\mp@subsup{}{}{\varepsilon
kù'өmī=n búnn\varepsilon "water creature"
```

Ipfv verbal adjective forms with no preceding cb are synonymous with agent nouns, so the presence of būn- distiguishes different meanings in e.g. būn-kúvdìr ${ }^{\varepsilon}$ "thing to do with killing" versus kūvdír ${ }^{\varepsilon}$ "killer."

Note the idioms

| $b u ̄ n-g i ̣ \eta^{\mathrm{a}}$ | "short chap" (informal, humorous) |
| :--- | :--- |
| būn-kúdı̀ ${ }^{\circ}$ | "old man" (the normal expression) |

The combination noun + adjective is rendered with noun cb before the adjective, which inflects as sg pl or cb on behalf of the head noun:

| nū $a^{\prime}$ | "hen" | nōวs ${ }^{\text {/ }}$ | "hens" |
| :---: | :---: | :---: | :---: |
| nō-pịolì $\mathrm{g}^{\text {a }}$ | "white hen" | n̄-pịəlìs ${ }^{\text {c }}$ | "white hens" |
| nō-sún ${ }^{\circ}$ | "good hen" | n̄̄-súmà | "good hens" |

Another adjective or a dependent pronoun can follow a first adjective cb, but noun-adjective compounds cannot form cbs for deverbal noun generic complements; $\mathrm{sg} / \mathrm{pl}$ forms appear instead:

$$
\begin{array}{ll}
\text { nịn-wók-pị̀əlì ga } & \text { "white tall person" } \\
\text { nō-pị̂əl-kà } \bar{a}^{\prime} & \text { "this white hen" }
\end{array}
$$

but fū-ź́ňndà kù $\theta s^{\mathrm{a}} \quad$ "seller of red (i.e. dyed) cloth" (not *fū-zén̆'-kù $\theta s^{\mathrm{a}}$ )

Compounds with adjectives may develop specialised lexical meanings:

```
nū'-bịl}\mp@subsup{l}{}{\textrm{a}
tì-sābılímm}\mp@subsup{}{}{\textrm{m}}\quad\mathrm{ a traditional remedy ("black medicine")
g\grave{n̆'-sābılíga}\quadHaaf 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'-bịəlífo "small coin" NT (lā'af
dà-S!̣'ərr& "some day, perhaps" (dāar& "day", sị'a "some")
dàbìs-sị'ər\varepsilon
```



```
pư'à-pāala/ "bride" (pư'āa}\mp@subsup{}{}{\textrm{a}}\mathrm{ "wife", pāalíg}\mp@subsup{g}{}{\textrm{a}}\mathrm{ "new")
dà-pāala/ "young man, son" (dāun "man")
```

In WK's speech (not DK's) and many written sources, mm-class nouns require adjectives in -mm, as does būn "thing" in abstract but not concrete senses:

|  | dā-páalìm ${ }^{\text {m }}$ | "new millet beer"; WK does not accept *dā-pâal, *dā-páalìg. |
| :---: | :---: | :---: |
|  | tì-sābılím ${ }^{\text {m }}$ | "black medicine", a specific traditional remedy |
|  | tì-vūnním ${ }^{\text {m }}$ | "oral medication" ("swallowing medicine") |
|  | tì-kv̄vdím ${ }^{\text {m }}$ | "poison" ("killing medicine") |
|  | $k p a ̄ n ̆$-sóvn̆dìm ${ }^{\text {m }}$ | "anointing oil" (kpāan̆m ${ }^{\text {m/ "oil, grease") }}$ |
|  | būn-bósdìm ${ }^{\text {m }}$ | "desirable thing" (1 Cor 14:1: nòjı̀límm "love") |
| but |  | "desirable thing" (BNY p17: a sheep) |
|  |  | "the visible world" |
| but | $b \bar{n}-\check{n} y$ ćtì $r^{\varepsilon}$ | "a visible object" |

Adjectives may show apocope-blocking 3.2 as a downtoner. Only singular forms seem to be possible. (All examples KT):

Lì à n $\bar{\varepsilon}$ fū-píəlìgā.
Lì à nē fū-pịəlì gā lā.
Lì à n $\bar{\varepsilon}$ wị̂ug.
Lì à nē wị́ugō.
fū-wịugū lā
Lì à nē tītā'arī.
"It's a whitish shirt."
"It's the whitish shirt."
"It's red."
"It's reddish."
"the reddish shirt"
"It's biggish."

### 12.6.1.1 Bahuvrihis

Noun + adjective compounds may be used as a bahuvrihi adjectives:

| Lì à nē nū'-kpịilvón. | "It's a dead hand." |
| :---: | :---: |
| Bịig lā á nē nū'-kpịilv́n. | "The child is dead-handed." |
| Ò à n̄̄ bị́-[nū'-kpịilón]. | "He's a dead-handed child." |
| kùg-nōb-wók ${ }^{\text {a }}$ | "long-legged stool" |
| kv̀g-nכ̄b-wâ'ad ${ }^{\text { }}$ | "long-legged stools" |
| Kùg-kànā á nē nōb-wók. | "This stool is long-legged." WK |
| $z u \bar{g}-m a ́ u k{ }^{\text {p }} \mathrm{pl} z \bar{u} g-m a ̂ ' a d^{\varepsilon}$ | "crushed-headed" |
| $z \dot{v}-w \bar{j} k^{\text {/ }}$ | "long-tailed" |
| nōb-gị ${ }^{\text {a }}$ | "short-legged" |
| $z \bar{u}-p \varepsilon ́ \varepsilon l v ̀ ~ g \mathrm{pl} z \bar{u}-p \varepsilon ́ \varepsilon l a ̀ ~$ | "bald" |
| lām-fôog ${ }^{\text {pl }} \mathrm{pl}$ läm-fôod ${ }^{\varepsilon}$ | "toothless" (lām ${ }^{\text {m } / ~ " g u m ", ~ f u ̀ e ~ " d r a w ~ o u t ") ~}$ |

The two adjectives "one of a pair" 12.4 .1 are often used in bahuvrihis: nị̂fňyáuk ${ }^{\text { }}$ "one eye", bà-nịf-n̆yáuk ${ }^{\circ}$ "one-eyed dog"; tòb-yīun $\eta^{ว /}$ "one ear" bị-tùb-yīná "oneeared children."

The construction is not modification of an adjective by a cb. In cases like bị̀-nū'-kpíilú $\eta^{3}$ "child with a withered hand" the adjective is modifying the cb immediately preceding it, not vice versa: it is not possible to say *bị-nū'-kpị̂im ${ }^{\mathrm{m}}$. The adjective may even be plural despite singular reference of the whole compound:

$$
\begin{array}{ll}
\text { plị̀-tùb-kpị̀dā } & \text { "deaf child" (tùbùr }{ }^{\varepsilon} \text { "ear", kpị̀ "die") } \\
& \text { bì̀ } t u ̀ b-k p i ̄ ̀ d a ̄ ~ n a ́ m \\
& \text { a, bì̀-tùb-lìıd } d^{\varepsilon}
\end{array}
$$

### 12.6.1.2 Nouns as adjectives

Human-reference nouns may be used as adjectives modifying other humanreference nouns; the construction is effectively appositional:

| bị-sāan ${ }^{\text {a/ }}$ or bị̀-sáan ${ }^{\text {a }}$ | "stranger-child"; | only bù-sáa ${ }^{\text {a }}$ | "stranger goat" |
| :---: | :---: | :---: | :---: |
| bị-kpị̀'im ${ }^{\mathrm{m} /}$ or bị-kpịilún ${ }^{\text {c }}$ | "dead child"; | only bù-kpịilúp ${ }^{\circ}$ | "dead goat" |
| bị-dāu or bị̀-dāvg ${ }^{\text {a }}$ | "male child"; | only bù-dāvg ${ }^{\text {a }}$ | "male goat" |
| bì-pu'āa ${ }^{\text {a }}$ or bị-pua $\mathrm{k}^{\mathrm{a}}$ | "female child" |  |  |
| bị-zū'өm ${ }^{\mathrm{m} /}$ or bị̀-zv̀nzò ${ }^{\text {a }}$ | "blind child" |  |  |
| $b i ̀-g i k^{\text {a }}$ | "dumb child" |  |  |
| bị-wàbìr ${ }^{\text {c }}$ | "lame child" |  |  |
| bị-bālērv̄g ${ }^{\text {a }}$ | "ugly child" |  |  |
| bị-pòn̆'วr ${ }^{\text {c }}$ | "crippled child" |  |  |

```
nà'-bịiga}\mathrm{ or bị̀-nà'aba
dàu-bịilga}\mathrm{ or bì-dāu}\quad "male child"
nàsàa-bịigig}\mp@subsup{}{}{\mathrm{ a}
yàmmùg-bị-pú\etaa
yàm-bị-pú\etaa
bị-pú\eta-yàmmùga
```

Agent nouns can only be adjectival after cbs which could not be complements:

```
pư'à-zàan̆s a
bị-sịinna/ or bị̀-sịnníg}\mp@subsup{g}{}{\textrm{a}}\quad\mathrm{ "silent child"; only bv̀-sịnníga}\quad"silent goat"
pu'à-kv̄vdíga
pư'à-lā'adīga}\mp@subsup{}{}{\mathrm{ a }
cf pư'à-kvovd a/ only "killer of women" WK
pu''à-lā'ad a only "laugher at women" WK
```


### 12.6.2 Quantifiers

Except for yịigá "firstly", quantifier determiners follow the head, which may be a cb only before yīnní "one" and in a few fixed expressions like dà-pịigā "ten days."

Quantifiers can be coordinated:
o nya'andolib pii ne yi
ò ňyà'an-dòllìb pịii n $\bar{\varepsilon}$ yị́'
3AN disciple:pl ten with two
"his twelve disciples" (Mt 26:20)

### 12.6.3 Adverb 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. Àm $\bar{\varepsilon} \eta a ́ ~ " r e a l l y, ~ t r u l y " ~$ occurs in the meaning "genuine, real":

う̄n sōb á nē dó'atà àm $\bar{\eta} \eta a ́ ~ l a ̄ . ~$
3AN.CN NULL.AN COP FOC doctor:SG ADV:real:ADV ART
"That one's the real doctor."

With $\check{n} w a ̄ d \bar{l} s$ yôvm lā púvg $\bar{v}=n$ "months in the year" (SB) and wābūg mōogū=n lā "the elephant in the bush" (WK), I have not recorded the full contexts, possibly e.g. $\grave{M}$ dāa n̆y $\bar{\varepsilon}$ wābūg mōog $\bar{v}=n ~ l \bar{a}$ "I saw an elephant in the bush." The 1976 NT has

Lina ane labasup Jesus Christ Wina'am Biig la yela.
Lìnā á n $\bar{\varepsilon}$ lábà-sòn Jesus Christ Wínà'am bịig lā yźlà.
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 has Lina ane Yesu Kiristo one a Wina'am Biig la labasup.

### 12.6.4 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:

| bịì $g^{\mathrm{a}}$ | "child" | bị-kànāa | "this child" |
| :--- | :--- | :--- | :--- |
| bị̀-sō' | "a certain child" | bị-sùn-kànā' | "this good child" |
| bị-kànغ̀? | "which child?" | bị-bó? | "what child?" |

yeltood ayopoi bane ka maliaknama ayopoi mor la
y $\bar{\varepsilon}$-tôod àyópòe bánì kà màlịāk-námá ${ }_{\text {àyópòe e mōr lā }}$ matter-bitter:PL NUM:Seven REL.PL and angel-PL NUM:Seven have art
"the seven plagues which the seven angels have" (Rv 15:8)

### 12.6.5 Lā and n̆wà

$L \bar{a}^{\prime}$ and $\check{n} w a ̀$ are corresponding deictic particles "that" and "this." They 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 $\grave{n}$-clause, when it may follow $l \bar{a}{ }^{\prime}$ attached to the clause 16.9. Unlike $l \bar{a}{ }^{\prime}, \check{n} w a ̀ ~ c a n ~ s t a n d ~ a l o n e ~ a s ~ a ~ N P: ~$

Ňwà á n̄ bịig.
"This is a child." WK; tones sic.
This cop Foc child:Sg.
$L \bar{a} /$ retains its deictic sense in identificational clauses 17.1.5 and after demonstratives 12.3.2, but is elsewhere a definite article, marking referents as specific and already established. $L \bar{a}^{\prime}$ is not used for "familiar background":

Wịnnìg lị́ yā. "The sun has set."
Sun:SG fall PFv.

It is not used with pronouns, proper names, or abstract mass nouns:

Nonilim pv naada.
"Love does not come to an end." (1 Cor 13:8)
Nònìlím pū nāadá=ø.
Love NEG.IND finish:IPFV=NEG.

Unlike n̆wà, it not used in vocatives 17.1.5.
There is no indefinite article: a NP without $l \bar{a} /$ is indefinite if it could have taken lā as an article. The sense may be non-referential, as with negative-bound nouns and with the complement of the copula àe $\breve{n}^{\text {ya }}$ used ascriptively:

```
M bịig kä'e=ø. "I've no child" WK
1SG child:SG NEG.BE=NEG.
O}\mathrm{ à nर्ट bịig. "She is a child."
3AN COP FOC child:SG.
```

A specific sense is only likely in a presentational statement 19.5:

Dau da be mori o biribing

Man:Sg tns exist cat have 3an child-boy:SG
"Once there was a man who had a son ..." KSS p35

Outside such contexts, an indefinite NP is usually generic; unlike English "the", $l \bar{a} /$ is not used with a generic sense:

Tomtom pu gat o zugdaana.
Tùm-tūm pū gát ò zūg-dáanā=ø.
Worker:SG NEG.IND pass:IPFV 3AN head-owner:SG=NEG.
"The servant does not surpass his master." (Jn 15:20)

Kusaas ye ... "The Kusaasi say ..." (moral of a story) KSS p16

A predependent NP ending in $l \bar{a} /$ makes the following head definite, and the head does not itself take the article:
nà'ab lā bị̂ig
"the chief's child" (not *nà'ab lā bị̂ig lā)

Only demonstrative pronouns or predependents with the article automatically make their heads definite; heads with predependent personal pronouns or proper names take $\overline{l a}^{\prime}$ only when already established:

On daa an pu'asadir la ka o kul sidi paae yoma ayopoi ka o sid la kpi. Ón dāa án̆ pư'á-sādīr lá kà ò kūl sīdī $\quad$ Ø $\quad$ āe 3AN:NZ TNS COP woman-nulliparous:SG ART and 3AN marry husband:SG CAT reach yúmà àyópòe kà ò sīd lā kpí. 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)

## Dau da be mori obiribing

Dāu dá bè Ø mōrí ò bị-díbìn
Man:SG tns exist cat have 3an child-boy:SG
"Once there was a man who had a son ..." KSS p35
cf $\dot{M}$ bịìg bé. $\quad$ "I have a child." WK (= M mór bịìg.)
1SG child:SG EXIST.
$\grave{M}$ bịì kā'e=ø. $\quad$ "I've no child" WK (= M kā' bịigā.)
1SG child:SG NEG.BE=NEG.
$\grave{M}$ bịig lā $k \bar{a} ' e=\varnothing . \quad$ "My child's not there" WK
1SG child:SG ART NEG.BE=NEG.

Certain words consistently lack $l \bar{a} /$ after a pronoun possessor even if they are specific old information, e.g. $b \bar{a} \bar{a}^{1 /}$ "father", sàam ma "father." This may reflect uniqueness within a particular context.

For an unambiguously indefinite specific meaning like "some, another", indefinite pronouns are used:
$N a \overline{'-s i ̣ ə ə b a ̀ ~ o ́ n ̆ b i ̀ d ~} n \bar{\varepsilon}$ mōod. "Some cows are eating grass."
Cow indf.pl chew:IPFV Foc grass:PL.

An indefinite pronoun is required to make a head indefinite after a predependent with the article:

```
nà'ab lā bí-sō' "a child of the chief's"
```

chief:SG ART child INDF.AN

## 13 Adverb phrases

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 17.3.1, as are several relative clause types.
Coordination of AdvPs uses n $\bar{\varepsilon}$, as with NPs:
$B \bar{\varepsilon} o g \bar{u}=n \quad n \bar{\varepsilon}$ zâam kà fù ná nịŋ tí-kànā.
Morning=LOC with evening and 2SG IRR do medicine-DEMST.SG.
"You'll use this medicine morning and evening."

Nyalima na be winnigin $n \varepsilon$ nwadigin $n \varepsilon$ nwadbibisin.
Ňyālımá nà b $\bar{\varepsilon} \quad$ wịnnnìgī$=n ~ n \bar{\varepsilon} \quad \check{n} w a ̄ d ı g i ́=n ~ n \bar{\varepsilon} \quad \check{n} w a ̄ d-b i ̣ b ı s i ̄=n . ~$
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)

The prototypical use of AdvPs is as VP adjuncts. For AdvPs as dependents in NPs see 12.5.3; time/circumstance AdvPs may appear as postlinker adjuncts 17.1.1.

AdvPs also occur as verb arguments. AdvP subjects are most often seen before the copula àeñ ${ }^{\text {ya }}$, but occur with other verbs too, especially statives.

Yij venl, ka poogin ka'a su'um.
Yị̀ vén̆l kà $p \bar{v} v g \bar{v}=n$ kā' súmm=ø.
Outside be.beautiful and inside:SG=LOC NEG.BE good:ABSTR=NEG.
"Outside is beautiful but inside is not good." (Acts 23:3, 1996)

Kristo da kpii ti ysla la ke ka ti bay nэŋilim an si'em.
Kristo=ø dà kpịi tì yz̄lá lā ké kà tì báp nòjìlím=ø àn̆ sị’əm.
Christ=nz tns die 1PL about ART cause and 1PL realise love=NZ COP INDF.ADV
"Christ dying for us makes us understand what love is like." (1 Jn 3:16)
(absolute clause AdvP as subject)

In Sùjā bé "OK it is" (WK), sùjā used metalinguistically: "the word sùךā."
Verbs with appropriate meanings take locative AdvPs as complements 16.7.3.
The copula àeñ̆ ${ }^{\text {ya }}$ typically takes a derived manner-adverb or abstract noun as complement rather than an adjective as NP head 16.10.

Kusaal characteristically says "be/do how" rather than "be/do what" (cf relative clauses with sị̀'əm ${ }^{\mathrm{m}}$ 17.3.2.1, and the idiom "X nị̀n wēlá ...?" "how can X ...?" 17.2.1.)

Dā nị́ŋ̀ $a_{\text {àláa=ø! } \quad \text { "Don't do that!" ("thus") }}$
NEG.IMP do ADV:thus=NEG.

Fu wom ban yst si'em laa?
Fù wúm bán yèt sị̀'əm láa=ø?
2SG hear:IPFV 3PL:NZ say:IPFV INDF.ADV ART=PQ?
"Do you hear what they are saying?" (Mt 21:16)

### 13.1 Time/circumstance

AdvPs expressing time may be instantiated by proadverbs or by distinctive time adverbs such as $z i ̣ n n a ́ ~ " t o d a y ", ~ s u ̀ ' ө s^{\mathrm{a}}$ "yesterday", dūnná "this year." B̄̄̄og${ }^{\circ}$ "tomorrow" cannot inflect or take dependents; dāar ${ }^{\varepsilon}$ "day after tomorrow/before yesterday" is homophonous with the noun dāar ${ }^{\varepsilon}$ "day." Absolute clauses 17.3.1 frequently express time. Other time AdvPs are simply NPs with temporal meanings, including nouns like $y v^{\prime} v \eta^{\supset}$ "night", v́vn $n^{\text {n }}$ "dry season", nịntā $\eta^{\text {a/ "heat of the day" }}$ inflect and occur with dependents. The particle ňwà "this" is commonly attached to time words, e.g. zàam n̆wá [za:ma] "this evening", yó'vך n̆wá [yơ:y:a] "tonight."

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 ànịnā dábısà bị'əlà.
1PL remain ADV:there day:pl few.
"We stayed there a few days."

The day begins at sunrise. Answers to bò-wịnn ${ }^{n}$ "what time of day?" may be

| $b \bar{\varepsilon}$ og $\bar{v}=n^{\varepsilon /}$ | "morning" | bèkèkkèon̆ ${ }^{\text { }}$ | "very early morning" |
| :---: | :---: | :---: | :---: |
| zàam ${ }^{\text {m }}$ | "evening" | àsùbá | "dawn" (Arabic) |
| wịn-lịir ${ }^{\text {e }}$ | "sunset" | yó'v ${ }^{\text {a }}$ | "night" |
| wị̀n-kòon̆ $r^{\varepsilon}$ | "sunset" | nịntā $\eta^{\text {a/ }}$ | "heat of the day" |

Wịn $n^{n \varepsilon}$ "time of day" (cf wịnnì̀ $g^{\text {a }}$ "sun") always has a predependent.
Clock times are calqued from Hausa: kérıfà àtán̆' "three o'clock" = karfèe ukù. Answers to būn-dâar ${ }^{\varepsilon}$ "which day?" may be

| zīná | "today" | sù'es ${ }^{\mathrm{a}}$ | "yesterday" |
| :--- | :--- | :--- | :--- |
| $b \bar{\varepsilon} o g^{\circ}$ | "tomorrow" | dāar $^{\varepsilon}$ | "day after tomorrow/ |
|  |  |  | before yesterday" |

Weekday names are of Arabic origin. Many older speakers count in days, not weeks; the traditional three day market cycle differs from village to village.

| Àláasìd dâar | "Sunday" | Àtínì dâar | "Monday" |
| :--- | :--- | :--- | :--- |
| Àtàláatà dâar | "Tuesday" | Àlárıbà dâar | "Wednesday" |
| Àlàmíisì dâar | "Thursday" | À(r)zúmà dâar | "Friday" |
| Àsịibıtì dâar | "Saturday" |  |  |

Dāar ${ }^{\varepsilon}$ "day" is "twenty-four hour period" (nịntān "day as opposed to night") and is used with predependents to specify a particular day; the word dàbısir ${ }^{\varepsilon}$ is also used for "day" in counting periods of time, occurring usually in the plural:

Dābá àyópòe dâar kà fù ná lह̄b nā.
Dābá àyópòe kà fù ná l $\bar{b} b$ nā.
Àláasìd dâar kà fù ná lēb nā.
Tì kpélìm ànịnā dábısà bị̀əlá.

| dābá àyópòe | "week" | bákpàe | "week" |
| :---: | :---: | :---: | :---: |
| ňwādī $g^{\text {a/ }}$ | "moon, month" | $s \bar{\varepsilon}$ on̆ ${ }^{\text {o }}$ | "rainy season" |
| v́vn ${ }^{\text {ne }}$ | "dry season" | sāpál ${ }^{\text {l }}$ | "Harmattan" |
| dàwàlìg ${ }^{\text {a }}$ | "hot humid time just before the rains" |  |  |
| yòvm ${ }^{\text {m }}$ | "year" | dūnná | "this year" |

 "Time" in general is sāŋá pl sānsá cb sān-:

| sān-kánc̀? | "when?" | sān-kán lā | "at that time" |
| :--- | :--- | :--- | :--- |
| sāךá kám | "all the time" | sāךá bèdvḡ̄ | "a long time" |
| sānsá bèdvgv̄ | "many times" | sāךá bị'əlá | "for/in a short time" |

### 13.2 Place

Locative AdvPs consist of Kusaasi place names, specialised locative adverbs, or NPs followed by postpositions. The core locative postposition is the particle $n \bar{\imath} / \sim n^{\varepsilon}$. Some postpositions are themselves followed by $n^{\varepsilon}$; many postpositions are converted nouns. Nouns other than place names cannot otherwise be used alone as locatives.

Specialised locative adverbs include yì̀ $\eta^{\text {a }}$ "outside", dàtìu $\eta^{3}$ or dìtó $\eta^{3}$ "right", dàgòbì $g^{\mathrm{a}}$ "left", àgól ${ }^{\mathrm{l}}$ or àgōlá "upwards", lāllí "far off" (perhaps from lāl ní.)

The particle is $n \bar{\imath} /$ after words ending in a short vowel in SF, after pronouns and after loanwords, and liaison-word $n^{\varepsilon}$ elsewhere:
mù'arī $=n \quad$ "in a lake" yūdá nì "among names"
$\grave{m} n \bar{\imath} \quad$ "in me" mān $n \bar{\imath} \quad$ "in me"
la'asug doodin ne suoya ni
là'asòg dóodī=n n $\bar{\varepsilon}$ suēyá nì
assembly:SG house:PL=LOC with road:PL LOC
"in the synagogues and in the streets" (Mt 6:2)
$Y i ̣ r^{\varepsilon /}$ "house" has the exceptional sg and pl locative forms yịnnn yáa=n ${ }^{\varepsilon}$, with the nuance "home", as in the formula Pv̀'vsìm yị́n "Greet those at home" (i.e. "Goodbye.")

Quantifiers and the article $l \bar{a}^{\prime}$ may precede or follow the locative particle:
mò' $a r \bar{i}=n$ lā or mù'ar lā ní "in the lake"
m gbana ni wusa
"in all my letters" (2 Thes 3:17, 1996)
m̀ gbànà ní wūsā
1sG letter:PL Loc all

The particle is attached to all nouns other than place names used as complements of verbs of motion or location, in any locative sense:

Kem Siloam buligini pie fo nini.
Kદ̀m Siloam búlvgī=nī $\varnothing$ pị́ə fù nịnń.
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 Pailet len yi nidibin la na ya'asi ysli ba ye...
Kà Pailet lém yị nị̆dıbí=n lā nā yá'asì $\varnothing$ y ýlì̀=bā y $y$...
And Pilate again emerge person:PL=LOC ART hither again Cat say=3pl that ...
"Pilate came out to the people again and said to them ..." (Jn 19:4)

ILK: Ò bè dâ' $a=n$.
Ò bè síá'arī=n.
Ò bè pōogú=n.
Ò bè yịn.
Ò bè mōogv̄=n.
Ò bè kōlıgī $=n$
Ò bè tūvmmī=n.
"He's at market."
"He's at the bush."
"He's at the farm."
"He's at home."
"He's in the grasslands."
"He's at the stream."
"He's at work."

More precise locative meanings are expressed with postpositions 13.4.

Kusaasi place names are intrinsically locative and do not take $n \bar{\imath} / \sim n^{\varepsilon}$, but they often have a locative proform in apposition, particularly to express rest at a place:

Ò bè Bók.
M̀ ná k $\bar{\varepsilon} \eta$ Bók.
Fv̀ yûug Bók kpēláa?
Fù yûug Bókàa? SB

```
"He's at Bawku." ILK
"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 nīl or paraphrases like Jerusalem ténī=n "in Jerusalem-land."

The locative particle also appears in some time expressions: b $\bar{\varepsilon} o g^{\circ}$ "tomorrow", $b \bar{\varepsilon} o g \bar{v}=n^{\varepsilon /}$ "morning", y!̣ìgí= $n^{\varepsilon}$ "at first" sān-sị́'ə=n lā "at one time, once..."

Proforms used as locative heads of relative clauses are intrinsically locative:

One ken likin zi' on ken si'ela.
ग̀nì $k \bar{\varepsilon} n \quad l i ̣ ̂ k i ̄=n ~ z i ̄ ' ~ o ́ n ~ k e ̄ n ~ s i ̣ ̀ ~ ə l a ̄=\varnothing . ~$
REL.AN go:IPFV darkness=LOC NEG.KNOW 3AN:NZ go:IPFV INDFIN=NEG.
"He who walks in darkness does not know where he is going." (Jn 12:35)
ka mori fv key zin'ikane ka fo pv booda.
kà mōrí=fù $\varnothing$ k $\bar{\varepsilon} \eta z i!\breve{n}^{\prime}-k a ̀ n i ̀ ~ k a ̀ ~ f u ̀ ~ p \bar{u} \quad b o ́ \partial d a ̄=\varnothing$.
and have=2SG cat go place-rel.sG and 2SG neg.IND want=NEG.
"and take you where you do not want." (Jn 21:18)

### 13.3 Manner

Various NP types can be used as manner AdvPs. Besides proforms, there are several distinctive manner-adverb formations; they do not take dependents. Apocopeblocking is common. Some have the prefix à-followed by M spreading: àmēŋá "truly", àsīdā "truly", ànị́pà "promptly." Some derive from adjective stems with the suffixes $m m$ or -ga 8.2. Others include pāalv́ "openly" and n̆yāen ${ }^{\text {n } / ~[j ̃ a ̃ ̃ ̃] ~ " b r i g h t l y, ~ c l e a r l y " ~}$ (written nyain even in texts prior to 2016.)

Wina'am a su'um nyain. "God is light." (1 Jn 1:5, 1996)
Wínà'am án̆ súm n̆yāe.
God COP good:ABSTR brightly.
... ke ka ti lieb nyain. "... make us light." (1 Jn 1:7)
... ké kà tì lịəb n̆yāe.
... cause and 1pl become brightly.

Ka li sid nie nyain.
"And there truly was light." (Gn 1:3)
Kà lì síd nịe ňyāe.
And 3in truly appear brightly.

A number of manner-adverbs are formed by reduplication of roots:

| nà'anā | "easily" | $k \bar{n}$ n'ok |
| :--- | :--- | :--- |
| tò'otō $/$ | "straight away" | "solely, by oneself" $=k \bar{n} \breve{n}^{\prime}$ |

Reduplication of nouns or numbers 12.4.1 creates distributive manner-AdvPs; reduplication of manner-adverbs themselves is intensifying:

| zịn̆'ig zịñ'ig | "place by place" | dàbısìr dábısìr |
| :--- | :--- | :--- |
| àsídà sídà | "day by day" |  |
| àmēy truly" mē | "vá | "very truly" |

M̀ wv́m Kūsâal bị̀'əlá. $\quad$ I know Kusaal a little."
1SG hear:IPFV Kusaal slightly.

M wóm bị̀'əl bị'əl. "I understand it a very little."
1SG hear:IPFV little little.

Relative clauses with sị̀ $\partial m^{\mathrm{m}}$ "somehow" are common as AdvPs 17.3.2.1.
Manner-adverbs resemble generic mass nouns in their syntactic behaviour in several respects. Even count nouns in generic senses may be encountered as AdvPs:

```
M k\varepsilońy nōbá.
"I went on foot." SB; WK corrected this to 1SG go leg:PL. M kév nē nōbá, using \(n \bar{\varepsilon}\) "with."
```

A prepositional phrase with $n \bar{\varepsilon}$ parallels a count plural used adverbially in

À-n̆y $\bar{\varepsilon} \quad n \bar{\varepsilon} \quad n i ̣ ̂ f ~ s o ́ n ̌ ' ว ~ A ̀ ~ A ̀ w o ̀ m ~ t u ̀ b a ̀ . ~ . ~$
PERS-see with eye:sg be.better.than PERs-hear ear:PL.
"Saw-with-eye beats Heard-with-Ears" (Seeing is believing.)

Quantifiers are frequently used adverbially:

Ò tùm bédvgū/pāmm. "She's worked a lot."

Quantifiers without distinct partitive senses have the same meaning when used adverbially after an object as when used as part of the object NP itself:

Bà gòsī=tí wūsā. "They've looked at us all/all of us." WK
3PL look.at=1pL all.

but Bà gòsī=tí bédvgū
Bà gòsí tì bèdvgū.
Bà gòsī=tí bábıgā.
Bà gòsí tì bàbıgā.
"They've looked at us a lot." WK
"They've looked at a lot of us." WK
"They've looked at us many times." WK
"They've looked at many of us." WK

Numbers have specific forms for "so many times" 12.4.1.

### 13.4 Postpositions

Postpositions are adverbs with predependents. Many represent special uses of nouns. Most are literally or metaphorically locative, and some include the locative particle. Postpositions may not be coordinated, but their predependents may:
tinam $n \varepsilon$ fon suvgine? $\quad$ [what is there] between us and you?" (Mt 8:29)
tīnám $n \bar{\varepsilon} \quad$ fūn súvgū=n $\varepsilon=\varnothing$ ?
1 PL with 2SG between=LOC=CQ?

Bābá "beside" ( pl of $b \bar{a} b \bar{i} r^{\varepsilon /}$ "sphere of activity"):
m̀ nōbá bàbà "beside my feet"

Gbị̀nne "at the bottom of" (gbịnnn "buttock"):
$z u \bar{\theta}$ lā gbịn $\quad$ "at the foot of the mountain"
 Ňyá'a $\eta^{\mathrm{a}}$ "behind; after (time)" (ňyá' $a \eta^{\mathrm{a}}$ "back", lì n̆yá'a $\eta^{\mathrm{a}}$ "afterwards"):

NĒ'ŋá ňyâ'aך kà ò kūl. "After this she went home."
DEMST.IN after and 3AN go.home.
$P \bar{v} v g \bar{v}=n^{\varepsilon /}$ "inside" ( $p \bar{v} v g^{\text {a }}$ "belly, inside"):

Dāu lā bé nē dó-kàyā lā pv́vgū=n.
Man:SG ART EXIST FOC hut-DEmST.SG ART inside:SG=Loc.
"The man is inside that hut."
n̆wādīs yôvm lā púvḡ̄=n "months in the year" (metaphorical locative)

Sā'anz "into/in the presence of", "in the opinion of", "chez":

Wínà'am sâ'an "in the sight of God"

Fù ná dị'e tîım pư'á-bàmmā lā sâ'an.
2SG IRR receive medicine woman-DEMST.PL ART among.
"You'll get the medicine from where those women are."

Sìsùvgū=n $n^{\varepsilon /}$ "between" (KB suvgin):
tīnám n $\bar{\varepsilon} f \bar{u} n$ sísùvg $\bar{v}=n \quad$ "between us and you"
$T \bar{\varepsilon} \eta i ́ r^{\varepsilon}$ "under" ( $t \bar{\varepsilon} \eta^{\mathrm{a}}$ "ground"; with no predependent Gòsìm t̄$\eta \eta^{\prime} r!$ "Look down!"):
téebòl lā téyìr "under the table"

Tùөn ${ }^{\text {ne "in front of" (with no predependent Gòsìm tûөn! "Look to the front!"): }}$
dāká lā tûon "in front of the box"

Y $\overline{l a ́}$ "about, concerning" ( pl of $y \bar{\varepsilon} \mathrm{c}^{1 \varepsilon /}$ "matter, affair"):

Bà yc̀lō=ø mān yz̄lá wūsā. "They told him all about me."
3PL say=3AN 1SG.CN about all.


Ò dìgìl gbáung lā té $\varepsilon b \grave{l}$ lā zúg.
3AN lay.down book:SG ART table:SG ART upon.
"She's put the book on the table."
b̄̄-zúgò? "why?" ("on account of what?")
dāu lā zúg "on account of the man"

Pian'akane ka m pian' tisi ya la zug, ya ane nyain.
Pịăn̆'-kànì kà m̀ pīān̆'乞ø tísì=yā lā zúg, yà á n̄̄ ňyāe.
Word-Rel.sG and 1sG speak cat give=2Pl art upon, 2Pl cop foc brightly.
"Because of the words I have spoken to you, you are clean." (Jn 15:3)

The set expression sāa zúg ${ }^{3}$ is used for "sky"; it is intrinsically locative:

Ka kvksr yi saazug na ...
Kà kùkj̄r yị sāa zúg nā...
And voice:SG emerge rain:SG onto hither
"And a voice came from heaven..." (Jn 12:28)

Zūgú=n $n^{\varepsilon}$ "on":
téعbòl lā zúgō=n "on the table"

### 13.5 Proadverbs

| Place | Demonstrative |  | Indefinite <br> zịn̆'-sị̄ $a$ <br> "somewhere" | Interrogative |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $k p \bar{\varepsilon}$ | "here" |  | yáa ní | "where?" |
|  | kps̄lá | "there" |  | yáa | "whither |
|  | ànị | "there" |  |  | /whence?" |
|  | ànị́nā ${ }^{\prime}$ | "there" |  |  |  |
| Time | nānná <br> nānná-nā' <br> sān-kán ${ }^{\varepsilon}$ | "now" | sān-sị'a "sometime" | sān-kán ${ }^{\varepsilon}$ <br> būn-dâar ${ }^{\varepsilon}$ <br> bう̀-wị̀n ${ }^{\mathrm{n} \varepsilon}$ | "when?" |
|  |  | "now" |  |  | "which day?" |
|  |  | "then" |  |  | "what time of day?" |
| Manner | àn̆wá <br> àwá $n \bar{a}^{\prime}$ <br> àlá | "like this" | $\begin{aligned} & \text { sị'əm }{ }^{\mathrm{m}} \\ & \text { "somehow" } \end{aligned}$ | wēlá | "how?" |
|  |  | "like this" |  |  |  |
|  |  | "like that" |  |  |  |

The $\grave{a}-$ of the "manner" forms is preceded by the LF-final vowel -l 4.2 .
Proforms expressing reason are formed with the postposition $z \bar{u} g^{\rho /}$ : àlá $z$ ù $g^{\circ}$ "because of that", b̄̄zúgò? "why?" (cf bō zúgō "because.")

## 14 Ideophones

Adjectives cannot take adverbs as modifiers. 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.

| Lì à n $\bar{\varepsilon}$ pị́əlìg fáss fáss. | "It's very white." |  |
| :---: | :---: | :---: |
| Lì à n̄̄ sābılíg zị́m zị́m. | "It's deep black." |  |
| Lì à nē zịñ'a wịm wịm. | "It's deep red." |  |
| Lì à nē fū-zịn̆'a wịm wị́m. | "It's a deep red shirt." | WK |
| M̀ n̆yć fū-zịn̆'a wị́m wịm. | "I've seen a deep red shirt." | WK |
| Fū-zịn̆'a wịm wịm bé. | "There's a deep red shirt." | WK |
| $\grave{M}$ bôod fū-zịñ'a wịm wịm lā. | "I want the deep red shirt." | WK |
| Ò à nē wōk tólılìlì. | "She's very tall." |  |
| Ò à nē gịn tị́rıgà. | "She's very short." |  |
| Ò wà'am tólılilì. | "She's very tall." |  |
| Ò gị̀m nē tị́rıgà. | "She's very short." |  |

Not all adjectives, or even all gradable adjectives, have associated ideophones; thus WK has only the adverb pāmm in

Lì à súnā pāmm.
Lì à nē bē' $\varepsilon d$ pāmm.
Lì zùlìm pāmm.
Lì mà'as pāmm.
"It's very good."
"It's very bad."
"It's very deep."
"It's very damp."

Most dynamic verbs likewise are not associated with ideophones:

Ò tùm pāmm.
Ò tùm hālí.
Ò zò pāmm.
Ò zò hälí.
"She's worked hard."
"She's worked hard." 19.6
"She's run a lot."
"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 nē tólìb tólìb. $\quad$ He [a rabbit] is running lollop-lollop." WK

Similarly, the stance verb $z i!$ 'e ${ }^{\text {ya }}$ "be standing" and its dual-aspect derivatives are often followed by sāpī "straight" (LF sappine KB), but the word is found also after other verbs.
ka ku nyane due o meni zi'e sapii.
kà kú n̆yāŋī ø dúe ò m $\bar{\varepsilon} \eta \bar{\imath} \_\varnothing$ zị'e sāpīı.
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 mosgin la
màalìm sưā-dâvg sāpī mōogū=n lā
make:IMP road-male:SG IDEO grass:SG=LOC ART
"Make straight the high road in the wilderness" (Is 40:3)

Ideophones of this type resemble manner adverbs syntactically, and similarly can be preposed with kà (Abubakari 2017.) There is some overlap of categories: see on $\check{n y} y \bar{a} e^{\mathrm{n} \varepsilon /}$ "brightly", for example 13.3. A third type of ideophone overlaps with emphatics: so, for example kịmm in B̄̄ kịmm "what exactly?" 12.3.4.

## 15 Prepositions

Prepositional phrases function as VP adjuncts or complements. They cannot be direct components of noun phrases. Their own complements are NPs or AdvPs, including $\grave{n}$-clauses. Neither prepositions nor their complements can be coordinated.
$\boldsymbol{N} \overline{\boldsymbol{\varepsilon}}$ is both accompanying and instrumental "with." $N \bar{\varepsilon}$ "and", coordinating NPs and AdvPs, is fundamentally the same word.
$N \bar{\varepsilon}$ may take bound personal pronouns as complements (WK, SB):

$$
\begin{aligned}
& \text { ní } \mathrm{m}^{\mathrm{a}} \text { níf }{ }^{\mathrm{O}} \text { nó LF nó=o [nõ:] ní līlor né lì } \\
& \text { ní } i^{\prime} \bar{l}^{\prime} \text { or né tì ní yā' or né yà ní bā' or né bà }
\end{aligned}
$$

Written ne o is usually read [nõ] in the audio NT.
Examples for $n \bar{\varepsilon}$ :

Lìgıním fù nịf né fù nû'ug.
Cover:IMP 2SG eye:sG with 2SG hand:SG.
"Cover your eye with your hand."
Bà kè̀ n̄̄ nōbá. $\quad$ They've gone on foot." WK
3PL go with leg:PL.

Dịm $n \bar{\varepsilon} \quad W i n n, d \bar{a} \quad t \hat{1} ' a s ~ n \bar{\varepsilon} \quad W i n n \varepsilon ́=\varnothing$.
Eat:IMP with God:Sg, NEG.IMP talk with God:SG=NEG.
"Eat with God, don't talk with God."

Kulim $n \varepsilon$ sumbogosom. $\quad$ Go home in peace." (Mk 5:34)
Kùlìm n̄̄ sùmbūgusím.
Go.home:Imp with peace.

Bárıkà né fò k $\bar{\varepsilon} n \quad k \bar{\varepsilon} n$. "Welcome!" (a greeting template 20) Blessing with 2SG arrival arrival.
$\grave{M}$ gén̆' né fù. "I'm angry with you." SB
1SG get.angry:PRV with 2SG.

Là'am n $\bar{\varepsilon}$ "together with" with absolute clause 17.3.1 complements means "although."

W̄̄v means "like." With pronoun complements WK has

| wv̄v mān | wv̄v fūn | wv̄v $\bar{n} n^{\varepsilon}$ | wv́v lì |
| :--- | :--- | :--- | :--- |
| wv́v tì | wv́v yà | wv́v bà |  |

Complements of $w \bar{v} v$ are followed by a meaningless $n \bar{\varepsilon}$ unless they have the article $l \bar{a} /$ or are numbers, when $w \bar{v} v$ means "about."

| $w \bar{v}$ mān $n \bar{\varepsilon}$ | "like me" | wv̄v búv $n \bar{\varepsilon}$ |
| :--- | :--- | :--- |
| $w \bar{v} v ~ t u ̄ s a ́ ~ a ̀ y!i ́ ' ~$ | "about 2000" |  |

Alazugo mori ya'am wvo wiigi ne...
Àlá zùḡ̄, mòrı̄=ø yā'am wv̄v wịigí n $\bar{\varepsilon} . .$.
Therefore, have=2PL.SUB sense like snake:PL like...
"Therefore, be wise as serpents ..." (Mt 10:16)

Relative clauses with sị̀'əm 17.3.2.1 are common as complements:

Ò zòt wūvbújì=ø zòt sị̀'əm lā.
3AN run:IPFV like donkey:SG=NZ run:IPFV INDF.ADV ART.
"He runs like a donkey runs."

WK permits phrases introduced by wv̄v to be preposed with kà 19.3:

Wūv bún né kà ò zót.
Like donkey:sg like and 3an run:IPFv.
"Like a donkey, he runs."

WK rejects this for $n \bar{\varepsilon}$ : *Né $\grave{m}$ nû'ug kà m̀ sī'ıs. "With my hand, I touched it."
$W \bar{v} v$ may take a content clause as complement:

M pian'adi tisidi ya wov ya ane m biis ne.
$\grave{M}$ píán̆'adī $\varnothing \varnothing$ tísıdī=yá wv̄v yà á né $\grave{m}$ bịis n $\bar{\varepsilon}$.
1SG speak:IPFV CAT give:IPFV=2PL like 2PL COP FOC 1SG child:PL like.
"I talk to you as if you were my children." (2 Cor 6:13)

## 16 Verb phrases

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 liaison enclitics; 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 yā 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 $n \bar{\varepsilon} \bar{\varepsilon}^{\prime}$. 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 2 nd pl subject pronoun ${ }^{\text {ya }}$.

Bound VP particles occur in a fixed order:

| Tense | Mood | Preverb |  | E1 | E2 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| dàa | $\varnothing \leftrightarrow$ p | pòn | VERB | $n^{\varepsilon}$ | $m^{\mathrm{a}}$ | $n \bar{\varepsilon}^{\prime}$ |
| sàa | $\varnothing \leftrightarrow d \bar{a}$ | lèm |  | ya | $f^{\jmath}$ |  |
| $\varnothing$ | $n a ̀ \leftrightarrow k \grave{v}$ | tì |  |  | o |  |
| pà' |  | kpèlìm |  |  | $l ı$ |  |
| sà |  | là'am |  |  | $t \imath$ |  |
| dāa |  | dèそìm |  |  | $y a$ |  |
| dà |  | $\ldots$ |  |  | $b a$ |  |

$\varnothing$ marks slots where the absence of a particle can be contrastive.
E1 is the slot for the discontinuous-past liaison enclitic $n^{\varepsilon}$ or the postposed 2 pl subject ya; E2 for enclitic personal pronouns as direct or indirect objects, which unlike all other complements precede aspect-marking $n \bar{\varepsilon}^{\prime}$. Only one bound object pronoun may occur; cf $n$-catenation using $t i s^{\varepsilon}$ "give" 17.2.1.

The particles in the column "Mood" also mark polarity: positive $\leftrightarrow$ negative.
Tone Pattern A verbs have all-M tones in the irrealis mood.
For tense-slot adjuncts see 16.2.5.

### 16.1 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 16.5. 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. 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.

### 16.1.1 Aspectual $n \bar{\varepsilon}$

Following a verb word with no free words intervening, the VP focus particle $n \bar{\varepsilon} /$ 19.1.2 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." This usually occurs because the time referred to is not coextensive with the time of the situation (CGEL pp125 ff.) 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 $n \bar{\varepsilon}^{\prime}$ is not possible; however, resultative perfectives express a state resulting from the action of the verb, and because this state follows the action the time referred to and the time of the situation never coincide. Accordingly, aspectual $n \bar{\varepsilon}^{\prime}$ 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 $n \bar{\varepsilon}^{\prime}$ cannot be aspectual.
$N \bar{\varepsilon}^{\prime}$ 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, $n \bar{\varepsilon} /$ 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:

$$
\text { Ò kùesìd̄̄=bá n } \bar{\varepsilon} . \quad \text { "She's selling them." }
$$

3AN sell:IPFV=3PL FOC.

Ò kùesìd n $\bar{\varepsilon}$ sūmmā lā. "She is selling the groundnuts." 3AN sell:IPFV FOC groundnut:PL ART.
but $\grave{O}$ kù̀sìd sūmmā lā n $\bar{\varepsilon}$. "She sells/is selling the groundnuts." 3AN sell:IPFV groundnut:PL ART FOC. (VP focussed: "They're not free.")

Ò zàbìd. "He fights."
3AN fight:IPFV.

Ò zàbìd $n \bar{\varepsilon}$.
"He's fighting."
3AN fight:IPFV FOC.
but $\dot{O} \quad p \bar{v} \quad z a ́ b ı d \bar{a}=\varnothing$. "He's not fighting/He doesn't fight."
3AN NEG.IND fight:IPFV=NEG.
$N \bar{\varepsilon}^{\prime}$ 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 19.5:

Nịigí j̀n̆bìd n̄̄ mōod. Bà nùud n̄ kû'өm.
Cow:PL chew:IPFV FOC grass:PL. 3PL drink:IPFV FOC water.
"Cows eat grass. They drink water." ("What do cows eat? and drink?")
$N \bar{\varepsilon}^{\prime}$ is omitted in replying to questions or commands by repeating the verb:
A: Gòsìm!
"Look!"
B: M gósìd! "I'm looking!"
A: Fù gósìd nć $\varepsilon$ ? "Are you looking?"
B: M gósìd! "I'm looking!"

### 16.1.2 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 yà'-clauses 17.1.4.1. 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. 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 nị.
Rain tws rain.
but Sāa nị yā.
Rain rain PFV.
"It rained (before yesterday.)"
"It has rained (time unspecified.)"
WK: "Perhaps the grass is still wet, or I am explaining that the area is not really a desert."

Perfective appears with present meaning with events and processes which can be conceptualised as being coextensive with the moment of utterance:
$\dot{O} y \grave{\varepsilon} l y \bar{\varepsilon} \ldots$
3AN say that $\ldots$

Performatives naturally fall into this category:
$\grave{M}$ pû'vs yā. "Thank you", "I thank you."
1SG greet pFv.
$\grave{M}$ siák yā. "I agree."
1SG agree PFv.

Verbs of perception and cognition (often corresponding to English "stative" verbs that do not use the progressive present) frequently appear as present perfectives, once again corresponding to English simple present:

M n̆yć nū'-bị́bısá àtán̆'. "I can see three fingers."
1SG see hand-small:PL NUM:three.

```
M t\varepsilon̂n̆'\varepsilons kà ... "I think that ..."
1SG think and ...
```

Verbs expressing a change of state in the subject may use the perfective to express the resulting state. Aspectual $n \bar{\varepsilon} /$ must then follow whenever syntactically permissible:

Lì bòdìg yā.
3in lose pFv.
but
Lì bòdìg n $\bar{\varepsilon}$.
"It's lost."

3in lose foc.

| Ò kpị̀ n̄⿹. | "He's dead." |
| :---: | :---: |
| M géńn $n \bar{\varepsilon}$. | "I'm tired." |
| Bà kùdùg né. | "They're old." |
| Lì pè' $\varepsilon$ l n $\bar{\varepsilon}$. | "It's full." |
| Lì yò nē. | "It's closed." |
| M̀ búg nē. | "I'm drunk." |
| Ò lèr n $\bar{\varepsilon}^{\text {. }}$ | "He's ugly." WK |
| Lì sòbìg nē. | "It's black." WK |

Agentive transitive verbs of dressing express a change of state in the subject:
$\grave{M}$ yé fūug. $\quad$ I've put a shirt on."
1SG put.on shirt:SG.
$\grave{M} y \varepsilon ́ \quad n \bar{\varepsilon}$ fūug. $\quad$ "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:

M̀ dá' n̄ búy. $\quad$ I've bought a donkey."
1sG buy foc donkey:sG. ("What have you bought?"; focussed object)

As stance verbs are not stative in Kusaal, assume-stance verbs do not express a change of state, and their perfectives cannot accept a resultative reading:
$O$ dìgìn $n \bar{\varepsilon}$.
3AN lie.down FOC.
"He's lain down." DK: "Someone calls at your house and gets no answer; he thinks you're out but I'm explaining that you've gone to bed."

In catenation 17.2 the order of VPs when the first has perfective aspect is iconic, with constituent order constrained to follow event order: while English might say "Two men stood with them, dressed in white", Kusaal must have

Ka dapa ayi' yє fupiela zi'e ba san'an.
Kà dāpá àyịí yć fū-pịəlà ø zị'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)

An imperfective may be followed by a perfective:

Ňwādısá àtán' kà fù ná mōr bịịg lā $n$ k $\bar{\varepsilon} \quad n a \overline{.}$
Month NUM:three and 2SG IRR have child:SG ART CAT come hither.
"Bring the child here in three months." ("having the child, come here.")

With absolute clauses $\underline{17.3 .1}$ as adjuncts, the temporal relationship to the main clause is determined by aspect, with perfective in the absolute clause implying priority and imperfective simultaneity. In the same way, narrative generally features series of tense-unmarked perfectives describing events strictly in order 16.2.4.

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.
Kùkòmà dá zàb tāabá à-sōn̄'e bị'əlá yz̀là.
Leper:PL tns fight each.other PERs-better.than slightly about.
"Lepers once fought each other about who was a bit better." KSS p40

### 16.1.3 Imperfective

Without aspectual $n \bar{\varepsilon}{ }^{\prime}$, the imperfective of dynamic verbs is "habitual", expressing multiple events, or a propensity of the subject to the action expressed by the verb, while stative verbs express abiding states:

Nịigí j̀n̆bìd mōod. "Cows eat grass."
Cow:PL chew:IPFV grass:PL.

M zịñ'i.
"I sit."
1SG be.sitting.

Ò gịm.
3AN be.short.
$\grave{M}$ mór pư'ā.
"I have a wife."
1sG have wife:sg.

With $n \bar{\varepsilon}^{\prime}$, dynamic imperfectives have continuous/progressive meaning. This is permitted only if the subject is an agent (including the subjects of stance verbs), is undergoing a change of state, or is moving without external agency.

Nā'-sịəbà óňbìd $n \bar{\varepsilon}$ mōod. "Some cows are eating grass."
Cow-IndF.PL chew:IPFV Foc grass:PL.
$\grave{M}$ zịñ'i $\quad n \bar{\varepsilon} . \quad$ "I'm sitting."

1SG be.sitting FOC.
$\grave{M}$ yôod $n \bar{\varepsilon}$ kúlìn lā. "I'm closing the door."
1SG close:IPFV FOC door:SG ART.

Kùlìn lā yôวd n̄̄. "The door is closing."
Door:SG ART close:IPFV foc.

Lì lịt $n \bar{\varepsilon} . \quad$ "It is falling."
3IN fall:IPFV FOC.

Otherwise, $n \bar{\varepsilon} /$ must be interpreted as focussing a constituent, not as aspectual:

Dāam lā nûud. "The beer gets drunk." WK
Beer art drink:IPFV.
but Dāam lā nûud n $\bar{\varepsilon}$. "The beer is for drinking." ("not pouring away")
Beer art drink:IPFV Foc. Not possible as "The beer is being drunk." WK
$N \bar{\varepsilon}^{\prime}$ after stative verbs is normally interpreted as focussing a constituent:

Ò gịm $n \bar{\varepsilon}$. $\quad$ "He's short." ("I was expecting someone taller.")
3AN be.short FOC.
$\grave{M}$ mór nē pu'ā.
1SG have FOC woman:SG.
"I have a woman." (not "wife": implies an irregular liaison, WK)

However, any explicit time reference in the clause itself, even a tense marker, may signal a temporary state, with a contrast between the time referred to and other times when the state was not in effect, permitting the use of aspectual $n \bar{\varepsilon} /$ :

Lì vèn $n \bar{\varepsilon} . \quad$ "It's beautiful." (Focus on the verb.)
3IN be.beautiful FOc.
but Nānnánā, lì vèn n̄̄. "Just now, it's beautiful."
Now, 3in be.beautiful Foc.

Lì dāa vén n̄̄. "It was beautiful." WK: "I gave you a cup, and
3IN tns be.beautiful FOc. it was OK then, but now you've spoiled it."

Mù'ar lā dāa zúlìm n $\bar{\varepsilon}$. "The lake was deep."
Lake:SG ART TNS be.deep Foc. (Implying, "Now it's shallow." WK)

Dynamic verbs may similarly express a time-limited habitual sense:

Nịdīb kpịid $n \bar{\varepsilon}$. $\quad$ "People are dying."
Person:PL die:IPFV Foc.

If the following constituent does not permit focussing with $n \bar{\varepsilon}^{\prime} \underline{19.1 .2}, n \bar{\varepsilon}^{\prime}$ is constrained to be aspectual even without explicit time limitation:

M̀ mór n $\bar{\varepsilon}$ bịissá àtánā.
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 án̆ súnā.
3IN TNS COP good:ADV.

Lì dāa á n̄̄ súnā.
3IN TNS COP FOC good:ADV.

Lì à nē súnā. 3IN COP FOC good:ADV.
"It was good." WK
"At the time, it was good." WK
"It's good." ("Now; it wasn't before." WK)

### 16.2 Tense

### 16.2.1 Tense particles

The tense particles are mutually exclusive. The day begins at sunrise.

| dàa | day after tomorrow |
| :--- | :--- |
| sàa | tomorrow |
| $\varnothing$ | present, or implicit (see below) |
| pà' | earlier today <br> sà <br> $d a ̄ a$ |
| dà | besterday <br> before yesterday |
| Fù sá gbìs $w \bar{\varepsilon} l a ́=\varnothing ?$ | "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:

Ò sáa zàb nà'ab lā. $\quad$ "Let him fight the chief tomorrow."
3AN tns fight chief:SG ART.

Dāa "before yesterday" can be used even for remote past. Many parallel NT passages narrate the same events with either dāa or dà, but when both markers occur, dà always expresses time prior to dāa. (For other "pluperfects", cf tense marking in content clauses 17.4.2, and in $\grave{n}$-clauses within narrative 16.2.4.)

### 16.2.2 Discontinuous past

My informants use the discontinuous-past marker $n^{\varepsilon}$ to make an earliertoday past with indicative meaning:
$\grave{M}$ óňbıdī=n sūmmā. "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; $n^{\varepsilon}$ 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 $n^{\varepsilon}$ in Kusaal 17.1.4.

### 16.2.3 Periphrastic futures

Kusaal does not use tense-unmarked indicative imperfectives for immediate future. Note the use of the perfective in its instantaneous-present sense in

```
M kúl yā. "I'm going home (now.)"
1SG go.home PFv.
```

There are two periphrastic indicative constructions for "to be about to ...":
(a) bòod ${ }^{\mathrm{a}}$ "want" + gerund. The subject need not be animate; the construction is only possible with gerunds from dynamic verbs.

$$
\text { Tìıg lā bôod lḷ̆ig. } \quad \text { "The tree is about to fall." }
$$

Tree:sg art want fall:GER.

Yv'vן bood gaadvg, ka beog bood nier.
Yó'vך bôod gáadùg kà bēog bôod nị̂ər.
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.
$\grave{M}$ yé $\grave{m}$ kūā sūmmā. $\quad$ I'm going to hoe groundnuts." 1SG that 1SG hoe groundnut:PL.
$\grave{M}$ ý́ $\grave{m}$ kịá nịm. $\quad$ I'm going to cut meat" 1SG that 1SG cut meat:SG.

### 16.2.4 Implicit tense and narrative

Tense markers are frequently absent, but the occurrence of tense markers is not arbitrary, and constrasts with $\varnothing$ may occur. By default, if there is no other timereferring element in the clause, the absence of any tense particle expresses present tense, regardless of aspect; in isolation, past interpretation is not possible:

Nịdīb kpị̂id. "People die."
Person:pl die:IPFV.

Ò mòr pư'ā.
3an have wife:SG.

Ò kpị̀ yā.
3AN die pFV.
"He has a wife."
"She's died." ("present perfect")

Tense-markers may be omitted with the irrealis mood, with $-n^{\varepsilon}$ as today-past, or with a time AdvP in the clause:

```
Fv̀ ná kūl.
2SG IRR go.home
"You will go home."
(today, tomorrow, next week ...)
Fù sáa nà kūl.
"You'll go home tomorrow."
2SG TNS IRR go.home.
Fù sáa nà kūl b̄̄og.
2SG TNS IRR go.home tomorrow.
or Fù nà kūl b̄̄og.
2SG IRR go.home tomorrow.
```

or
$\grave{M}$ pá' ̀̀n̆bıdī=n sūmmā. "I was eating groundnuts earlier today." 1SG TNS chew:IPFV=DP groundnut:PL.
or $\dot{M}$ ón̆bıdī=n sūmmā.
1SG chew:IPFV=DP groundnut:PL.
$\grave{M}$ sá zàb nâ'ab lā sû'өs. "I fought the chief yesterday."
1SG tNS fight chief:SG ART yesterday.
or M̀ záb nâ'ab lā sû'өs.
1SG fight chief:SG ART yesterday.

Systematic meaningful omission of past tense markers occurs in narrative. In KB/NT narrative, main clauses which do not contain a time AdvP and are not introduced by kà show tense marking much more often than not (over five times as often in Acts 1-12 in the 1996 NT.) On the other hand, clauses introduced by kà have tense marking only to signal that they disrupt the narrative flow, as with flashbacks or descriptive passages. The frequency of tense-marked clauses without kà varies: the Balaam's Donkey narrative 22.1 shows a higher proportion than typical NT narrative, for example. However, narrative consistently favours long sequences of coordinated kà-clauses with perfective aspect and no tense marking, narrating the sequence of events in order; kà itself here corresponds to zero in English.

Less formal sources like the Three Murderers text 22.2 often drop tensemarking in clauses without kà within narrative. Such clauses are analogous to the "historic present" of English informal conversational narration (CGEL p130); kp $\bar{\varepsilon}$ "here" and spatio-temporal deictics like kàmā "this" are also common in such texts.

In all types of narrative, clauses introduced by kà lack tense-marking when they are carrying the narrative forward, but are normally tense-marked when expressing disruptions in narrative flow.

Presented with isolated kà-clauses with perfective aspect and no tense marking, my informants always interpreted them as expressing events, rejecting any aspectual interpretation of the particle $n \bar{\varepsilon}^{\prime}$ in favour of constituent focus; but with tense marking, $n \bar{\varepsilon} /$ was, as usual, taken as aspectual by default:

$$
\begin{array}{ll}
\text { Lì bj̀dìg n } \bar{\varepsilon} . & \text { "It's lost." } \\
\text { 3IN get.lost FOC. }
\end{array}
$$

Kà lì bódìg n̄̄.
And 3in get.lost foc.

Rejected by WK; accepted after some thought by DK, explained as contradicting "someone hid it" i.e. as contrastive focus

Bà kùdìg nē.
3PL get.old FOC.

Kà bà kúdìg n $\bar{\varepsilon}$.
And 3pL get.old foc.

But Kà lì dāa bódìg n̄̄. "And it was lost."
And 3IN TNS get.lost FOC.
Kà bà sá kùdìg n $\bar{\varepsilon}$.
Kà bà dāa kúdìg n $\bar{\varepsilon}$.
"They're old."
"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
etc all acceptable as "and they were old."

Disruptions of narrative flow normally must be tense-marked, whether or not the clause is introduced by kà:

Ka Yesu daa an yvma pii ne ayi' la, ka ba key malvy la wov ban énti nipid si'em la. Ka malvך la dabisa naae la, ka ba lebidi kun. Ka Yesu kpelim Jerusalem tejin ka o ba' ne o ma pu baך ye o kpelim yaa. Ba daa ten'عs ye o dolne ba tej dim la, ka kej...
Kà Yesu=ø dāa án̆ yómà pịii né àyị́ lā, kà bà kह̄ŋ málòn And Jesus=nz tns cop year:PL ten with nUm:two Art, and 3PL go sacrifice:SG lā wv̄v bán $\bar{\varepsilon} \varepsilon n ̆ t i ́ ~ n i ̣ \eta i ̀ d ~ s i ̣ ' ə m ~ l a ̄ . ~ K a ̀ ~ m a ̀ l o ̀ \eta ~ l a ̄ ~ d a ́ b ı s a ̀=\varnothing ~$ ART like 3PL:NZ usually do:IPFV INDF.ADV ART. And sacrifice:SG ART day:PL=NZ nāe lā, kà bà lćbıdì $\varnothing$ kūn. Kà Yesu kpélìm Jerusalem finish ART, and 3PL return:IPFV CAT go.home:IPFV. And Jesus remain Jerusalem ténī=n kà ò bā' né ò mà pū báy yé ò kpèlìm land:SG=LOC and 3AN father:SG with 3AN mother:SG NEG.IND realise that 3AN remain
 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)

So too with the aside $O$ mada ane Uria po'a in the genealogy in Matthew 1.1ff 1996, among dozens of clauses of the pattern kà X dú'á Y "and X begat Y":

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 dư'á nâ'ab David. Kà David dư'á Solomon. Ò mà And Jesse beget king:sg David. And David beget Solomon. 3an mother:Sg
dá à nē Uria pư'á. Kà Solomon dư'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."

Very long series of coordinated "asides" do sometimes drop tense marking; in KB the genealogy in Luke shows ka $X$ saam da an $Y$ at the beginning of paragraphs in the text, but ka $X$ saam an $Y$ otherwise.

Tense-unmarked dynamic-verb imperfectives can appear without aspectual $n \bar{\varepsilon}^{\prime}$ in narrative to express several instances of an event:

Ka on kpen' la, o yeli ba ye [...]. Ka ba la'ad o.
Kà ón kpèn̆' lā, ò yćlì $=b \bar{a} y \bar{\varepsilon}[\ldots]$. Kà bà lá'adō=ø.
And 3AN:NZ enter ART, 3AN say=3PL that ... and 3PL laugh:IPFV=3AN.
"After he came in, he said to them [...]. But they laughed at him." (Mk 5:39-40)
$\grave{N}$-clauses normally mark tense independently, but within narrative they mark tense relative to the narrative timeline:

Ka Pita yo'un tien Yesu n sa yel si'el la ye ...
Kà Pita yū'vn tị́en̆ Yesu=n sà yèl sị’əl lā ȳ̄...
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 kà 19.3, regardless of whether kà also precedes or whether the absolute clause has tense marking (132/136 cases in Mark, Luke, and Acts 1-14, 1976.) With absolute clauses as adjuncts following kà, tense marking in main and absolute clauses agrees and follows the usual principles for narrative (69/78 cases.) Accordingly, $n \bar{\varepsilon}$ must be focussing the verb in

Ka ban ken la, Jesus gbisid ne.
Kà bán k $\bar{\varepsilon} n \quad l a ̄, J e s u s ~ g b i ̣ s i ̄ d ~ n \bar{\varepsilon}$.
And 3PL:NZ go:IMPF ART, Jesus sleep:IPFV Foc.
"As they were travelling, Jesus was sleeping." (Lk 8:22-23, 1976)

Tense marking is not affected by clause adjuncts other than time expressions or by the "resumptive" $y \bar{\varepsilon}$ of indirect speech 17.4.2; cf:
Amaa ba da zot o ne dabiem, ban da pv nip o yadda ye o sid ane nya'andol la
zug. Amaa ka Barnabas zaŋ Saul n mor o key ...
Àmáa bà dà zòtō=ø n $\bar{\varepsilon}$ dábị̄m, bán dà $p \bar{u} \quad$ nínò $=\varnothing$
But 3PL tns fear:IPFV=3AN FOc fear, 3PL:NZ TNS NEG.IND do=3AN
yáddā yé ò sìd à n̄̄ n̆yâ'an-dòl lā zúg. Àmáa kà Barnabas
faith that 3AN truly COP FOC disciple:SG ART upon. But and Barnabas
záy Saul $n$ mōró=ø ø $k \bar{\varepsilon} \eta \ldots$
take Saul cat have=3an 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 kà; the tense marker of the first such clause is not repeated, but the following kà-clauses are not carrying on the narrative and can thus have any aspect:

Ba da pu mor biiga, bozugo Elizabet da ane kundu'ar, ka babayi la wusa me kudigne.
Bà dà pū mōr bịiigā=ø, bj̄zúḡ̄ Elizabet dá à n $\bar{\varepsilon}$ 3PL tns neg.Ind have child:SG=NEG, because Elizabeth TNS COP FOC
kúndù'ar kà bà bàyịí lā wūsā mé kùdìg nē. barren.woman:SG and 3PL NUM:two ART all also get.old FOC.
"They had no child, because Elizabeth was barren and they were both old." (Lk 1:7, 1996; no $n \varepsilon$ in the KB ka babayi' la wusa me kvdig hali.)

### 16.2.5 Tense-slot adjuncts

Tense-slot adjuncts may precede, occupy or follow the slot for tense particles; in any case they precede the mood and polarity markers. They do not affect the independency-marking tone overlay.

Sādıgím "since" 17.3.1 always precedes tense markers. Yū'vn "then, next", sìd "truly, thus" and lè $\varepsilon$ "but" precede tense markers much more often than they follow (in KB, 51 cases of sid da to 5 of da sid; 15 of $l \varepsilon \varepsilon d a$ to 1 of $d a l \varepsilon \varepsilon$.)

Josua yv'vn da kvdigya. "Then Joshua grew old." (Jo 13:1)
Josua yū'vn dá kùdìg yā.
Joshua then tws grow.old PFV.

O sid kpiya. $\quad$ He's really died." (Mk 15:44)
Ò sìd kpì yā.
3AN truly die pFV.

Ò sìd dāa á nē nâ'ab. "Truly, he was a chief." WK
3AN truly tns Cop foc chief:SG.

Ka man pian'ad la lee ku gaade.
Kà mān pìân̆'ad lā lé $k$ vì gāad $\bar{\varepsilon}=\varnothing$.
And 1sG.CN speech art but neg.IRR pass=NEG.
"But my words will not pass away. (Mt 24:35, 1996)
amaa lé pv'vsimi Wina'am bareka
àmáa lè $\varepsilon$ pò'vsìmī $=\varnothing \quad$ Wínà'am bárıkà
but but greet:IMP=2PL.suB God blessing
"but thank God" (Eph 5:4)

For WK, lè $\varepsilon$ carries the tone overlay; he corrected e.g. *Lદ̀ $\varepsilon$ gj̀sìm nâ'ab lā! to $L \grave{\varepsilon} \varepsilon$ gōs nâ'ab lā! "But look at the chief!" KB does not follow this rule.

Ny $\bar{\varepsilon} \varepsilon$ ( $t i ́)$ (KT $\bar{\varepsilon} \varepsilon \check{n} ~ t i ́, ~ N T ~ n y i i ~ t i, ~ K B ~ \varepsilon \varepsilon n t i) ~ " h a b i t u a l l y ", ~ k u ̄ l ̄ ̄ m / k u ̄ d i ̄ m ~ " a l w a y s ", ~$ and nàm "still" (with a negative, "yet") follow any tense particles.

Hor dim la me da énti be Seir.
Hor dím lā mé dà $\bar{\varepsilon} \varepsilon n ̆ t i ́ ~ b \varepsilon ̀ ~ S e i r . ~$
Hor null.pl art also tns habitually exist Seir.
"The Horites too used to live in Seir." (Dt 2:12)

Tvuma la da nam pu pin'il la
Tōvmā lá=ø dà nàm pō pịn̄'il lā
work:SG ART=NZ TNS still NEG.IND begin ART
"before the work began" (Zec 8:10) ("The work having not yet begun.")

Tìım lā nám bè $\varepsilon=\varnothing$ ? "Is there any medicine left?"
Medicine art still ExIST=PQ? ("Does the medicine still exist?")

On ne o pu'a Prisila daa kvdim nan yine Room ...
ग̄n né ò púā Prisila dāa kūdīm nám ỵ̣ $n \bar{c}$ Room ...
3AN.CN with 3AN wife:sG Priscilla tns ever still emerge foc Rome ...
"He and his wife Priscilla had just arrived from Rome ..." (Acts 18:2)

Ňyāan/nāan "next, afterwards", nāan 17.1.4 "in that case" and pà' tì "perhaps" do not occur with tense markers. Ňyāan usually appears in kà-clauses in narrative.

Ka Zugssb sunf nyaan yv'vn ma'ae.
Kà Zūg-sób sún̆f n̆yāan yū'vn mā'e.
And Lord heart:sg next then cool.
"Then the Lord's anger subsided." (Jo 7:26)

One pa'ati an Kristo la bec?
ว̄nī乙ø pá' tì àn̆ Kristo lā bé $\begin{gathered}=\varnothing \text { ? }\end{gathered}$
3AN.CN CAT perhaps cop Christ ART or=PQ?
"Perhaps he is the Christ?" (Jn 4:29)

### 16.3 Mood

There are three moods: indicative, imperative and irrealis. 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 $n \bar{\varepsilon}^{\prime}$ with aspectual meaning.

Imperative mood is negated by $d \bar{a}$. It is used in direct commands and prohibitions and in purpose clauses. With dual-aspect verbs carrying the independency-marking tone overlay it shows a special inflection -ma 16.5 but otherwise the verb word coincides in form with the indicative.

Ò vv̀l tîım kà ò nóbìr pv̄ záb $\bar{\varepsilon}=\varnothing$.
3AN swallow medicine and 3AN leg:SG neg.Ind fight=NEG.
"She took medicine and her leg didn't hurt." WK

Ò vv̀l tîım kà ò nóbìr dā záb $\bar{\varepsilon}=\varnothing$.
3AN swallow medicine and 3AN leg:SG NEG.IMP fight=NEG.
"She took medicine so her leg wouldn't hurt." WK

Dòllı̄=ní=m! "Follow ye me!"
Follow=2PL.SUB=1SG!

Mòr nịn-báalìg! "Have pity!"
Have eye-pity!

The -ma imperative of dual-aspect verbs is perfective by default:
Kòn̆sìm!
"Cough!"

Imperatives without independency-marking mark aspect distinctions by verb flexion, like other moods:

Dā kón̆s $\bar{\varepsilon}=\varnothing!$
NEG.IMP cough=NEG!

Dā kón̆sıdā=ø!
NEG.IMP cough:IPFV=NEG!
"Don't cough!" (To a patient who just coughed during an eye operation with local anaesthetic)
"Don't cough!" (Explaining before the operation what to avoid throughout)

See 17.1.3 on the postposed 2 pl pronoun ${ }^{\text {ya }}$ in commands to several people.
Aspectual $n \bar{\varepsilon}^{\prime}$ cannot appear with the imperative, but àlá "thus" after imperatives has a continuous/progressive sense. Informants contract -í à- to -í- or -á-. Single-aspect verbs used as imperatives also frequently add àlá.

Dịmí àlá! "Carry on eating!" [dımila] or [dimala]
Dìmī=ní àlá! "Keep ye on eating!" [dıminıla] or [diminala]
Eat:IMP=2PL.SUB ADV:thus!

Dìgī=ní àlá! "Keep (ye) on lying down."
Be.lying.down=2PL.suB ADv:thus!

Even stative verbs may be used in direct commands: any restrictions are pragmatic rather than syntactic. Thus Vve! Vv̀e! "Live!" (Ez 16:6) and e.g.

Bé $\begin{aligned} & \text { ànịnā! } \quad \text { Be (i.e. stay) there!" SB }\end{aligned}$
Āa=ní àlá bāan̆lím! "Be (ye) quiet!"
COP=2PL.SUB ADV:thus quiet:ABSTR!

Imperative mood follows another imperative in catenation.

Kèl kà ò gōs! "Let her look!"
Cause:IMP and 3AN look!

Kغ̀m nā $n$ gās! $\quad$ "Come and look!"
Come:IMP hither cat look!

Irrealis mood expresses future statements and questions, using the markers nà (positive), kù (negative.) Tone Pattern A verbs change all tonemes to M. Aspects are distinguished by verb flexion as with the indicative, but aspectual $n \bar{\varepsilon} /$ cannot occur; perfective occurs much more often than imperfective. Irrealis with past tense markers is contrary-to-fact, not future-in-the-past 17.1.4.3.

### 16.4 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 clitic 4.1. Aspectual $n \bar{\varepsilon} /$ 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 dā; conversely, forms which are negated by dā are imperative. Irrealis is negated by kù, which replaces the positive irrealis marker nà.

> Ò zàb nâ'ab lā.
> 3AN fight chief:SG ART.

Ò $p \bar{v}$ záb nà'ab láa=ø. "He hasn't fought the chief."
3AN NEG.IND fight chief:SG ART=NEG.

Zàm nâ'ab lā! "Fight the chief!"
Fight:IMP chief:SG ART!

Dā záb nà'ab láa=ø! "Don't fight the chief!"
NEG.IMP fight chief:SG ART=NEG!

Ò nà zāb nâ'ab lā. "He'll fight the chief."
3AN IRR fight chief:SG ART.

Ò kì zāb nâ'ab láa=ø. "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. Negative clitics appear as usual.

Kā'e "not be, not have" appears as kā' before a complement. It is the negative to both "be" verbs, the copula àeñ ${ }^{\text {ya }}$ and bè "be somewhere, exist", and also to mōra ${ }^{\mathrm{a} /}$ "have." *P̄̄ bé is not found, but $p \bar{v} m \bar{r}$ is quite common; pū áen̆ is rare but can be found in contrastive contexts.

Dāu lā $k \bar{a}^{\prime} \quad$ ná'abā=ø. "The man isn't a chief."
Man:SG ART NEG.BE chief:SG=NEG.

Dāu lā $k \bar{a}^{\prime} \quad b \bar{̣} i g \bar{a}=\varnothing . \quad$ "The man hasn't got a child."
Man:SG ART NEG.HAVE child:SG=NEG.

Pư'ā lā mór bịig, àmáa dāu lā $k a ̄ ' e=\varnothing$.
Woman:SG ART have child:SG but man:SG ART NEG.HAVE=NEG.
"The woman has a child but the man hasn't."

Dāu lā $k \bar{a} ' e=\varnothing . \quad$ "The man isn't there."
Man:SG ART NEG.BE=NEG.

Dāu $k a ̄$ 'e $d$ dóogū=n láa=ø. "There's no man in the room." Man:Sg NEG.BE room:SG=LOC ART=NEG.

Dāu lā $k a \bar{\alpha}^{\prime} \quad d o ́ v g \bar{v}=n \quad$ láa=ø. "The man is not in the room." Man:SG ART NEG.BE room:SG=LOC ART=NEG.

Kā'e has a clause-final variant kà'asìgè (always LF):
Ò bịig ká'asìg $\bar{\varepsilon}=\varnothing$.
"She has no child."
3AN child NEG.EXIST=NEG.

Mịt "see that it doesn't happen that ..." 17.2.2 is always imperative. In this sense, the postposed 2 pl subject ya does not occur, even in address to several people.

Mit ka ya maal ya tuumsuma nidib tuon ye ba gosi.
Mịt kà yà mâal yà tùvm-sùmà nịdīb tûөn yé bà gōs $\bar{\varepsilon}=\varnothing$. NEG.LeT.IMP and 2PL do 2PL deed-good:PL person:PL before that 3PL look.at=NEG.
"See that you don't do your good deeds in front of people so they'll look at you." (Mt 6:1, 1996)

KB uses mid with no clitic: Mid ka ya maali ya tovm suma nidib tuon ye ba gos.
Mịt 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.
Mịtī $=\varnothing \quad$ zīrí nò-dị́'əsìdìb bánì kz̄nní 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)

Zī' "not know" normally replaces negative particle + mị̀'. A clause-final LF $z i ' i s i g \varepsilon$ also appears in KB, NT (e.g. Lk 12:40.)

Bùク-bān̆'ad zī' $\quad y \bar{\varepsilon} \quad t \bar{\varepsilon} \eta \quad t v ́ l l a \bar{a}=\varnothing$.
Donkey-rider:SG nEG.KNow that ground:Sg be.hot=NEG.
"He who rides a donkey does not know the ground is hot." (Proverb)

Mị' does occur with negative particles:
$M$ biig Solomon ane dasaך, ka pv mi' wov lin nar si'em.
$\dot{M}$ bịig Solomon á nē dá-sāך, kà pū mị̀
1SG child:SG Solomon FOC COP young.man:SG, and NEG.IND know
wūv lín nār sị̀'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 Chr 22:5)

### 16.5 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 kà other than content clauses, regardless of whether they are subordinate or coordinate. The markers are primarily tonal, but there are associated segmental manifestations.

The independency-marking tone overlay is manifested only on VPs with positive polarity and indicative or imperative mood. If there is a preverb, it carries the overlay instead of the verb itself. The past tense marker dāa not only remains M itself but also prevents the overlay from applying to any subsequent words.

The overlay 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.)

Examples of tone overlay manifesting independency marking in main clauses (with $z a ̀ b^{\varepsilon}$ "fight", gōs ${ }^{\varepsilon}$ "look at", nà'ab ${ }^{\text {a }}$ "chief"):

Ò zàb nâ'ab lā.
Ò gòs nâ'ab lā.
Ò sà zàb nâ'ab lā.
Ò sà gòs nâ'ab lā.
"He's fought the chief."
"He's looked at the chief."
"He fought the chief yesterday."
"He looked at the chief yesterday."

In contrast, the intrinsic tones appear after kà, with preverbal dāa, in negative polarity, and in subordinate clauses:

Kà ò záb nà'ab lā.
Kà ò gūs nâ'ab lā.
Ò dāa záb nà'ab lā.
Ò dāa gōs nâ'ab lā.
Ò pū záb nà'ab láa.
Ò pū gōs nâ'ab láa.
Ò yá' zàb nà'ab lā ..
Ò yá' gōs nâ'ab lā ...
ón zàb nà'ab lā
ón gōs nâ'ab lā
"And he's fought the chief."
"And he's looked at the chief."
"He didn't fight the chief."
"He didn't look at the chief."
"He hasn't fought the chief."
"He hasn't looked at the chief."
"If he fights the chief ..."
"If he looks at the chief ..."
"he having fought the chief"
"he having looked at the chief"

Content clauses have independency marking:

Bà ys̀l yć ò zàb nâ'ab lā.
3PL say that 3AN fight chief:SG ART.
"They say he's fought the chief."
Examples for the final M before liaison, using the verbs bòdì $g^{\varepsilon}$ "lose", yādī $g^{\varepsilon /}$ "scatter" and the pronouns $m^{\mathrm{a}}$ "me" ba "them":

| Intrinsic tones: | bòdıgì $=m^{\text {a }}$ | bòdı $\mathrm{gìd}^{\text {l }} \mathrm{l}=\mathrm{m}^{\text {a/ }} \mathrm{ipfv}$ | $b \grave{d ı g ı ̀ ~}=$ ba' ${ }^{\prime}$ |
| :---: | :---: | :---: | :---: |
|  | $y a ̄ d ı g i ́=m^{\text {a }}$ | $y a ̄ d ı g^{\prime}{ }^{\text {d }}$ i $=\mathrm{m}^{\text {a/ }} \mathrm{ipfv}$ | $y \overline{a ̄ d ı g i ́=b \overline{a r ~}}$ |
| With overlay: | bòdıgī $=m^{\text {a }}$ | bòdıgìdi $=m^{\text {a/ }}$ | bòdıgī=bá |
|  | yàdıgī $=m^{\text {a/ }}$ | yàdıgı̀dī $=\mathrm{m}^{\mathrm{a} /}$ | yàgıdī $=$ bá |

Before a liaison word with initial fixed-L toneme, M must change to H 4.4:

Bà kùvdī=bá. "They kill them."
3PL kill:IPFV=3PL.

Bà kùvdí bà būvs. 3PL kill:IPFV 3PL goat:PL.

Bà gòsō=ø.
"They looked at her."
3PL look.at =3AN.

Bà gòsú ò bịig. "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 ò lì bà are never followed by M spreading when the following VP has independency marking.

Thus, with no independency marking after coordinating kà:

Kà m̀ záb nà'ab lā.
Kà ò záb nà'ab lā.
but ì záb nâ'ab lā.
Ò zàb nâ'ab lā.
"And I've fought the chief."
"And he's fought the chief."
"I've fought the chief."
"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" 17.4.2:

Ò tèn̆'عs kà ò xàb nâ'ab lā. "He thinks he's fought the chief." WK 3AN think and 3AN fight chief:SG ART.

Ò tèn̆'عs kà m̀ záb nâ'ab lā. "He thinks I've fought the chief." 3AN think and 1SG fight chief:SG ART.
but Ò yèl yé ò xàb nâ'ab lā. "He says he's fought the chief." 3AN say that 3AN fight chief:SG ART.
and Ò yèl yé m̀ 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:

Ò kì zāb nâ'ab láa=ø. "He will not fight the chief."
3AN NEG.IRR fight chief:SG ART=NEG. (VP irrealis mood)
Ò lغ̀ dāa záb nà'ab lā. $\quad$ "But he did fight the chief."
3AN but TNS fight chief:SG ART. (preverbal dāa)
Ò yc̀l ý́ ì̀ nà zāb nâ'ab lā. "He says I'll fight the chief."
3AN say that 1SG IRR fight chief:SG ART. (VP irrealis mood)

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 flexion -ma 7.1 marks imperatives of dual-aspect verbs whenever they carry the independency-marking tone overlay:

Gòsìm!

Gòsımī=ní=bā! "Look ye at them!"
Look:IMP=2PL.SUB=3PL!

But $D \bar{a} \quad g \bar{\jmath} s \bar{\varepsilon}=\varnothing!$
NEG.IMP look=NEG!

Kह̀l kà ò gās!
Cause:IMP and 3AN look!

Dòllī=ní=bā! "Follow ye !" (single-aspect verb)
Follow=2PL.SUB=3PL!
"Look!"
"Don't look!" (negative)
"Let her look!"
(No independency marking: subordinate)

The particle $\boldsymbol{y} \bar{a}$ follows any perfective verb form carrying the tone overlay which would otherwise be phrase-final. Texts write ya solid with the verb; before 2016 it appears as -eya after consonants. Its toneme becomes L before interrogative clitics 3.8.3. Yā may be related to the perfective -ra of one Nawdm verb conjugation. Phrase constituents can only follow yā by right dislocation 19.4. Examples:

Ò gòs yā.
3AN look PFV.
$O$ Ò sà gòs yā.
3AN TNS look PFV.

Sāa nị yā.
Rain:SG rain PFV.

M̀ tên̆' $\varepsilon$ kà lì lù yā. "I think it's fallen down." (content clause)
1SG think and 3IN fall PFv.
But $\begin{aligned} & \text { Ò } \text { gòs } \bar{\imath}=m . \\ & \text { 3AN look.at=1SG. }\end{aligned} \quad$ "He's looked at me." (not final)
"It has rained."
"She's looked."
"She looked (yesterday.)"

Sāa dāa nị́.
Rain:SG tNs rain.

Ò dāa gōs.
Ò nà gōs.
Kà ò gōs.
Ò pū gد̄s $\bar{\varepsilon}$.
Ò gịm.
Ò mị̀'.
Ò nว̀ŋ.
"He looked." (preverbal dāa)
"She'll look." (irrealis)
"And he looked." (no independency marking)
"He's not looked." (negative)
"She's short." (stative)
"She knows." (stative)
"She loves him." (stative)

### 16.6 Preverbs

Preverbs follow all other preverbal particles. The independency-marking tone overlay and the all-L to all-M toneme change of the irrealis mood both fall on any preverb, the main verb following with its intrinsic tonemes.

Pòn "previously, already":

Ò pùn záb nà'ab lā. "He's already fought the chief."
3AN already fight chief:SG ART.

Kà ò pón zàb nà'ab lā.
And 3AN already fight chief:SG ART.
"And he's already fought the chief."

In yà'-clauses, yà' pùn means "even if":

Li ya'a pon du'a, saam na dii li.
Lì yá' pùn dư'à, sáam ná dīı=lí
3IN if already bear, stranger:PL IRR eat=3IN.
"Even if it [millet] bears a crop, strangers will eat it." (Hos 8:7)

Lદ̀m "again" (cf lèb ${ }^{\varepsilon}$ "return"):
$\grave{M}$ nị̣f lém zábìd n $\bar{\varepsilon}$. $\quad$ "My eye is hurting again."
1SG eye:SG again fight foc.

Kà ò lém zàb nà'ab lā. "And he's fought the chief again."
And 3AN again fight chief:SG ART.

Ò nà l̄̄m záb nà'ab lā. "He'll fight the chief again."
3AN IRR again fight chief:SG ART.

Kpèlìm is "still" before an ipfv, but "immediately afterwards" before a pfv. It occurs also as a main verb "remain, still be." KB has the reduced form kpèn.

Ka o kpelim zu'om. "Immediately he went blind."
Kà ò kpélìm zū'өm. (Acts 13:11, 1996: KB Ka o kpen zu'om.)
And 3an immediately go.blind.
m biig Josef nan kpen vve. "My child Joseph is still alive." (Gn 45:28)
m̀ bịig Josef nám kpèn vv̄ę.
1SG child:SG Joseph still still be.alive.

Là'am "together" (cf là'as ${ }^{\varepsilon}$ "gather"); as a main verb là'am ${ }^{m}$ is "associate with."
ka nidib wusa da la'am kpi ne o.
kà nị̣dīb wūsā dá là'am kpị̀ nó=ø.
and person:PL all TNS together die with=3AN.
"so all people died together with him." (2 Cor 5:14)

Dènìm "beforehand" (cf dè $\eta^{\varepsilon}$ "go, do first": m̀ dćn̄̄=f "I've got there before you"; $d \varepsilon \eta^{\varepsilon}$ is used with the same meaning in $n$-catenation.)

Pin'ilvgun sa ka Pian'ad la da pun devim be.
Pịn̆'ilúgō=n sá kà Pịàn̆'ad lā dá pùn dèjìm bè.
Beginning:SG=LOc hence and word:SG ART tns already beforehand Exist.
"In the beginning, the Word already existed beforehand." (Jn 1:1)

Màlıgìm "again" (cf Toende Kusaal malig "do again"):

Amaa man pian'ad la kv maligim gaade.
Àmáa mān piân̆'ad lā kú mālıgīm gáad $\bar{\varepsilon}=\varnothing$.
But 1SG.cn speech art neg.IRR again pass=neg.
"But my words will not pass away. (Mt 24:35)

Tì "once, until" occurs often in $n$-catenation; the sense is "before" when the next VP is perfective.
hali ka Herod ti kpi. "Until Herod had died." (Mt 2:15)
hālí kà Herod tí kpị.
Until and Herod once die.

Kغ̀m Ø tí n̆y $\bar{\varepsilon}$ dú'atà. "Go to see the doctor." SB
Go:IMP cat once see doctor:sg.

Beogv ti nied la ka ba gaad!
$B \bar{\varepsilon} o g o ́=\varnothing$ tì nị̀d lá kà bà gâad!
Morning=NZ once appear:IPFV ART and 3PL pass.
"Before morning appears they have passed!" (Is 17:14)

### 16.7 Complements

### 16.7.1 Objects

Objects precede all other complements, and indirect objects precede direct:
$\grave{M}$ dāa tísì=l̄̄ nâ'ab lā. "I gave the chief to it." sic 1SG TNS give=3IN chief:SG ART.

If there is no overt object after an obligatorily transitive verb, an anaphoric pronoun object is implied. Among many other verbs, this category includes all singleaspect verbs which take complements other than locatives.

Mānī ø áň dú'atà kà fūn mén áěn.
1SG.CN CAT COP doctor:SG and 2SG.CN also COP.
"I'm a doctor and you are too."

In conversation, the antecedent may be in the previous speaker's words:
Q. Fì mór gbāunך láa=ø? "Do you have the letter?"

2SG have letter:SG ART=PQ?
A. $\bar{\varepsilon} \varepsilon \check{n}, \grave{m}$ mór.
"Yes, I have it."
Yes, 1sG have.
Q. Fù bóodó=o=ø
"Do you love her?"
2SG want=3AN=PQ?
A. Áyìı, m̀ pū bósdā=ø. "No, I don't love her."

No, 1SG NEG.IND want=NEG.

For other null-anaphora objects see 19.3 17.2.2.
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

bànì zūud nị̄dıbī Ø gbān̆'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)
ònı̀ dāa zūud
REL.AN TNS steal:IPFV
vs Mid ka ya kv nid. "Do not kill [a person.]" (Ex 20:13)
Mịt kà yà kū nịd. (kū is obligatorily transitive)
NEG.LET and 2PL kill person:SG.

Most other transitive dynamic verbs can be used intransitively with object transferred to subject position and agent unmentioned. Continuous ipfv aspect may only appear if the subject is undergoing a change of state or moving without external agency, as with e.g. yò "close", nāe/ "finish", bj̀dì gع "lose, get lost", mā'el "get cool", zàmìs $s^{\varepsilon}$ "learn/teach", nāmīs ${ }^{\varepsilon /}$ "(make) suffer", bàs ${ }^{\varepsilon}$ "go/send off", dūe "raise/rise."
$\grave{M}$ náa tūvmā lā. $\quad$ I've finished the work."
1SG finish work ART.

Gbàunp lā sób n $\bar{\varepsilon}$. "The letter is written."
Letter:SG ART write Foc.

Gbànà sóbìd zịná. "Letters get written today." WK
Letter:PL write:IPFV today.

Gbàū lā sóbìd súŋā. "The letter is writing well (i.e. easily.)" WK
Letter:SG ART write:IPFV good:ADV.

Tūvmā lā náa $n \bar{\varepsilon} . \quad$ "The work is finished."
Work art finish foc.
$\grave{M}$ nú dāam lā. $\quad$ I've drunk the beer."
1SG drink beer ART.

Dāam lā nú yā. "The beer has got drunk."
Beer art drink PFV.

When parts of a subject's own body appear as objects, assume-stance verbs are often preferred to make-assume-stance:

Dìgıním fù nû'ug. $\quad$ "Put your hand down."
Lie.down:IMP 2SG hand:Sg.

Lìgıním fù nịf né fù nû'ug.
Cover:IMP 2SG eye:SG with 2SG hand:SG.
"Cover your eye with your hand."

Nịe "appear" is more frequent than $n \varepsilon ̇ \varepsilon l^{\varepsilon}$ "reveal" before ò $m \bar{\varepsilon} \eta \eta^{\text {a/ }}$ "him/herself":

Ka o nie o meŋ Jemes san'an ...
Kà ò nịe ò mēŋ Jemes sâ'an ...
And 3an appear 3an self James among ...
And he revealed himself to James (1 Cor 15:7)

Some verbs only take direct objects of a very limited type, often expressed with a noun formed from the same stem:

Fì túm bó-tùvmà=ø? "What work do you do?"
2SG work:IPFV what-work=CQ?

Ka ya ninkvda zaansim zaansima.
Kà yà nịn-kúdà zàaňsìm záaňsímà.
And 2PL person-old:PL dream:IPFV dream:PL.
"And your old people dream dreams." (Acts 2:17)

Almost any verb can take an indirect object expressing benefit, interest etc:
Ò $d \grave{v} g \bar{v}=m$.
"He cooked (for) me."
3AN cook=1SG.

Lì màlısī=m.
"I like it." ("It's sweet for me.")
3in be.sweet=1SG.

Àláafù bé $\varepsilon=b a ́$.
"They are well." ("Health exists for them.")
Health Exist=3PL.

It is not possible to transfer indirect objects to the subject position:

Nà'ab lā tís yā. only "The chief was given [to someone.]"
Chief:Sg ART give PFV.

Some verbs require an indirect object, which cannot be ellipted unless any direct object is too, with a necessarily anaphoric sense; tis $s^{\varepsilon}$ "give" is the prototypical example, along with causatives like dìıs ${ }^{\varepsilon}$ "feed", nūlūs ${ }^{\varepsilon /}$ "give to drink."
$\grave{M}$ tís nâ'ab lā dāká. "I've given the chief a box."
1SG give chief:Sg ART box:SG.
$\grave{M}$ tís nâ'ab lā. $\quad$ I've given it to the chief."
1SG give chief:SG ART.
$\grave{M}$ tísō=ø dāká. $\quad$ I've given him a box." Not *M̀ tís dāká.
1SG give=3AN box:SG.

Dā tísò=ø sị̄əlā=ø. "Don't give her anything!"
NEG.IMP give=3AN INDF.IN=NEG.

Dā tís $\bar{\varepsilon}=\varnothing$ !
NEG.IMP give=NEG.
$\grave{M}$ 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. kàd X sàrị́yà "judge X ", mōr X nịn-báalìg or zò X nị̣n-báalìg "have pity on X ", nị̀ $\eta \mathrm{X}$ yàddā "believe X , believe in X ", zò X dàbịəəm "fear X", sìàk X n̄̄or "obey X", n̆wغ̀' X nû'ug "make an agreement with X."

Bà zòtō=ø dábị̄əm. "They are afraid of him."
3PL feel:IPFV=3AN fear.

Bà nị̀nō=ø yáddā.
3PL do=3AN assent.

Ò n̆wغ̀' nâ'ab lā nû'ug. "He made an agreement with the king."
3AN strike king:SG ART hand:SG.

### 16.7.2 Predicatives

Predicative complements are resultative or depictive:

Kcl ka m liebi fo tomtom yinne.
Kèl kà m̀ lịəbì fù tùm-tūm yīnní.
Cause:Imp and 1Sg become 2SG worker:SG one.
"Make me one of your servants" (Lk 15:19)
$\grave{M}$ á né fù tùm-tūm. $\quad$ I am your servant."
1SG COP FOC 2SG worker:SG.

Adjectives without corresponding stative verbs may appear as NP heads in predicative complements:

Bà à nē píəlà. "They're white."

Mam ane pielug amaa m ya'a paae bugumin asec ka m leb zin'a.
Mām á ne píəlv̀g àmáa m̀ yá' pāe búgúmī=n, àsć $\varepsilon$ kà m̀ léb zịn̆'a. 1SG COP FOC white:SG but 1SG if reach fire=LOC, except and 1SG turn red:SG. "I am white, but when I reach the fire I turn red." [crayfish] (BNY p16)

Compounds with nịnn- "person" or būn- "thing" + adjective are commoner. They are required with adjectives preceding dependent pronouns:

Lì à nē būn-pị̂əl-kàךā. "It is this white one."

Some constructions require a predicative complement after a direct object.
Pùd ${ }^{\varepsilon}$ "name, dub" takes a NP object with the head $y \bar{v} ' v r^{\varepsilon /}$ "name", and the name itself as predicative complement optionally introduced by $y \bar{\varepsilon}$ "that."

Ka fo na pod o yo'vr ye Yesu.
Kà fù ná púd ò yū'vr ȳ̄ Yesu.
And 2SG IRR dub 3AN name:sg that Jesus.
"And you will call him Jesus." (Mt 1:21)

Ka o pud biig la yv'vr Yesu.
Kà ò púd bịig lā yô'vr Yesu.
And 3an dub child:sg art name:sg Jesus.
"And he called the child Jesus. " (Mt 1:25)

Bùol ${ }^{\varepsilon}$ "call" can be used in the ipfv with a person as object and name as complement, optionally introduced by $y \bar{\varepsilon}$, or with $y \bar{v} ' v r^{\varepsilon /}$ "name" as the subject:
on ka ba buon ye Pita la
òn kà bà bûөn ȳ̄ Pita lā
Rel.an and 3pl call:IPFV that Peter art
"who was called Peter" (Mt 10:2)
dau so' ka o yv'vr buon Joon.
dàư-só' kà ò yū'vr bûөn Joon.
man-INDF.AN and 3AN name:SG call:IPFV John.
"a man [habitually] called John." (Jn 1:6)

Màal ${ }^{\varepsilon}$ "make" is used with object and resultative predicative complement in

Ka o maal o mey nintita'ar.
Kà ò mâal ò mēŋ nịn-títā'ar.
And 3AN make 3AN self person-great:sG.
"He made himself out to be a great man." (Acts 8:9. 1976)

### 16.7.3 Locatives

Position/movement verbs may take non-obligatory locative complements.

Ò kèŋ Bók. $\quad$ "She's gone to Bawku."
3AN go Bawku.

Ò $p \bar{v} \quad t u \bar{n} ' \Theta \smile \varnothing \quad k \bar{\varepsilon} n n a ́=\varnothing$.
3AN NEG.IND be.able CAT go:IPFV=NEG.
"She can't walk."

Dìgınìm kp̄̄! "Lie down here!"
Lie.down:Imp here!

Ò dìgìn yā. $\quad$ "He's lain down."
3AN lie.down PFV.

Ò dìgìl gbáung lā téعbv̀l lā zúg.
3AN lay.down book:SG ART table:SG ART upon.
"She's put the book on the table."

Ò dìgìl gbáun lā. "She's put the book down."
3AN lay.down book:SG ART.
Dāu lā bé nē dó-kàyā lā pv́vgū=n.
Man:SG ART EXIST FOC hut-DEMST.SG ART inside:SG=LOC.
"The man is inside that hut."

Àláafù béo=ø. $\quad$ "He's well." ("Health exists for him.")
Health Exist=3AN. Indirect object, no complement.

### 16.7.4 Prepositional phrases

$W \bar{\varepsilon} n n^{\text {na/ }}$ "resemble" usually takes a phrase introduced by $n \bar{\varepsilon}$ or $w \bar{v} v \underline{15}$.

Ka o nindaa wenne nintay ne.
Kà ò nịn-dáa w $\bar{\varepsilon} n \quad n \bar{\varepsilon} \quad n i ̣ n t a ̄ \eta ~ n \bar{\varepsilon}$.
And 3AN eye-face:sg resemble with sun:sg like.
"His face is like the sun." (Rv 10:1, 1996)

Lālla/ "be far" usually takes a phrase introduced by $n \bar{\varepsilon}$ :

Amaa o pu lal ne tii.
Àmáa ò pū lāl né tīı=ø.
But 3SG neg.ind be.far with 1PL=NEG.
"But he is not far from us." (Acts 17:27)
Dōıla/ "accompany" with the preposition ne means "be in accordance with":

Li dolne lin sob Wina'am gbaupon si'em la ye ...
Lì dòl n $\bar{\varepsilon}$ lín sōb Wínà'am gbáung $\bar{v}=n$ sị'əm lā y $\bar{\varepsilon} \ldots$ 3IN follow with 3in:NZ write God book:SG=LOC INDF.ADV ART that ...
"This is in accordance with what is written in God's book ..." (1 Cor 2:16)

Contexts where focus-n $\bar{\varepsilon}^{\prime}$ is prohibited show that $n \bar{\varepsilon}$ is not a preposition in e.g.
M̀ yí n̄̄ Bók. $\quad$ I come from Bawku." SB
1SG emerge Foc Bawku.

Meeri one yi Magdala
"Mary who came from Magdala"
Meeri ónì yị Magdala (Mk 16:9, 1996)
Mary rel.An emerge Magdala

### 16.7.5 Clauses

$K \bar{\varepsilon}$ "let" and mịt in the sense "let not" always take a kà-catenation. Nāra/ "be obliged to" and bòsd ${ }^{\mathrm{a}}$ in the sense "want to" take purpose clauses, and the meaning is anaphoric if it is absent. Gūr ${ }^{\mathrm{a} /}$ in the sense "wait for (an event)" takes a NP headed by a gerund or a purpose-clause. Àen̆ ${ }^{\text {ya }}$ "be" may take a content-clause complement.

Verbs of cognition, reporting, and perception have as complement a content clause, a relative clause with $s \underset{i}{ } 1 \quad \partial m$, or a postpositional AdvP with yz̄lá "about." Most such verbs have an anaphoric sense without such an object.

Kà-catenations can be used as resultative predicates 17.2.2.

### 16.8 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.

Bà dìt n̄̄ sā'ab dó-kànā lā púvgū=n.
3PL eat:IPFV FOC porridge hut-DEMST.SG ART inside:SG=LOC.
"They're eating porridge in that hut."

### 16.9 Final particles

$N \bar{a} /$ "hither" and sà "hence" stand last in the VP.

M̀ mór kû'өm náa=ø? "Shall I bring water?" SB
1SG have water hither=PQ?

Bùgúm lā yịt yáa ní ná=ø?
Fire ART emerge:IPFV where loc hither=CQ?
"Where is the light coming from?" SB

Fì yí yáa ní ná=ø? "Where have you come from?" WK
2SG emerge where loc hither=CQ?

K $\bar{n} \check{n}$ "come" is invariably used with $n \bar{a}$ '; the identical SF imperatives of $k \bar{\varepsilon} \bar{n}$ "come" and $k \bar{\varepsilon} \eta^{\varepsilon /}$ "go" are distinguished by the following $n \bar{a} /$ or sà respectively:

Kèm nā! "Come here!"
Kغ̀m sá! "Go away!"

Sà often refers to time rather than place:

Fu na bay li nya'ay sa. "You will come to understand afterwards."
Fì ná báy li n̆yá'aŋ sá. (Jn 13:7, 1976)
2SG IRR realise 3IN behind since.

Lazarus pon be yavgon la daba anaasi sa.
Lazarus pún bè yávgū=n lā dābá_ànāasí sà.
Lazarus previously Exist grave:SG=LOC ART day:PL NUM:four since.
"Lazarus had already been in the grave four days." (Jn 11:17)

The particles are VP-final, not clause-final, and precede subordinate clauses:

Alazug Wina'am pu tom o Biig dunia ni na ye o kvvs dunia dim be' $\varepsilon d \varepsilon$.
Àlá zùg Wínà'am pū tóm ò Bịịg dūnıyā ní nā
Thus God neg.Ind send 3AN child:SG world:sg loc hither
yé ò kv̄vs dūnıyā dím bè' $\varepsilon d \bar{\varepsilon}=\varnothing$.
that 3AN settle world:SG NULL.PL bad:PL=NEG.
"For God did not send his Son to judge the sins of the world." (Jn 3:17)

Kદ̀m n̄̄ n gōs! "Come and look!" SB
Come:Imp hither cat look!

They often follow the article $l \bar{a} /$ when it ends an $\grave{n}$-clause containing them, but either order is possible:

```
dunia kane ken la na
dūnıyá-kànì k\overline{\varepsilon}n lā nā
world-REL.SG come:IPFV ART hither
"the world which is coming" (Lk 20:35)
ňwādīg-kánì k\overline{\varepsilon}n nā lā
month REL.SG come:IPFv hither art
"next month" SB
```

The VP-final particles can follow gerunds, and may again follow the article:

Ninsaal Biig la lebvg la na
Nịn-sâal Bị̂ig lā lćbùg lā nā
Human:SG child:SG ART return:GER ART hither
"the return of the Son of Man" (Mt 24:27)

### 16.10 "Be" verbs

Bè expresses existence or, with a focussed or foregrounded locative, location. The corresponding negative is always kā'e ( $k \bar{a}$ ' before a complement.)

```
Wínà'am bé. "God exists." (Calque of Ghanaian Pidgin
God ExIST. God de, implying "It'll all work out.")
Àláafù b\varepsilońo=ø.
"She's well." ("Health exists for her.")
Health ExIST=3AN.
Wāad b\varepsiloń. "It's cold."
Cold.weather ExIST.
Dàu_-sō' b\varepsiloń kp\varepsilon̄lá. "There's a man here."
Man-Indf.AN Exist here.
Mam bene moogin. "I'm in the bush." BNY p8
Mām b\varepsiloń n\overline{\varepsilon}}\mathrm{ mōogv̄=n.
1SG.CN EXIST FOC grass:SG=LOC.
Moogin ka mam be. "I'm in the bush." BNY p10
M\nūogv́=n kà mām b\varepsiloń.
Grass:SG=LOC and 1SG.CN EXIST.
```

The copula àeñ̆ ${ }^{\text {ya }}$ takes a predicative complement. Except when VP-final, àen̆ monophthongises to àn̆ (àan̆ before liaison), becoming à before focus-n $\bar{\varepsilon}^{\prime}$. The usual negative is $k a \bar{a} e ~ \sim k a \bar{\prime}$ ', but pū áenn occurs, e.g. in expressing contrasts. The sense may be ascriptive or specifying (cf CGEL p266.) If it is ascriptive, the complement is nonreferring, and normally focussed with $n \bar{\varepsilon}^{\prime}$ if permitted 19.1.2, while in specifying constructions the subject usually has $n$-focus 19.1.1.

```
M á n\overline{\varepsilon} dv́'atà. "I'm a doctor." ("What do you do?")
```

1SG COP FOC doctor:SG.

Mānī_ø áň dú'atà lā. "I'm the doctor." ("Which one is the doctor?") 1SG.CN CAT COP doctor:SG ART.
$\grave{M} k \bar{a}^{\prime} \quad d v ́ ' a t a ̄ a=\varnothing . \quad$ "I'm not a doctor."
1SG NEG.BE doctor:SG=NEG.

Mānī ø áň dv́'atà àmáa fūn pū áňyā=ø.
1SG.CN CAT COP doctor:SG but 2SG.CN NEG.IND COP=NEG.
"I'm a doctor but you aren't."

Nobibisi a mam disun.
Nō-bị́bisì ø án̆ mām dí-sùŋ.
Hen-small:pl cat cop 1sG.CN food-good:SG.
"Chicks are my favourite food." BNY p13

Some adjectives can appear as NP heads of predicative complements after àen̆ ${ }^{\text {ya }}$ and other verbs 16.7.2, but typically àe $\breve{n}^{\text {ya }}$ has a derived manner-adverb or abstract noun as complement instead. In any case, such constructions are ascriptive, and use $n \bar{\varepsilon} /$ where syntactically permissible:

Mam ane sabilig, la'am ne wala $m$ venl hali.
Mām á nē sābılíg, là'am nē wālá m̀ vén̆l hālí.
1SG COP FOC black:SG, together with how 1SG be.beautiful even.
"I am dark, although I am very beautiful." (Sg 1:5)

```
    Lì à ne\overline{ ná'anā.}
    Lì à nह\overline{\varepsilon}}\mathrm{ būgvsígā.
    Lì à nह̄ zāalím.
but Lì àn̆ sú\etaā.
```

"It's easy."
"It's soft."
"It's empty."
"It's good." 19.1.2

Absolute clauses and even content clauses may be complements of àe $\breve{n}^{\text {ya }}$ :
$M$ diib ane ye $m$ tom one tomi $m$ la na boodim naae.
$M$ dīıb á nē yé m̀ túm j̀nì tùmì=m lā nā bóodìmø nāe. 1SG food COP FOC that 1SG work REL.AN send=1SG ART hither will CAT finish.
"My food is that I do the will of him who sent me completely." (Jn 4:34)

Àen̆ ${ }^{\text {ya }}$ can also take AdvPs as subjects:

Zịná à ne dá'a. "Today is market."
Today COP FOC market:SG.

Man nopi ya si'em la ane bedego.
Mán nò $\overline{1}=y a ́ ~ s i ̣ ' ə m ~ l a ̄ ~ a ́ ~ n \bar{\varepsilon} ~ b \varepsilon ́ d v g u ̄ . ~$
1SG:NZ love=2PL INDF.ADV ART COP FOC much.
"How much I love you, is a lot." (2 Cor 7:3, 1976)

## 17 Clauses

Typical clauses show a subject NP followed by a VP. Kusaal is SVO; deviations may occur by preposing or dislocation. Any nominaliser particles (ǹ or yà') immediately follow subjects; the clause-linkers kà "and", y $\bar{\varepsilon}$ "that", and catenator-n precede the subject, which is always ellipted after $n$ and may be ellipted after kà. $Y \bar{\varepsilon}$ and $n$ are always subordinating, but kà may be coordinating or subordinating, with a great variety of meanings. Clause adjuncts may precede, follow, or occupy the clause-linker position in main/content clauses. For "emphatics" see 19.6.

Criteria for describing a clause as main or subordinate do not always neatly align. In principle, independency marking 16.5 marks clauses 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.

|  | independency-marked | not independency-marked |
| :--- | :--- | :--- |
| main $\underline{17.1}$ | main without kà | main with initial kà |
| complementised $\underline{17.4}$ | $y \bar{\varepsilon} /$ kà content | $y \bar{\varepsilon} / k a ̀$ purpose |
| catenated $\underline{17.2}$ |  | $n / k a ̀$ catenation |
| nominalised |  | ǹ absolute/relative $\underline{17.3}$ <br> yà' in conditionals $\underline{17.1 .4}$ |

Main and content clauses can be statements, questions or commands. They have structural possibilities not possible for other clause types, including lacking VPs.

Complementised clauses are introduced by y $\bar{\varepsilon}$ "that", less often kà. Purpose clauses lack independency marking, have imperative VPs, 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.

Ka o ba' ne o ma pu bay ye o kpelim yaa.
Kà ò bā' né ò mà pū báy yé ò kpèlìm 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 resemble serial verb constructions. When introduced by $n$ they ellipt their subjects. They lack independency and tense marking, and are part of their main clauses for focus. The main clause may be semantically subordinate.

Clauses with $\grave{n}$ or yà＇after the subject are nominalised．They have independent tense－marking．Being nominalised，they are coordinated with n $\bar{\varepsilon}$ ，not kà：
．．．pa＇ali ba［on daa nye Zugsob la suorin，ka o pian＇tis o si＇em］，
$\boldsymbol{n \varepsilon}$［Saul n mool Yesu ycla ne sunkpi＇eup Damaskus tejin si＇em．］
．．．pá＇alì＝bā ón dāa n̆ȳ̄ Zūg－sób lā sūөrí＝n，kà ò pīān̆＇〔ø
．．．teach＝3PL 3AN：NZ TNS see Lord ART road：SG＝LOC and 3AN speak cat tísò＝ø sị̀＇əm，n̄̄ Saul＝n mōol Yesu yćlà n $\bar{\varepsilon}$ sūn̆－kpị̂＇oך give＝3AN INDF．ADV with Saul＝nz proclaim Jesus about with heart－strength
Damaskus té $\bar{\imath}=n \quad s i ̣ ̀ ' \partial m$ ．
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 main－clause－final elements：

Ti pu bood ye dau kaya aan ti na＇aba．
Tì pū bôod ȳ̄ dáu⿱㇒日－kàjā áan̆ 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）
ka pu nar ka ba buolim ye Tvmtumma．
kà $p \bar{v} \quad$ nár kà bà bú $ө l i ̀=m y \bar{\varepsilon}$ Túm－tv̄mmā＝ø．
and Neg．IND must and 3PL call＝1SG that worker：SG＝NEG．
＂and I ought not to be called an apostle＂（1 Cor 15：9）

Subordinate clauses can be freely embedded，except that catenated clauses cannot follow complementised clauses at the same level：

M pu bood［ye fo ti yel beog daar［ye fune ke［ka mam Abram lieb bvmmora．］］］ $\grave{M} p \bar{u} \quad$ bôod yé fù tí yèl bēog dāar y $\bar{\varepsilon}$
1SG NEG．IND want that 2SG once say tomorrow day．after．tomorrow that
fūnī ø ké kà mām Abram lị̂əb būn－mórā＝ø．
2SG．CN CAT cause and 1SG Abram become thing－haver：SG＝NEG．
＂I do not want you some day saying that it was you who made me，Abram， rich．＂（Gn 14：23）［Catenated within content within purpose］
［ban mi＇［ye biig la kpine la］］zug
bán mị＇y $\begin{gathered} \\ \varepsilon\end{gathered}$ bịig lā kpị nē lā zúg
3PL：NZ know that child：SG ART die FOC ART upon
＂because they knew the child was dead＂（Lk 8：53）［Content within nominalised］

Kusaal is not pro-drop. Impersonal constructions require a dummy subject lì :
Lì tùl. $\quad$ "It [weather] is hot."
3IN be.hot.

Lì àn̆ súpā.
3IN COP good:ADV.

Lì nàr kà fù kūl. "It's necessary for you to go home." 3IN must and 2SG go.home.

Lì may be omitted in yà'-clauses:

Ya'a ka'ane alaa, m naan kv yeline ya ye ...

If NEG.BE=DP ADv:thus, 1 SG then NEG.IRR say=DP=2PL that...
"If it were not so, I would not have told you that ..." (Jn 14:2)

Zi'isige 16.4 appears without a subject in the meaning "unbeknownst."
Subject pronouns are always ellipted after catenator-n. Except in content clauses, they are regularly ellipted after kà when coreferential with the subject of the preceding clause; M spreading then follows kà. Conversations may be reported Kà ò y źl ... kà ò yćl ..., each ò marking a switch of speaker. The implication of subject change can override gender agreement (which is no longer robust 12.3.1) even in the face of semantic inappropriateness:

Pư'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
but Pư'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 ellipted pronoun may refer to the subject of a preposed absolute clause:

Ban wom ne'عŋa la ka sin.
Bán wòm nē'pá lá kà sịn.
3PL:NZ hear DEMST.IN ART and be.silent.
"After they heard this they fell silent." (Acts 11:18)

See 17.1.3 for ellipsis and movement of subject pronouns in commands.
Other subject pronoun ellipsis is informal, and may be "corrected" if speakers' attention is drawn to it. It does not affect meaning. M spreading after ellipted pronouns remains. Such ellipsis may become standardised in greetings or proverbs:

Náe yà $a=\varnothing$ ? "[Have you] finished?"
Finish $\mathrm{PFV}=\mathrm{PQ}$ ?

### 17.1 Main

Main clauses show structural possibilities shared only with content clauses, which are downranked main clauses. For independency marking see 16.5. They may be statements (the unmarked default), questions or commands; some types lack VPs. They are coordinated with kà "and", k $\bar{v} v$ "or", $b \bar{\varepsilon} \varepsilon$ "or"; here $k \bar{v} v$ and $b \bar{\varepsilon} \varepsilon$ are synonymous. With lè $\varepsilon$ "but", or in narrative, kà corresponds to English zero.

### 17.1.1 Clause adjuncts

Clause-level adjuncts precede the subject position. They appear only in main and content clauses, although the preposition wv̄v "like" may take a content clause as complement 15, and the emphatic hālí may not only appear in the prelinker adjunct slot of main clauses but also precede catenator-n 19.6. The position of the negative clitic shows that the clause after àsé $\varepsilon$ is not subordinate in

M kv basif ka fv keyc ases ka fo nipi m zug bareka.
$\grave{M}$ kú bāsí=f kà fù k $\bar{\varepsilon} \eta \varepsilon ́=\varnothing$ àsće kà fù nịì̀ $\grave{m}$ zūg bárıkà. 1SG NEG.IRR leave=2SG and 2SG go=NEG unless and 2SG do 1SG head:SG blessing. "I will not let you go unless you bless me." (Gn 32:26)

Linker adjuncts do not occur along with linker particles at all. They include

| kv̄v | "or" | b̄̄ $\varepsilon$ | "or" |
| :--- | :--- | :--- | :--- |
| dìn zúgō | "therefore" | lìn zúgō | "therefore" |
| àlá zūḡ̄ | "thus" | b̄̄ zúgō | "because" |

Bō zúgō may also appear after an absolute clause, like $z \bar{u} g^{\partial /}$ alone.
Prelinker adjuncts precede any linkers.

| àmáa | "but" | àsć $\varepsilon$ | "unless" |
| :--- | :--- | :--- | :--- |
| àlá zùg | "thus" |  |  |

Ka sieba la' o. Amaa ka sieba yel ye ...
Kà sị̀əbā lá'o=ø. Àmáa kà sịəəbā yźl yē ...
And indF.pl laugh=3AN. But and indf.pl say that...
"Some laughed at him, but others said..." (Acts 17:32)

Wina'am daa pu gani ti ye ti tom dian'ad tuvma, amaa ye ti be nyain.
Wínà'am dāa $p \bar{v} \quad$ gā $\eta i ́=t \bar{~} \quad y \varepsilon ́ ~ t i ̀ ~ t u ́ m ~ d i ̀ a ̄ ' a d ~ t u ́ v m a ̀=\varnothing, ~$
God TNS NEG.IND choose=1PL that 1PL work dirt work=NEG, àmáa yé tì bé n̆yāe.
but that 1pl Exist brightly.
"God did not choose us to act impurely, but to be pure." (1 Thes 4:7)

By ellipsis of shared clause elements, àsć $\varepsilon$ is found before NPs as "except":

So' kae an so'vm ases Wina'am gollim.
Sō' kā'e乞 ø áň súm=ø àsé $\begin{aligned} & \text { Wínà'am gúllīmm. }\end{aligned}$
INDF.AN NEG.BE CAT COP goodness=NEG unless God only.
"No-one is good except God alone [is good]." (Mk 10:18)

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, bo ka m lem lood noدr ya'asc?
Àmáa ón sādıgím kpị lā, bó kà m̀ lém lōod nōor yá'asغ̀=ø=ø? But 3AN:NZ since die ART, what and 1SG again tie:IPFV mouth:SG again=NEG=CQ? "But since he has died, why should I still be fasting?" (2 Sm 12:23)

Some constituents always occur as postlinker adjuncts: yà'-clauses "if/when ..." 17.1.4, sādıgím-clauses 17.3.1, b̄̄ogó "tomorrow" and dāa-sị́' $\varepsilon \bar{\varepsilon}$ " "perhaps." Yà'clauses only appear after main clauses by dislocation. Any time, circumstance, or reason AdvP may appear as a postlinker adjunct, including dìn/lìn zúg "therefore", lì ňyá'aŋ "afterward", lín à sị’əm lā "as things stand", àsīdā "truly" and absolute clauses.

Any AdvP may be placed before the subject by kà-preposing 19.3, so time, circumstance or reason AdvPs may occur before the subject alone, preceded by kà, followed by kà, or both preceded and followed by kà; however, manner or place AdvPs can only precede by preposing: *Mōogú=n mām bé was corrected by WK to

Mōogú=n kà mām bé. "I'm in the bush."
Grass:SG=LOC and 1SG.CN Exist.

In KB dìn/lìn zúg "therefore" is a kà-preposed VP adjunct in 177/371 cases. Constructions without kà probably arose by dìn/lìn zúg encroaching on the role of dìn/lìn zúgō, because kà dìn/lìn zúg is usually followed by kà.

Bō zúg without -כ appears in KB only as preposed bō zúg kà ...? "why ...?":

Bozug ka li aan ala?
"Why is it so?" (Hg 1:9)
Bōzúg kà lì áan̆ àlá=ø?
What on and 3IN Cop thus=CQ?

### 17.1.2 Questions

Content questions (except those with lịa 17.1.5) 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 4.1. $N \bar{\varepsilon}^{\prime}$ may not appear 19.1.2.

There is no special word order, but if the subject contains the interrogative pronoun it must be $n$-focussed 19.1.1, and non-subjects are very often preposed 19.3. Preposing is obligatory for $b \bar{\jmath} z u ́ g, ~ " w h y ? " ~ a n d ~ f o r ~ b \bar{\jmath} ~ w h e n ~ u s e d ~ f o r ~ " w h y ? " ~ " ~$

Fì bôod bó=ø? "What do you want?"
2SG want what=CQ?

Fù bôod línè=ø? "Which do you want?"
2SG want DEM.IN=CQ?

Dāu lā n̆yé ànó'onè=ø? "Whom did the man see?"
Man:SG ART see who=cQ?

Boo maalع?
"What has been done?" (Lk 24:19)
Bōo Ø máalغ̀=ø?
What cat make=cQ?

Ànó'onì ø n̆y $\bar{\varepsilon}$ bịíigà=ø? "Who has seen a child?"
Who cat see child:SG=CQ?

Ànô'on bịigì ø n̆wá=ø? "Whose child is this?"
Who child:SG CAT this=CQ?

Ànô'on kà dāu lā n̆yće=ø? "Whom did the man see?"
Who and man:SG ART see=CQ?

Bó kà fù kúmmà=ø? "Why are you crying?"
What and 2SG weep:IPFV=CQ?

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 polarquestion clitic 4.1. $N \bar{\varepsilon}^{\prime}$ appears as in statements. The answer expected is $\bar{\varepsilon} \varepsilon \check{\varepsilon}$ 17.1.5.

Dāū lā ňyé bịígàa=ø? "Has the man seen a child?"
Man:SG ART see child:SG=PQ?
$\grave{M}$ á $n \bar{\varepsilon}$ dáv̀v=ø?
1SG COP FOC man:SG=PQ?

Bà kùvd nē búvsè $=\varnothing$ ?
3PL kill:IPFV FOC goat:PL=PQ?

Fù $p \bar{u} \quad$ wúmmàa $=\varnothing=\varnothing$ ? "Don't you understand?"
2SG NEG.IND hear:IPFV=NEG=PQ? (expects $\bar{\varepsilon} \varepsilon n ̆, ~ h e r e ~ " n o ") ~$

The second type follows the ordinary statement form with either bé $\varepsilon$ "or" (expecting disagreement) or kúv "or" (expecting agreement; rare in NT/KB):

Dāu lā n̆yé bịig kúv=ø?
Man:SG ART see child:SG or=PQ?
"Has the man seen a child?" (I expect so.)

Dāun lā n̆yé bịị bé $=\varnothing$ ?
Man:SG ART see child:SG or=PQ?
"Has the man seen a child?" (I expect not.)

### 17.1.3 Commands

For indirect commands, see 17.4. In direct commands the subject is 2 nd person: 2 sg pronouns are deleted, and 2 pl pronouns moved to immediately after the verb, assuming the liaison-word form ${ }^{\text {ya }}$ 4.2. Thus

Fì gós bịig lā. "You (sg) have looked at the child."
2SG look.at child:SG ART.

Yà gós bịig lā. "You (pl) have looked at the child."
2PL look.at child:SG ART.
but Gòsìm bịig lā! "Look (sg) at the child!"
Look.at:IMP child:SG ART!

Gòsımī=ø bịìig lā! "Look (pl) at the child!"
Look.at:IMP=2PL.sub child:SG ART!

Dā gōs bịig láa=ø! "Don't (sg) look at the child!"
NEG.IMP look child:SG ART=NEG!

Dā $\quad$ ōs $s \overline{=}=\varnothing \quad$ bịig láa $=\varnothing$ !
NEG.IMP look=2PL.SUB child:SG ART=NEG!
"Don't (pl) look down!"
$D \bar{a} \quad g \bar{\partial} s \bar{\varepsilon}=\varnothing!\quad$ "Don't (sg) look."
NEG.IMP look=NEG!

Dā gōsī=yá=ø! "Don't (pl) look."
NEG.IMP look=2PL.SUB=NEG!
$2 \mathrm{sg} / 2 \mathrm{pl}$ subject pronouns are not changed after yà'-clauses:

Fo ya'a mor pu'a, fon da mood ye fo bas oo.
Fù yá' mōr pu'ā, fūn dā mōod yé fù básō=o=ø.
2SG if have wife:SG, 2SG NEG.IMP struggle:IPFV that 2SG abandon=3AN=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 17.4.2, even when the addressee is the same as in the original utterance:

Ò yء̀l y乏́ bà gòsìm t $\quad \bar{\varepsilon} \eta \bar{\imath}=n$.
3AN say that 3PL look:IMP ground:SG=Loc.
"She said to them: Look down!" WK

Ò yèl yé fù gòsìm t $\quad \bar{\varepsilon} \eta \bar{\imath}=n$.
3AN say that 2SG look:IMP ground:SG=LOC.
"She said to you sG: Look down!"

Some speakers keep postposed ${ }^{\text {ya }}$ after the verb even when there is a pronoun subject before it; such speakers also repeat ya in catenated clauses.

Ò yc̀l yć bà gòsımī $=\varnothing \quad t \bar{\varepsilon} \eta \bar{\imath}=n$.
3AN say that 3PL look:IMP=2PL.SUB ground:SG=LOC.
"He said to them: Look down!"

Kغ̀mì=ø nā $\quad n \quad g \bar{\partial} s \bar{\imath}=\varnothing!$
Come:IMP=2PL.SUB hither cat look=2PL.sub!
"Come (ye) and look!" (WK Kèmì nā n gōs!)

Direct commands consisting of a verb alone or with a following postposed subject pronoun occasionally end in a LF like that preceding a negative clitic:

## Gòsımā! <br> Gòsımī=yá!

"Look!"
"Look! pl

### 17.1.4 Conditionals

Conditional clauses have a yà'-clause as postlinker adjunct, after any other adjuncts. The main clause can be of any type, including a command or a question.

Fì yá' gōs kpēlá, bó kà fù n̆yz̄tá=ø?
2SG if look here, what and 2SG see:IPFV=CQ?
"If you look here, what do you see?"

Yà'-clauses cannot be coordinated, but there may be several in a main clause:

Ka ligidi la ya'a po'og, m ya'a ti leb na, m na yoof.
Kà lịgıdī lā yá' pò'og, m̀ yá' tì lèb nā, m̀ ná yóv=f.
And money art if get.small, 1SG if once return hither, 1SG IRR pay=2SG.
"If the money runs short, once 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:

Fo ya'a mor pu'a, fon da mood ye fo bas oo.
Fò yá' mōr pư'ā, fōn dā mōod yé fù básō=o=ø.
2SG if have wife:SG, 2SG NEG.IMP struggle:IPFV that 2SG abandon=3AN=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 kayaa.
Dìn-zúg lì nāan án̆ súm bà yá' pū dv̂'a=n dáư-kàクáa=ø.
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)

Yà'-clauses express tense independently. They can have irrealis mood, but an indicative event-perfective need not have past reference:

Fv ya'a na dollimi key, m na keך.
Fù yá' nà dōllí=mī $\quad \varnothing$ k $\bar{\varepsilon} \eta$, m̀ ná $k \bar{\varepsilon} \eta$.
2SG if IRR accompany=1SG CAT go, 1SG IRR go.
"If you will go with me, I will go." (Jgs 4:8)

M ya'a pv keje, Sunid la kv kén ya ni naa.
M̀ yá' pū kēŋ́́=ø, sūŋīd lā kú kéعn̆ 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 $n^{\varepsilon} 16.2 .2$, beside tense, is used to express modal remoteness (cf CGEL pp148ff), describing a hypothetical or unlikely state of affairs. With näan, the sense is contrary-to-fact. It can attach to any verb form except imperatives. $N^{\varepsilon}$ in a first VP is usually repeated in following catenated clauses. $N^{\varepsilon}$ appears most often in yà'-clauses, but can occur elsewhere:

Man boodin $n \varepsilon$ yaname naan aan ma'asiga bec yaname naan aan tuvliga.
Mān bóวdī $=n n \bar{\varepsilon}$ yānámì nāan âa=n mā'asígā bē $\varepsilon$
1SG.CN want=DP that 2PL:NZ then COP=DP cold:ADV or
yānámì nāan âa=n tūvlígā.
2PL:NZ then COP=DP hot:ADV.
"I might wish you had been cold or you had been hot." (Rv 3:15)

Tense-slot adjunct nāan "in that case, it being so" is distinct from ňyāan "next, then" (from ňyá'an ${ }^{\mathrm{a}}$ "behind"), but before $2016 \check{n} y a ̄ a n ~ o f t e n ~ a p p e a r s ~ a s ~ n a ̄ a n: ~$

Fu na ki'is man noor atan' ka noraug naan [nyaan KB] kaas noor ayi. Fù ná kī'ıs mān nóvr àtán̆' kà n̄̄-dâvg n̆yāan kāas nóvr àyịi'. 2SG IRR deny 1SG.CN time:SG NUM:three and cock:SG next cry time:SG nUM:two. "You will thrice deny me before the cock crows twice." (Mk 14:30, 1996)

In KB nāan is usually written naane before liaison words and naan elsewhere.

In subordinate clauses KB usually simply has irrealis nà where older versions had nāan. Modal nāan most often appears in conditional main clauses; in main clauses after kà, nāan without $n^{\varepsilon}$ often represents ňyāan.
$N a \bar{a} n$ without $n^{\varepsilon}$ is often effectively equivalent to yà' "if/when."

Li an sum ye dau yinne naan kpi nidib la ysla gaad ...
Lì àn̆ súm yē dāū yīnní nāan kpị́nị̃dīb lā yélà 乙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)

Noŋir lem kae' gaad nidi naan kpi o zuanam zugo.
Nòjìr lém kā'e $\quad$ Ø gâad nị̣dí=ø nāan kpị ò zưà-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)

Nāan with $n^{\varepsilon}$ expresses contrary-to-fact, as in conditional clauses:

Li su'm ka fu daa naan zaŋin m ligidi $n$ su'an banki ni.
Lì sù'm kà fù dāa nāan záyí=nখ m̀ lịgrdī $n$ sū'a=n bápkì 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 means "if only":

M zugdaan la ya'a naan siaki keך nyesn nodi'es la be Samaria la!
M̀ zūg-dâan lā yá' nāan síákì ø k $\bar{\varepsilon} \eta \smile \varnothing ~ n ̆ y \varepsilon \bar{\varepsilon} \varepsilon=n$
1Sg head-owner:SG ART if then agree cat go cat see=dP
nó-dị̂'əs lá」ø b̀̀ 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 Kgs 5:3)

### 17.1.4.1 Open

Conditional clauses without discontinuous-past $n^{\varepsilon}$ or nāan express "if", and also "when" in the case of main clauses with present or future reference. With main clauses with past reference, yà' is only used for conditionals; for "when", absolute clauses are used 17.3.1.

Fù yá' sinàk, tì ná dīgılí=f.
2 2SG if agree, 1PL IRR lay.down=2SG.
"If you agree, we'll put you to bed [i.e. admit you to hospital.]"

Ka Kristo ya'a da pv vv'vg kumine, alaa ti labasvp la moolvg la ane zaalim.
Kà Kristo yá' dà pū vū'vg $\quad k u ̄ m i ̄=n \varepsilon ́=\varnothing$, àláa tì làbà-sòn And Christ if tNS NEG.IND come.alive death=LOC=NEG, ADv:thus 1PL news-good:SG lā móslv̀g 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)

Nid ya' a tom tuvma, o di'ed yood.
Nịd yá' tùm tūumā, ò dị'əd yōod.
Person:SG if work:IPFV work, 3AN receive:IPFV pay.
"If a person works, he gets pay." (Rom 4:4)

Beog ya'a nie fo na wom o pian'ad.
Bēog yá' nịe, fù ná wúm ò pìàn̆'ad.
Tomorrow if appear, 2SG IRR hear 3AN speech.
"When tomorrow comes, you will hear his words." (Acts 25:22)

### 17.1.4.2 Hypothetical

If discontinuous-past $n^{\varepsilon}$ occurs in the yà'-clause and the main clause has irrealis mood without näan, the meaning is hypothetical. In the 1976 NT the main clause also has $n^{\varepsilon}$. KB may omit $n^{\varepsilon}$ in the main clause, and even the yà'-clause.

Wief ya'a sigin li ni, li zuluy na paaen o salabir.
Wịəf yá' sịgí=n lì nī, lì zùlv̀ク ná páa=n ò sàlıbìr.
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." (Rv 14:20, 1976)
KB: Ka wief ya'a sigi li ni, li zulvך na paae o salibir.

Nobir ya'a yelin ye, on pu a nu'ug la zug, o ka' ningbin nii, lin ku nyapin keen ka o ka' niggbin nii.
Nóbìr yá' yèlī=n yē, ón pū án̆ nû'ug lā zúg,
Leg:sg if say=DP that 3AN:NZ NEG.IND Cop hand:SG ART upon,
ò kā' nịn-gbị̀ níl=ø, līn kv́ n̆yā $\bar{\imath} \imath=n \smile \quad \varnothing$
3AN NEG.BE body:SG LOC=NEG, DEM.IN NEG.IRR accomplish=DP CAT
$k \varepsilon ́ \varepsilon=n \quad$ kà ò $k \bar{a}^{\prime} \quad n i ̣ ́ n-g b i ̣ \eta ~ n i ́ l=\varnothing . ~$
cause=DP and 3AN NEG.BE body: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)

### 17.1.4.3 Contrary-to-fact

A main clause with nāan implies contrary-to-fact. Both clauses have $n^{\varepsilon}$ :

Man ya'a pv kesn na tu'asini ba, ba naan kv morin taale.
Mān yá' $p \bar{v} \quad k \bar{\varepsilon} \varepsilon=n \quad n a \bar{\smile} \quad \varnothing \quad$ tú'asī=ní=bā,bà nāan kú
1SG.CN if NEG.IND come=DP hither CAT talk=DP=3PL, 3PL then NEG.IRR
$m \bar{r} r \bar{\imath}=n$ tâall $\bar{\varepsilon}=\varnothing$.
have=DP fault:SG=NEG.
"Had I not come to speak to them, they would not have been guilty." (Jn 15:22)

M ya'a morin sv'vgv m nu'ugin maan kvonif nannanna.
$\grave{M}$ yá' mōrī=n sú'vgì $\grave{m}$ nú'ugī=n, ̀̀ nāan $k \bar{v} v=n i ́=f$ 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." (Nm 22:29)

Past main clauses may show irrealis mood with past tense markers instead:

Bozugo Josua ya'a da tisini ba vv'vsvm zin'ig, Wina'am da kv lem pian' dabis-si'a yela ya'ase.
Bō zúgō Josua yá' dà tìsī=ní=bā vv̄'vsím zị̂n̆'ig, Wínà'am dá kù
Because Joshua if tws give=DP=3PL resting place:SG, God tNS NEG.IRR
l̄̄m pīā̆̆̄' dábìs-sịi'a yźlà yà'as $\bar{\varepsilon}=\varnothing$.
again speak day-INDF.in 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)

Ò dāa ná zāb nâ'ab lā.
3AN TNS IRR fight chief:SG ART.
"He would have fought the chief (but didn't.)" WK

### 17.1.5 Verbless clauses

Identificational clauses have the form NP + catenator- $n+$ deictic particle or wà nā "this here." The NP may be an interrogative pronoun.

Kùlìnì ø lā.
"That is a door."
Door:SG cat that.

Kùlìnì Ø wá nā. "This here is a door."
Door:Sg cat this hither.
$B \bar{\varepsilon} o g \bar{v} \smile \varnothing$ lā.
"See you tomorrow" ("That's tomorrow.")
Tomorrow cat that.

Bう̄ə乙ø lá=ø? "What's that?"
What cat that=CQ?

Ňwāamīs Ø n̆wá!
Monkey:pl cat this!
"Monkeys!" [w̃ã:misa]
(a passenger in my car, on suddenly catching sight of some)

Identificational clauses may append clauses by catenation:

Anv'on nwaa yisid nidib tvombe'عdi basida?

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?
Yह̄l-bóد Ø n̆wá kà Wínà'am ké kà lì páa=tì=ø?
Matter-what cat this and God cause and 3IN arrive=1PL=CQ?
"What is this that God has made to come to us?" (Gn 42:28)

Indentificational clauses can be embedded in verbal clauses:

Ya ningid boo nwa?
Yà nị́nìd bóo ø ňwá=ø?
2PL do:IPFV what CAT this=CQ?
"What is this you are doing?" (Neh 2:19)

Fu maal boo la tis mam?
Fù mâal bóo $\varnothing$ lā $\varnothing$ tís màm=ø?
2SG make what cat that cat give me=CQ?
"What is this that you have done to me?" (Nm 23:11)

Lịa clauses have the form X + lịa, meaning "where is X?" Although I often heard lịa in spontaneous conversation in the 1990's, no examples appear in the 1996 or 2016 Bible versions.

Fù mà là lị́a=ø? "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 lā lị́a=ø?
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 clitic 4.1 :
$\grave{M}$ pư'ā né $\grave{m}$ bịiis $\bar{\varepsilon}=\varnothing$ !
1SG wife:SG with 1SG child:PL=VOC!
"My wife and my children!"
$\grave{M}$ dị̀əmmā=ø, bó kà fù kú $\theta$ sìdà $=\varnothing$ ?
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 n̆wà "this":

| Pư'ā n̆wá! | "Woman!" |
| :--- | :--- |
| Zōn n̆wá | "Fools!" |

Some particles occur characteristically as complete utterances. Some are onomatopoeic; others are widely shared among local languages.

Tò.
Báp.
Ṅfá!
"Yes" is $\bar{\varepsilon} \varepsilon \check{n} ;$ "No" is áyìı. The reply agrees or disagrees with the question, so that if the question is negative, the usage differs from English:

Lì nàa nع́ $\varepsilon=\varnothing$ ? "Is it finished?"
3IN finish $\mathrm{FOC=PQ}$ ?
$\bar{\varepsilon} \varepsilon \check{n}$.
Áyì.

Lì $p \bar{u} \quad$ nāée $=\varnothing=\varnothing$ ?
3IN NEG.IND finish=NEG=PQ?
$\bar{\varepsilon} \varepsilon \check{n}$.
Áyìı. "Yes."
"No."
"Yes."
"No"
"Isn't it finished?"
.

### 17.2 Catenated

A clause may be followed by one or more VPs, each introduced by catenator- $n$; for the realisation of this particle see 4.2. Toende Kusaal (like Dagaare, Bodomo 1997) has zero throughout corresponding to catenator-n, but most other Western OtiVolta 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. For example, substitution of kà for catenator-n makes it impossible to interpret "auxiliary" verbs in the specialised senses associated with $n$-catenation:

M̀ zání $̀$ m̀ nú'ugì ø sī'ıs dāká lā.
1SG pick.up 1SG hand:SG CAT touch box:SG ART.
"I touched the box with my hand."
?? M̀ zání m̀̀ nû'ug kà sī'ıs dāká lā.
"I picked up my hand and touched the box."

M dāa kûes bùjù $\varnothing$ tís dv́'atà.
1SG TNS sell donkey:SG cat give doctor:SG.
"I sold a donkey to the doctor."
?? M̀ dāa kûes bùn kà tís dv́'atà.
"I sold a donkey and gave it to the doctor."

However, $n$-catenation shows much greater flexibility than typical serial verb constructions: complements, VP adjuncts, and even subordinate clauses introduced by kà may be incorporated within chains of catenated VPs, and even verbless clauses may be followed by catenated VPs:

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-sō' dūe $n$ zị̂e lá'asv̀g lā nị̄dīb sísv̀vgv̄=n, $n$ án̆
And man-INDF.AN rise cat stand assembly:SG ART person:PL among=LOC, CAT COP Parisee nịd kà ò yū'vr bû̀n Gamaliel, $n$ án̆ ónì pà'an Pharisee person:SG and 3AN name:SG call:IPFV Gamaliel, cat cop rel.An teach:IPFV Wínà'am wádà lā yélà, kà lém àn̆ yō'vr dâan nịdīb 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)

Amaa ka Zugsob malek daa kej n yo'og sarega doog za'anoor la yu'un kan, $n$ more ba $n$ yiis yiy.
Àmáa kà Zūg-sób málịāk dāa k $\bar{\varepsilon} \eta n$ yô'og sārıgá dôวg
But and Lord angel:sg tns go cat open prison:SG house:SG
zá'-nōor lā yū'vŋ-kán, $n$ mōrí=bā $n$ yịis yị́v.
compound-mouth:SG ART night-DEM.SG, CAT have=3PL 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)

Ano'on nwaa yisid nidib tovmbe'عdi basida?
Ànô'on乞ø n̆wáa $\varnothing$ yị̄sīd nịdīb tôvm-b̄̄' $\varepsilon d \bar{i} \_\varnothing$ 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. The catenated VP is itself a clause with an ellipted subject, identical to that of the preceding clause; this analysis is supported by the existence of clearly parallel catenation constructions using kà in place of catenator- $n$. 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 that catenator-n originated as a non-finite marker: Niggli, for example, calls the Mooré n+verb construction infinitif, and Canu, who calls it the "état neutre" (p272), confirms that it is used in citation and in one-word answers to questions (p175) and in constructions like ēm dátā nd̄̄ "je désire manger."

Catenation is a closer relationship than complementisation; mood and aspect are usually determined by the first VP, which carries the tense and polarity particles which apply to the entire catenation, but (especially in $n$-catenation) each VP retains discontinuous-past $n^{\varepsilon}$, 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. Catenation seems always to involve semantic subordination, and behaves as a single unit with regard to focus. 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. Furthermore, the order of perfectives expressing events must mirror the order of the events.

### 17.2.1 $\boldsymbol{N}$-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 Nịnn-sâal Bịig k $\bar{\varepsilon} n \quad n a ̄ \smile \varnothing$ dít kà nūud... And human: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' yє fupiela zi'e ba san'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.

Amaa m po mor antu'a zugv o yela na sobi tis na'atita'ar laa.

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)

Kèm ø tí $\check{n} y \bar{\varepsilon}$ dó'atà. "Go and see the doctor."
Go:Imp cat once see doctor:sg.

Man ya'a pv keغn na tu'asini ba ...
Mān yá' $p \bar{v} \quad k \bar{\varepsilon} \varepsilon=n \quad n a ̄ \smile \varnothing$ tú'asī=ní=bā...
1SG.CN if NEG.IND come=DP hither cat talk=DP=3PL ...
"If I had not come to talk to them ..." (Jn 15:22): note DP on both verbs.

Catenated VPs can be coordinated with kà "and":
ka key ... n ian'asid ka pian'ad n du'osid Wina'am yu'ur su'upa.
kà kēך ...n īān̆'asíd kà pìān̆'ad $n$ dū'өsíd Wínà'am yô'vr sújā. 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 meja.
Sógìà-sō' kā'e $n$ túm kà yōod ò mēŋá=ø.
Soldier-INDF.AN NEG.BE CAT work:IPFV and pay:IPFV 3AN self=NEG.
"No soldier works and pays for himself." (1 Cor 9:7, 1976)

The preverb $t i$ is often found with non-initial VPs in $n$-catenation.
Certain verbs have characteristic specialised meanings in $n$-catenation. Dualaspect verbs agree in aspect with the main VP verb.

The following precede the (semantically) main VP:
Àen̆́ya "be something/somehow" precedes a $n$-catenation in clefting 19.2.
Bè "exist, be somewhere" + ànịnā "there" + imperfective "be in the process of ..."

Ò bè ànịnā $n$ n̆wê' $\varepsilon d$ bịig lā.
3AN EXIST ADV: there cat beat:IPFV child:SG ART.
"He's currently beating the child."
Dōla/ "accompany in subordinate role, attend"

Bà dòllō=ø ø k $\bar{\varepsilon} \eta$ Bók. "They went to Bawku with him."
3PL follow=3AN cat go Bawku.
$K \bar{\varepsilon} \check{n}$ "come" and $k \bar{\varepsilon} \eta^{\varepsilon /}$ "go" are used as initiators:

M kénì ø pị̀ nû'us. "I went and washed my hands."
1SG go CAT wash hand:PL.

Mị' "know": nàm mị̀' n + pfv "always have X-ed", nàm $z i ̄ 1 n+$ pfv "never have X-ed":

Makir bane buudi paadi ya la nan mi' paae sieba men.
Mākír bànì būudī pāadí=yā lā nám mị'খ $\varnothing$ pāe sịəbā mén.
Testing Rel.PL sort reach:IPFV=2PL ART still know Cat reach indF.pl also.
"Trials of the kind that have reached you have always reached others too."
(1 Cor 10:13)
$\grave{M}$ nám $z \bar{i} \smile \quad \varnothing$ n̆y $\bar{\varepsilon} g b i ̄ g i ̄ m n \bar{\varepsilon}=\varnothing$.
1SG still neg.know cat see lion:SG=NEG.
"I've never seen a lion." SB

M̄̄ra/ "have" + object "bringing" with motion verbs:

Dābá_àyópj̀e kà fù mōró=ø Øø k $\bar{\varepsilon}$ nā.
Day:PL NUM:seven and 2SG have=3AN Cat come hither.
"Bring her here in a week." WK
$N a \overline{a n} n^{\varepsilon /}$ "starting from ... do... " takes a locative AdvP followed by a n-catenation:

Ka pu'a la da naane o bvy la zugv sig la ...
Kà pư'ā lá=ø dà nāaní $o ̀ ~ b v ̀ \eta ~ l a ̄ ~ z u ́ g i ̀ ~ ø ~ s i ̣ ̆ g ~ l a ̄ ~$
And woman:SG ART=NZ TNS start.at 3AN donkey:SG ART upon CAT descend ART "When the woman had got off her donkey ..." (Jo 15:18)

Nịŋ wālá literally "do how?" is used in catenation for "how can ...?" (see also 17.2.2):

Ninsaal na niy wala an pupiel Wina'am tuonne? Ninsaal biig na nip wala pv mor taal Wina'am tuonne?
Nịn-sâal ná nị̀p wālá ø àn̆ pú-pị̀l Wínà'am tûөnnغ̀=ø?
Human:Sg IRR do how cat cop holy:SG God before=CQ?
Nị̄n-sâal bị̂ig nà nị̄n wālá $ø ~ p \bar{u}$ mōr tâal Wínà'am tûөnnè=ø? Human:SG child:Sg IRR do how cat neg.Ind have fault:SG God before=CQ? "How can a human being be pure before God? How can the child of a human being not have sin before God?" (Jb 25:4)

Nyyā $\eta^{\varepsilon / ~ " o v e r c o m e " ~ a s ~ a n ~ a u x i l i a r y ~ m e a n s ~ " c a r r y ~ o u t ~ s u c c e s s f u l l y, ~ p r e v a i l ~ i n ": ~}$

Ka m nyap dunia. $\quad$ I have overcome the world." (Jn 16:33)
Kà m̀ n̆yāŋ dūnıyā.
And 1sg overcome world:Sg.

M̀ pū n̆yāŋī ø záb nà'ab láa=ø.
1SG NEG.IND prevail cat fight chief:SG ART=NEG.
"I wasn't able to fight the chief."

Unlike English "can", $\check{n} y \bar{a} \eta^{\varepsilon /}$ 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.
$\grave{M}$ kú n̆yāŋī 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 nyajedin ketin $k a$ nidib voen
wād-línì n̆yāyídī=n $\quad \varnothing$ k $\bar{\varepsilon} t i ́=n \quad$ kà nịdīb v $\bar{v} v=n$
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)
$S u^{\prime} \bar{a}^{\mathrm{a}}$ "conceal" is used for "secretly":

Ka Na'ab Herod su'a buol bajidib la ...
Kà Nà'ab Herod sư'ā乙 ø bûel bāŋīdīb lā ...
And king:sG Herod conceal cat call understander:Plart...
"Herod secretly called for the wise men ..." (Mt 2:7)

Tūn̆'e is a stative single-aspect verb "be able." As a main verb:
ba daa tis ka li zemisi ba pani na tun'e si'em
bà dāa tís kà lì zz̄mísì bà pànì=ø nà tūn̆'ө sị̀əm 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)

Both indicative and irrealis moods can express present ability or inability:
ka li kv tun'e su'a.
kà lì kv́ tūn̆' $\theta$ Ø $\varnothing$ sur'āa=ø.
and 3IN neg.irr be.able cat hide=NEG.
"which cannot be hidden" (Mt 5:14)

Ya na tun'e zin' teŋin la ne ti.
Yà ná tūn̆' $\Theta_{\smile} \varnothing$ zịň'i $t \bar{\varepsilon} \eta \bar{\imath}=n \quad$ lā né tì.
2PL IRR be.able cat be.sitting land:SG=LOC ART with 1PL.
"You can dwell in the land with us." (Gn 34:10)

Fv tun'e nyst si'ela?
Fù tún̆'ө ø n̆y $\begin{gathered}\text { ct } \\ \text { sí'əlàa }=\varnothing \text { ? }\end{gathered}$
2SG be.able cat see:IPFV INDF.IN=PQ?
"Can you see anything?" (Mk 8:23)

O pv tun'e pian'ada.
Ò pū tūn̆'ө乙 $\varnothing$ piā̆̆̆'adá= $\varnothing$.
3AN NEG.IND be.able CAT speak:IPFV=NEG.
"He could not speak." (Lk 1:22)
bozugo ba ku tun'e nyane ba meja.
bō zúgō bà kù tūn̆'ө ø n̆yāŋí bà mēŋá=ø.
because 3pl neg.IRR be.able cat control 3pl self=NEG.
"because they cannot control themselves." (1 Cor 7:5, 1996)

Zà $\eta^{\varepsilon}$ and $n \overline{{ }^{2}} k^{\varepsilon /}$ "pick up, take" with object "using" (of a literal object as instrument)

M̀ nók sú'vgì Ø $\varnothing$ kiá nịm lā.
1sg pick.up knife:SG cat cut meat:SG ART.
"I cut the meat with a knife."

M̀ zání $\grave{m}$ nú'ugì ø sī'ıs dāká lā.
1SG pick.up 1SG hand:SG CAT touch box:SG ART.
"I touched the box with my hand."
"Beginning" verbs naturally precede:

Ka Pita pin'ili pa'ali ba ...
Kà Pita pị̆ň'il $\frown$ pá'alı̀=bā ...
And Peter begin cat teach=3PL ...
"Peter began to tell them." (Acts 11:4)

Tì dépì ø tísò=ø lór.
1 PL precede cat give=3an car.
"We previously gave him a car."

Ka dau so' duoe zi'en la'asvg la svogin ...
Kà dàu-sō' dūe」ø zị̂’ən là'asòg lā sv́vgv̄=n ...
And man-IndF.an rise cat stand.up assembly art among=LOC ...
"And a man (having risen) stood up in the assembly ..." (Acts 5:34)

The following verbs follow the main VP:
Bàs ${ }^{\varepsilon}$ "send/go away" is used for "away, off, out":

Ano'on nwaa yisid nidib tuvmbs'عdi basida?

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)

Gàad ${ }^{\varepsilon}$ "pass, surpass" is used in comparisons:
$\grave{A}-W i n \quad g i ̣ m \quad \varnothing$ gát $\grave{A}-B \bar{v} g \bar{v} r$.
PERS-Awini be.short cat pass:IPFV PERS-Abugri.
"Awini is shorter than Abugri." SB

Fv sid nov mam gat bamaa?
Fù síd nò mām Ø gát bámmáa=ø?
2SG truly love 1SG CAT pass:IPFV DEMST.PL=PQ?
"Do you really love me more than these?" (Jn 21:15)

Gàlìs ${ }^{\varepsilon}$ "get to be too much" (Sāa gálìs yā "There's too much rain"):

Dā kárìm gbánà $\varnothing$ gálısìdā=ø.
NEG.IMP read:IPFV book:PL CAT exceed:IPFV=NEG.
"Don't read books too much."

Là'am ${ }^{\mathrm{m}}$ "together" is also found as a preverb 16.6 and in là'am n $\bar{\varepsilon}$ "together with" $\underline{15}$. As a main verb it means "associate with."
$T i s^{\varepsilon}$ "give" is used for "to, for"; the meaning need not imply "giving", and is simply a way to express an indirect object.

M̀ dāa kûes bùyù ø tís dú'atà.
1SG tNS sell donkey:SG cat give doctor:SG.
"I sold a donkey to the doctor."
 followed by an empty particle $n \bar{\varepsilon}$ unless it has the article $l \bar{a} \prime$ or is a number. The entire sequence $w \bar{\varepsilon} n+$ preposition + complement can be preposed with kà, or dislocated.

Ka o nindaa wenne nintay ne.
Kà ò nị̣n-dáa $w \bar{\varepsilon} n \quad n \bar{\varepsilon}$ nịntāך $n \bar{\varepsilon}$.
And 3AN eye-face:sG resemble with sun:sg like.
"His face is like the sun." (Rv 10:1, 1996: KB Ka o nindaa nwene winnig ne)

Da lo ya nindaase, wenne foosug dim la ninid si'em la.
Dā ló yà nịn-dáas $\bar{\varepsilon}=\varnothing$, w $\bar{n}$ n $\bar{\varepsilon}$ fōosúg dím lá= $\varnothing$
NEG.IMP tie 2PL eye-face:PL=NEG, resemble with puff:GER NULL.PL ART=NZ
nị̀nìd sị̀əəm lā.
do:IPFV INDF.ADV ART.
"Don't screw up your faces like the hypocrites do." (Mt 6:16, 1976)

Yà'as ${ }^{\varepsilon}$ or yà' $a s^{\mathrm{a}}$ "again" is now simply an adverb in KB, even preposable with kà 19.3.
ka m lem yeti ya'as ... "and I say again ..." (Gal 1:9, 1996)
kà m̀ lćm ys̀tì ø yâ'as
and 1SG again say:IPFV CAT again

Ya'as ka m gos ...
"Again I looked ..." (Rv 5:11, 1976)
Yà'as kà m̀ gōs...
Again and 1sG look ...
"Ending" verbs naturally follow the main VP:
Ò dìl Ø nāe.
"He's finished eating."
3AN eat cat finish.

Ò dìl $\varnothing$ 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 kíkịr-bê' $\varepsilon d$-nàm $n$ yịisíd nịd $\quad$ īb.
3AN drive:IPFV fairy-bad-pl CAT expel:IPFV person:PL.
"He drives evil spirits out of people."
$N$ tì pāe + NP/AdvP is "until, up to": hālí n tì pāa zịná "right up until today."

### 17.2.2 Kà-catenation

Certain constructions with a clause introduced by kà 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. Kà-catenated clauses cannot contain focus-n $\bar{\varepsilon}^{\prime}$.
$K \bar{\varepsilon}$ "let, leave off" is used with kà-catenation in the sense "let, cause that." The catenation subject cannot be the same as the main clause subject (in KB the only counterexample is Ti 2:7 kel ka fo mey an zanbinne tisi ba "Let you yourself be a sign to them", where $f v$ is formally a predependent.) The mood of the catenation matches the VP containing $k \bar{\varepsilon}$, though imperative often replaces irrealis mood.

Li da ke ka ba pv nyani kvvo.
Lì dà kè kà bà pū ňyāŋī ø kv́o=ø=ø.
3in tns cause and 3PL NEG.IND prevail cat kill=3AN=NEG.
"This caused them not to be able to kill him." (2 Kgs 11:2)

Ba kudim nipidi lin ye li ke ka ba da nye Kristo kum dapuudir namisvg laa.
Bà kv̄dīm nínìdī=lí yé lì ké kà bà dā n̆y $\bar{\varepsilon}$ Kristo kúm
3PL ever do:IPFV=3IN that 3IN cause and 3PL NEG.IMP see Christ death
dà-pūvdír námısùg láa=ø.
wood-cross:SG suffering ART=NEG.
"They have always been doing this so that they will not experience the suffering of the cross of the death of Christ." (Gal 6:12)
dine na ke ka ba da kpi'ilim.
Dīnī ø ná ké kà bà dā kpī'llímm=ø.
3IN.CN CAT IRR cause and 3PL NEG.IMP finish=NEG.
"That will cause them not to come to an end." (Gn 6:20)

After $k \varepsilon \varepsilon^{\varepsilon}=n$ kà, with discontinuous-past $n^{\varepsilon}$, the catenated clause generally had $n^{\varepsilon}$ in the 1976 Bible, but this is no longer invariable. Aspect usually matches:

Ka li ane wada la ket ka tuvmbs'ed nyst paŋ.
Kà lì à né wādá lā」ø két kà tùvm-b $\bar{\prime} ' \varepsilon d ~ n ̌ y \varepsilon ̄ t ~ p a ́ \eta . ~$
And 3IN 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)

Imperative $k \grave{c}^{a} l^{a}+k a ̀$-clause expresses commands to third or first persons:

Kèl kà ò gōs $t \bar{\varepsilon} \eta \bar{\imath}=n$.
Cause:IMP and 3AN look ground:SG=Loc.
"Let him look down."

Dā ké kà dàbị̄əm bé $\varepsilon=\varnothing$ !
NEG.IMP cause and fear EXIST=NEG.
"Don't be afraid." ("Let fear not exist.")

Kغ̀l [or Kغ̀lí=ø] kà tì pô'vs Wínà'am.
Cause:IMP cause:IMP=2Pl.sub and 1Pl greet God.
"Let us praise God."

Kと̀l kà ... is often ellipted informally, leaving the lack of independency marking as the only sign that the clause is a command:
$\grave{M}$ gōs nịf lā. "Let me look at the eye." (Overheard in clinic)
1SG look.at eye:SG ART.
$\grave{M}$ dígınદ̀ $=\varnothing$ ?
1SG lie.down=PQ?

Ò záb nà'ab lā.
3AN fight chief:SG ART.
"Am I to lie down?" (Overheard in clinic)
No independency imperative -ma
"He should fight the chief."
M spreading after ò but not záb

Mịt is a defective negative verb used only in the imperative. Much its most common use is with kà-catenation as "see that it doesn't happen that ...". In this sense it never appears with the postposed 2 pl subject ${ }^{\text {ya }}$, suggesting that it is impersonal.

Mid ka ya maali ya tovm suma nidib tuon ye ba gos.
Mịt kà yà máalì yà tùvm-sùmà nịdīb tûen yé bà gōs.
NEG.LET.IMP and 2PL make 2PL deed-good:PL person:PL front that 3PL look.at.
"Don't do your good deeds in front of people so they'll look." (Mt 6:1)

X nị̀ $w$ wzlá $n . .$. ? "how can X ...?" has an impersonal variant using a dummy subject in the main clause and the effective subject in kà-catenation.

Li nin wala ka o an David yaana?
Lì nị̀ w w̄̄lá kà ò án̆ David yâayà=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 kà:

M na nip wala ka nye faangire?
$\grave{M}$ ná nị̄ $\quad$ w $\bar{\varepsilon} l a ́ ~ k a ̀ ~ \check{n y} \bar{\varepsilon}$ fāan̆gír $\varepsilon$ = $=\varnothing$ ?
1SG IRR do how and find salvation=CQ?
"How can I find salvation?" (Acts 16:30)

Kà usually replaces $n$ when there is a change of polarity in catenation, but this is not invariable:

Ka dau daa zin'i Listra ni ka pu tun'e kenna.
Kà dāư dāa zịñ'i Listra ní kà pū tūn̆'ө $\varnothing$ k $\bar{\varepsilon} n n a ́=\varnothing$.
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)
but Ya sieba be kpela kv kpii ...
Yà sịəbā bé kpēlá」ø kú kpịi $i=\varnothing$...
2PL INDF.PL EXIST here CAT NEG.IRR die=NEG ...
There are some of you here who will not die ..." (Lk 9:27)

An adnominal kà-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 16.7.1. The sense resembles a non-restrictive relative clause:

Anina ka o nye dau ka o yv'or buon Aneas.
Ànịná kà ò n̆yc̄ dáụ kà ò yū'vr bûөn 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 pv'vsid Wina'am ka li nar ka ya kad saria.
Lì à né yà tāabā bánì pò'vsìd Wínà'am kà lì nár
3IN COP FOC 2PL fellow Rel.PL greet:IPFV God and 3iv 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 17.1.5, its NP can be the anchor; such constructions underlie kà-clefting and preposing.

Yel boo nwa ka Wina'am ke ka li paae ti?
Yह̄l-bóد Ø n̆wá kà Wínà'am ké kà lì páa=tì=ø?
Matter-what cat this and God cause and 3IN arrive=1PL=CQ?
"What is this that God has made to come to us?" (Gn 42:28)

The subject of the catenated clause does not normally refer to the anchor; if it does, the kà-catenation is a resultative predicate:
...ka la'am maan gigis ka ba wum ka pia'ad.
...kà lâ'am màan gígìs kà bà wúm kà pīān̆'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 $\check{n} y \bar{\varepsilon}$ the construction means "see $a s$ ":
$\grave{M}$ dāa n̆yz̄ dāu lá kà ò án̆ 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"
$\grave{M}$ dāa $p \bar{n}$ ňyē dāu lá kà ò án̆ ná'abā=ø.
1SG TNS NEG.IND see man:SG ART and 3AN Cop chief:SG=NEG.
"I didn't see the man as a chief." KT

## $17.3 \dot{N}$-nominalised

Insertion of $\grave{n} \mathrm{NZ} \underline{4.2}$ after the subject nominalises an original clause "X", producing an absolute clause signifying "it being the fact that X." $N$-clauses are also the basis of relative clauses, but $n$ often fuses with a preceding demonstrative to create what is synchronically simply a relative pronoun.
$\dot{N}$-clauses have independent tense marking (but relative to the narrative timeline within narrative 16.2.4.) Irrealis mood replaces imperative:

Yaname na mor sam si'a ane ye ya nop taaba.
Yānámì nà mōr sām-sị́'a á nē yé yà nón tāabā.
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)
$\grave{N}$-clauses cannot contain focus particles, but relative pronouns are often preposed with kà. Contrastive pronouns can be subjects of $\grave{n}$-clauses:
wuu mane a si'em la.
"as I am." (1 Cor 7:7, 1996)
$w \bar{v}$ mánì=ø àn̆ sị'əm lā.
like 1SG.CN=NZ COP INDF.ADV ART.
$\grave{N}$-clauses take no dependents themselves except predependent NPs or articles. Absolute $\grave{n}$-clauses normally take $l \bar{a}{ }^{\prime}$. After relative clauses $l \bar{a} /$ has its usual function:

One du'a $n \varepsilon$ Siig $m \varepsilon$ ane ala.
J̀nì dư'à nē Sīıg mé á né àlà.
ReL.AN bear with spirit:SG also cop foc thus.
"Someone born of the Spirit is like that too." (Jn 3:8)
... amaa o di'ene one tomi m la na
... àmáa ò dị̀ə n $\bar{\varepsilon}$ ónì tùmì $=m$ lā nā
... but 3AN receive FOC REL.AN send=1SG ART hither
"... but he receives him who sent me hither." (Mk 9:37)

The article is not repeated a second time after a NP with $l \bar{a}^{\prime}$. If the clause contains the VP-final particles $n \bar{a}^{\prime}$ "hither" or sà "hence", these may follow an article belonging to the $\grave{n}$-clause. Final negative clitics are dropped unless the $\grave{n}$-clause lacks $l \bar{a} /$ and is itself clause-final in its superordinate clause.

### 17.3.1 Absolute

$\grave{N}$-clauses without relative pronouns or indefinite pronouns used as relatives are absolute clauses, meaning "it being the fact that ...":

Dāu lā záb nâ'ab lā. "The man has fought the chief."
Man:SG ART fight chief:SG ART.
dāu lá=ø zàb nà'ab lā "the man having fought the chief" Man:SG ART=NZ fight chief:SG ART

Their typical use is as AdvPs of time or circumstance. They are the usual way of expressing past "when", as postlinker adjuncts or VP adjuncts. As constituent order usually reflects event order, VP adjuncts are generally preposed with kà 19.3 unless the absolute clause expresses a state of affairs rather than a single event:

J̄n dāa n̆yc̄t súnā, ón dāa án̆ bị-lịa láa=ø?
3AN.CN TNS See:IPFV good:ADV, 3AN:NZ TNS COP child-baby:SG ART=PQ?
"Did she see well when she was a baby?"

Absolute clause tense markers are the same as in the main clause; main clause markers may be omitted if the absolute clause precedes. The time relationship is determined by aspect, 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 yćlì=bā ...
And 3PL:NZ eat:IPFV ART, Jesus say=3PL ...
"As they were eating, Jesus said to them ..." (Mt 26:21)

Ka ban yi la, ka Zugsob malek nie o mej ...
Kà bán yị lā, kà Zūg-sób málịāk nịe ò mēך ...
And 3PL:NZ emerge art and Lord angel:sg appear 3AN self
"After they had left, an angel of the Lord showed himself ..." (Mt 2:13, 1996)

Verbs of perception (but not communication) may take absolute-clause objects:

Ka mat ka nye fon digi fo ziimin la bilim.

And 1SG pass:IPFV and see 2SG:NZ be.lying 2SG blood=LOC ART CAT roll. "I was passing and saw you rolling in your blood." (Ez 16:6)

Either argument of the copula àeñ $\breve{n}^{\text {ya }}$ can be an absolute clause:

Dine ke ka m a saalbiis zua la ane
mam pu sa'amidi ba la'ad ka me pu diti ba ki la.
Dìnì ké kà m̀ án̆ sâal-bịis zưá lā á nē mán ReL.SG cause and 1SG COP smooth-child:PL friend:SG ART COP FOC 1SG:NZ pū sáň'amìdí bà lā'ad kà mé pū dítí bà kị láa=ø. NEG.IND Spoil:IPFV 3PL goods:PL and also neg.Ind eat:IPFV 3PL millet ART=NEG. "What makes me a friend of human beings is that I don't spoil their property or eat their millet." BNY p20

Absolute clauses occur after $n$ tì pāe "up until" and là'am n $\bar{\varepsilon}$ "although":
winnigi yit si'el hali ti paae on lut si'el la
wịnnìgì=ø yị̀t sị'əl hālí $\varnothing$ tì pāe ón lùt sị̀əl lā sun:SG=NZ emerge:IPFV INDFIN until CAT once reach 3AN:NZ fall:IPFV INDF.IN ART "where the sun rises to where the sun sets" (Ps 65:8)

La'am ne on da zan'as la
Là'am nē ón dà zàn̆'as lā
Together with 3AN:NZ tNs refuse ART
"Although he refused" (Gn 39:10)

They may precede the postpositions $z \bar{u} g^{o / ~ " o n ~ a c c o u n t ~ o f ", ~ b o ̄ ~ z u ́ g o ̄ ~ " b e c a u s e ": ~}$

Ban mor deŋ la zug, ba kv di'e baa.
Bán mōr dē $\eta \quad$ lā zúg, bà kì dị́'ə=báa=ø.
3PL:Nz have wound:SG ART upon, 3PL NEG.IRR receive=3PL=NEG.
"Because they have a defect, they will not be accepted." (Lv 22:25)

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 kà.

Yદ̄lá "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=ǹ kpèn̆' Jerusalem lā yćlà
Jesus=nz enter Jerusalem art about
"[about] Jesus entering into Jerusalem."

Ban meed yir
"A house being built"
Bán mèzd yịr
3PL:NZ build:IPFV house:SG

The tense-slot adjunct sādıgím "since, because" appears only after yà' "if" and in absolute clauses:

O ya'a sadigim an Naazir nid, on mid ka o di ...
Ò yá' sādıgím án̆ Naazir nịd, j̄n mịd kà ò dí ...
3AN if since cop Nazirite person:SG, 3AN.CN NEG.LET and 3AN eat ...
"Because he is a Nazirite, he should not eat ..." (Nm 6:4)

Amaa on sadigim kpi la, bo ka m lem lood noor ya'asع?
Àmáa ón sādıgím kpị lā, bó kà m̀ lém lōod nōor yá'as $=\varnothing=\varnothing$ ?
But 3AN:NZ since die ART, what and 1SG again tie:IPFV mouth:SG again=NEG=CQ?
"But since he has died, why should I still be fasting?" (2 Sm 12:23)

For absolute clauses with the tense-slot adjunct nāan see 17.1.4.

### 17.3.2 Relative

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 $\grave{n}$ in the indefinite-pronoun type; unitary relative pronouns have arisen from fusion of a clause-initial short demonstrative pronoun with a following $\grave{n}$.

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 kanc kànì as a relative for human reference (invariably so after proper names), substituting one j̀nì, which cannot be preceded by a cb; the resulting construction is appositional:
o sid one da be ne o la
ò sīd ónì dà bè nó=ø lā
3AN husband:SG REL.AN TNS EXIST with=3AN ART
"her husband, who was there with her" (Gn 3:6) [clearly non-restrictive]

Compounding is impossible with coordinated heads or heads that lack cbs:
nimbane yoda sob Pebil la gbaupun line an nyovopaal dim gbaup la
nịn-bánì yūdá sōb P '-bịll lā gbáunj̄=n línì
person-Rel.PL name:PL write sheep-small:SG ART book:SG=LOC REL.IN
àn̆ n̆yó-vū-pâal dím gbáun lā
cop breath-alive-new:SG NULL.PL book:SG ART
"those whose names are written in the Lamb's book of those with new life" (Rv 21:27)
kokor kaya lini yi arazana ni la na
kùkj̄r-kápā líni yí àràzánà ní lā nā
voice-demst.Sg rel.in emerge sky:SG Loc art hither
"this voice which came from heaven" (2 Pet 1:18, 1976)

Mam Paul ne Timoti bane an Yesu Kristo tomtomnib la
Mām Paul nē Timoti bánì àn̆ Yesu Kristo tóm-tūmníb lā
1sG.cn Paul with Timothy rel.pl cop Jesus Christ 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. Long demonstrative pronouns are never relatives, and short demonstratives are never relatives when non-initial:

Wina'am one gaad si'el wusa la
Wínà'am ónì gàad sị̀'əl wv̄sā lā
God Rel.AN pass indF.in all art
"God who surpasses everything." (Lk 1:35)
wov baji gban'ad si'el si'em la
wōv bāทí=ø gbān̆'ad sị'əl sị’əm lā
like trap:SG=NZ seize:IPFV INDF.IN INDF.ADV ART
"like a trap seizes something" (Lk 21:35)
o na tom tovmnyalima gaad dau kaya tom si'el laa?
ò nà tūm tôvm-n̆yālımá ø gàad dàư-kàná=ø tùm sị̀'əl láa=ø? 3AN IRR work work-grand:PL CAT pass man-DEMST.SG=NZ work INDF.IN ART=PQ? "Will he do miracles greater than this man has?" (Jn 7:31)

O pa'al ne'عnam nyain tis so' wusa on vv'vg ninkan kumin la zug. Ò pà'al nē'-nám n̆yāe $\varnothing$ tís sō' wūsā ón vū'vg nịn-kán 3AN show DEM.IN-PL clearly CAT give indF.AN all 3AN:NZ revive person-dEM.SG $k u ̄ m i ̄=n$ lā zúg.
death=LOC ART upon.
"He has shown this clearly to everyone because he has raised that person from death." (Acts 17:31)

### 17.3.2.1 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. It need not follow the verb directly.

Wina'am nodi'esidib $n$ daa yel si'el $n$ sob Wina'am gbaupin la, ane ameja.
Wínà'am nó-dị́'əsìdìb=n dāa yźl sị̀'əl $n$ sōb
God mouth-receiver:PL=NZ tNS say indF.IN CAT write
Wínà'am gbáunjū=n lā á né àm $\bar{\varepsilon} \eta a ́$.
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)
... fon yslim fon nip li si'el.
... fūn yélìm fún nị̀̀̀̀=lī SỊ'əl.
... 2SG.CN say:IMP 2SG:NZ do=3IN INDF.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, but may be a verb complement or adjunct. It may be a predependent in such constituents, or belong to a subordinate clause within the
relative clause: elements following the pronoun thus cannot be taken as dependents of the entire relative clause.

With few exceptions (e.g. Rv 2-3 man nys so' la "the one I saw" KB), uncompounded indefinite pronouns are specific-indefinite or adverbial:

Ka ban tom so' la kv gaad one tom o la.
Kà bán tùm sō' lā kú gāad ónì tùmò=ø láa=ø.
And 3PL:NZ send indF.AN ART NEG.IRR surpass REL.AN send=3AN ART=NEG.
"One who was sent does not surpass the one who sent him." (Jn 13:16)

M na tisif fon bood si'el wusa.
$\grave{M}$ ná tīsī=f fún bòod sị̀əəl wūsā.
1SG IRR give=2SG 2SG:NZ want INDF.IN all.
"I will give you anything you want." (Mk 6:23)

Most often the pronoun and/or the whole relative clause is the complement of a verb of cognition, reporting, or perception, corresponding to an English "subordinate interrogative clause" (CGEL pp1070ff, pp972ff; so with 20/33 examples of relative clauses with sō' in the 1996 NT.)
m na pa'ali ya on nwene ss'.
$\grave{m}$ ná $p a \bar{\prime} a l \bar{\imath}=y a ́ ~ o ́ n ~ w \bar{\varepsilon} n ~ n \bar{\varepsilon} \quad s o ̄ ' . ~$
1SG IRR teach=2PL 3AN:NZ resemble with indF.an.
"I will teach you what he is like." (Lk 6:47)

David da tom so' ye o bu'osi bay pu'a la an so'.
David dá tùm sō' yé ò bū'өsī ø báy pu'ā lá=ø àn̆ sō'.
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 Sm 11:3)
ya na bay man yel ye $m$ an so' la.
yà ná bāŋ mán yèl yé m̀ àn̆ sō' lā.
2PL IRR understand 1SG:NZ say that 1SG COP INDF.AN ART.
"you will understand who I say that I am." (Jn 8:28)

Gosim ye fo na bay la'abama an so' bunnes?
Gòsìm yé fù ná bāŋ lá'-bàmmá=ø àn̆ sō' bónnè $\varepsilon=\varnothing$ ?
Look:IMP that 2SG IRR understand item-DEMST.PL=NZ COP INDF.AN thing:SG=PQ?
"Can you look and find out whose property these things are?" (Gn 38:25)

Alaa mam me kv yeli ya mam nye noor la so' san'ane.
Àláa mām mé kù y $\bar{\varepsilon} \bar{l} \overline{=}=y a ́ ~ m a ́ n ~ n ̆ y ~ ̄ ̄ n ̄ ̄ o r ~ l a ̄ ~ s o ̄ ' ~ s a ́ ' a n ~ \bar{\varepsilon}=\varnothing$.
Thus 1SG.CN also neg.IRR say=2PL 1SG:NZ see mouth:SG ART INDF.AN among=NEG.
"Thus I too will not tell you from whom I derived the authority." (Mt 21:27)

M na tomi $m B a^{\prime}$ zi'el noor so' ycla la tisi ya
M̀ ná tūmí $\grave{m}$ Bá'=ø zị'əl nōor sō' yźlà $\varnothing \varnothing$ tísì=yā.
1SG IRR send 1SG father:SG=NZ stand mouth:SG INDF.AN about CAT give=2PL.
"I will send whom my Father made a promise about to you." (Lk 24:49)
... bani ba yaaname an sieba
... báyì bà yāa-námì=ø àn̆ sịəbā
... understand 3PL ancestor-PL=NZ COP INDF.PL
"... discover who their ancestors were." (Ezr 2:61)
M mi' man gay sieba la.
M̀ mị́ mán gāŋ sịəbā lā.
1SG know 1SG:NZ choose INDF.PL ART.
"I know those whom I have chosen." (Jn 13:18)
Ón yèl sị'əl lā kā' sídāa=ø.
3AN:NZ say INDF.IN ART NEG.BE truth=NEG.
"What he says is not true" SB

Ya bay man niy si'el la gbinnes?
Yà bán mán nị̀ sị̄əəl lā gbịnnè $\varepsilon=\varnothing$ ?
2PL understand 1SG:NZ do InDF.IN ART meaning:SG=CQ?
"Do you understand the meaning of what I have done?" (Jn 13:12)

75/130 cases of relative sị'əl ${ }^{\text {a }}$ in the Gospels in the 1996 NT are subordinateinterrogative, 33 are abstract uncountable "what(ever)", and 22 locative.

Bozugo ya araza'ase be si'el la, ya potenda me bene anina.
Bō zúgó yà àràzà'así=ø bè sị'əl lā, yà pù-tèn̆dà mé bè né ànị nā.
Because 2PL treasure=NZ EXIST INDF.IN ART, 2PL mind:PL too EXIST FOC there.
"For where your treasure is, your mind is too." (Mt 6:21, 1996)

One key likin zi' on ken si'ela.
J̀nì $k \bar{\varepsilon} \eta l i ̣ ̣ k \bar{\imath}=n \quad z i ̄ 1 \quad$ ón $k \bar{\varepsilon} n \quad s i ̣ ̄ ' ə l \bar{a}=\varnothing$.
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)

Kusaal often uses manner-adverbs as predicative complements, so subordinateinterrogative type relative clauses with $s i ̣ \mid ~ \partial m$ " "somehow" are common:

Kristo da kpii ti yela la ke ka ti bay noŋilim an si'em.
Kristo=ø dà kpịi tì y zlá lā ké kà tì bán nòjìlím=ø àn̆ sị'əm. Christ=nZ tns die 1PL about ART cause and 1PL realise love=NZ COP INDF.ADV "Christ dying for us makes us understand what love is like." (1 Jn 3:16)

The article $\overline{\bar{a}} \bar{\prime}$ has its usual function with $s \underset{1}{\prime}$ 'əm-relative clauses:

M̀ mị́' mán nà nị̆ $\operatorname{sị̆}$ 'əm. "I know what to do."
1SG know 1SG:NZ IRR do INDF.ADV.

M̀ mị́' mán nà nị̄n sị̆'əm 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")
ón bò̀d sị'əm "as he may wish"
3AN:NZ want INDF.ADV
lín àň sị'əm lā "as things are"
3IN:NZ COP INDF.ADV ART

Yغ̀ $l^{\varepsilon}$ "say, tell" takes a $s \grave{̄}$ 'əm-relative clause with lā in the sense "say, tell how something is" and without lā in the sense "say how to do something":

Bà yc̀lō=ø bán nị̀n sị̀'əm lā.
3PL say=3AN 3PL:NZ do INDF.ADV ART.
"They told him what they'd done"

Bà nà y $\bar{\varepsilon} \bar{l} \bar{l}=f$ fón nà nị̣ $\operatorname{sị} ' \partial m$.
3PL IRR tell=2SG 2SG:NZ IRR do INDF.ADV.
"They'll tell you what to do."

Pà'al ${ }^{\varepsilon}$ "teach, inform" nevertheless takes a relative clause object without lā:

Bà pà'alō=ø bán nị̀ sị̀ $\quad$ m. "They informed him of what they'd done." 3PL inform=3AN 3PL:NZ do INDF.ADV.

Gàad ${ }^{\varepsilon}$ "pass, surpass" is used with a sị'əm-clause for comparing actions:

Mam tum bedego gaad ban tom si'em la.
Mām túm bédvgū ø gâad bán tùm sị̀əm lā.
1SG.CN work much CAT pass 3PL:NZ work InDF.ADV ART
"I've worked much harder than (how) they have." (2 Cor 11:23)
$G b a ̄ n ̆ ' e /$ "catch" is used with a sị̀'əm-clause for "decide what to do":

M̀ gbán̆'e mán nà nị̀ sị̂'əm. "I've decided what to do."
1SG seize 1SG:NZ IRR do INDF.ADV.

With verbs of doing, a sị'əm-relative clause can be a manner-adverb:

Bà nị̀ ón yc̀lì=bā sị'əm lā.
3PL do 3AN:NZ tell=3pl INDF.ADV ART.
"They did as he'd told them."
$S \underline{1} \overline{1}^{\prime} \not \partial m$-relative clauses occur often as objects of $w \bar{v} v$ "like", $w \bar{\varepsilon} n$ na/ "resemble"
...ka ya na ke ka nidib dol man wvo ziingba'adibi gban'ad zimi si'em la.
...kà yà ná ké kà nịdīb dōl mān wv̄v zịì $\bar{l}$-gbáň'adìb=ø
...and 3PL IRR cause and person:PL follow 1sG.CN like fish-catcher:PL=NZ
gbān̆'ad zịmí sị'əm lā.
catch:IPFV fish:PL INDF.ADV ART
"... you will make people follow me like fishermen catch fish." (Mt 4:19)

Là'am n $\bar{\varepsilon}$ or hālí n $\bar{\varepsilon}$ with a sị'əm-clause means "although."
In most relative clauses with a compounded indefinite pronoun, the pronoun is part of an AdvP (42/56 of cases of relative sị'a in the 1996 NT.)

M Zugsoba, ti zi' fun ken zin'isi'a la.

1SG Lord=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 nịe ón bè dó-sịia lā ní.
And fire appear 3SG:NZ EXIST room-INDF.IN ART LOC.
"And fire illuminated the room where he was." (Acts 12:7, 1996)

Abraham da nan kae' saysi'a la, ka man pun be.
Abraham dá nàm kā'e sān-sị́a lā, kà mān pón bè.
Abraham tns still neg.be time-indF.in ART, and 1sG.CN already Exist.
"When Abraham still did not exist, I already existed." (Jn 8:58, 1996)

Compounded indefinite pronouns in NPs are not limited to specific-indefinite or subordinate-interrogative types, but such constructions are uncommon.

Tiig walaa bigisid lin an tisi'a.
Tìg wélà $\varnothing$ bịgısìd lín àn̆ 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)

Nidib la da wum Yesu n tum tuum sieba ...
Nịdīb lā dá wòm Yesu=n tùm tùvm-sịəəbā ...
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)

But Fon bood ye fo kv dau so' la ya'a kpi...
Fún bòod yé fù kū dáú-sō' lā yá' kpị...
2SG:NZ want that 2 Sg kill man-IndF.AN ART if die...
"If the man whom you are seeking to kill dies ..." (2 Sm 17:3)

Ban da kv ninsieba da ka' bi'elaa.
Bán dà kū nịn-sịəbà dá kā' bị'əláa=ø.
3PL:NZ tns kill person-Indf.PL tns neg.be few=NEG.
"Those they had killed were not few." (1 Sm 4:10)

Kem tv'vs Samaria na'abi tom ninsieba la na ...
Kદ̀m ø tū'vs Samaria ná'abí=ø tùm nịn-sịəbà lā nā ...
Go:Imp cat meet Samaria king:SG=nz send person-Indf.pl art hither ...
"Go and meet the men sent by the king of Samaria ..." (2 Kgs 1:3)

Ka bugum dit tey tita'asi'a la nyo'os dvt ne agol saŋa dine ka' benne.
Kà bùgóm=ø dìt tén-tītá'-SỊ'a lā ňyô'os dòt né
And fire=NZ eat:IPFV land-big-InDF.IN ART smoke ascend:IPFV FOC
àgól sāŋá dìǹ̀ $k \bar{a}^{\prime} \quad b \bar{\varepsilon} n n \bar{\varepsilon}=\varnothing$.
ADv:upwards time:SG Rel.IN NEG.HAVE end:SG=NEG.
"The smoke of the great city which fire consumes goes up eternally." (Rv 19:3)

Nannanna, yaname daa sob gbauy si'a la ka m sobidi lebisidi ya.
Nānná-nā, yānámì dāa sōb gbáunŋ-Sị'a lá kà m̀ sōbıdī ø lćbısìdī=yá.
Now, 2PL:NZ TNS write letter-INDF.IN ART and 1SG write:IPFV CAT reply:IPFV=2PL.
"Now, it's the letter you wrote that I'm writing back to you about." (1 Cor 7:1)

Indefinite pronouns as relatives may be omitted before ordinal expressions:
ka fon gban'e ziin si'a yiiga la, fon ya'am o noor ...
kà fún gbān̆'e zị̄n-sị́'a yịigá lā, fūn yâ'am ò nōor...
and 2SG:NZ catch fish-INDF.IN firstly ART, 2SG.CN open:IMP 3AN mouth:SG
"and the first fish you catch, open its mouth..." (Mt 17:27)
but Paul $n$ sob gbauy yiiga daan $n$ tis Korint dim la nwa.
Paul=ǹ sōb gbáun yịigá dāan $n$ tís Korint dím lā乙ø n̆wá.
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)

### 17.3.2.2 With relative pronouns

The commonest type of relative clause begins with a relative pronoun as NP or NP predependent. In origin, these pronouns were short demonstrative pronouns followed by ǹ. When the head is the relative clause subject, the forms ònì kànì lìnì bànı̀ result, where $-\boldsymbol{\text { is }}$ due to liaison before nominaliser-ǹ, here always realised $\varnothing$.
$\grave{M}$ n̆yé dáu-kànì=ø zàb nà'ab lā.
1SG see man-DEM.SG=Nz fight chief:SG ART
"I saw the man who fought the chief."

When the pronoun is not itself the subject of the relative clause one might expect the $\grave{n}$ 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
yị-kán kà mām Paul bé lā
house-dem.sg and 1sg.cn Paul exist art
"the house where I, Paul, am" (Rom 16:23, 1976)
on buudi ka Jew dim kis
òn būudí kà Jew dím kịs
dem.an tribe:sg and Jew null.pl hate
"whose tribe the Jews hate" (Lk 10:33, 1996)

However, frequently even in older written materials, and almost invariably in KB, the pre-liaison forms are generalised to these cases too:
gbaup kane ka dau la sob la
for gbàup-kàn kà dāu lā sōb lā
letter-dem.SG and man:SG ART write ART
"the letter which the man has written"
dau kanc yadda nipiri pv zu'oe
i.e. dàư-kànì=ø yàddā-nípìrì $=\varnothing \quad p \bar{v} \quad z u ́ ' e$ man-DEM.SG=NZ assent-doing:SG=NZ NEG.IND become.great
"a man whose faith is not great..." (Mt 14:31), with nominaliser-n twice

It is thus best to regard ònì kànì lìnì bànì synchronically simply as subordinating relative pronouns, with j̀n kàn lìn bàn as allomorphs:

M̆ n̆ý́ dáư-kànì 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- $\grave{n}$ 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:
bànì zàb nà'ab lā "those who fought the chief"
REL.PL fight chief:SG ART

M̆ n̆yć dáu-kànì zàb nà'ab lā.
1SG see man-Rel.SG fight chief:SG ART
"I saw the man who fought the chief."
nimbane yoda sob Pebil la gbaupon line an nyovopaal dim gbaup la
 person-Rel.PL name:PL write sheep-small:SG ART book:SG=LOC REL.IN àn̆ n̆yó-v̄̄-pâal dím gbáưŋ lā cop breath-alive-new:SG NULL.PL book:SG ART
"those whose names are written in the Lamb's book of new life" (Rv 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 kà with a resumptive pronoun 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 the subordinate interrogative type.

Gbauy kane ka Jerusalem kpeenmnam daa sob la nwa.
Gbàun $-k a ̀ n i ~ k a ̀ ~ J e r u s a l e m ~ k p e ̂ \varepsilon n ̆ m-n a ̀ m ~ d a ̄ a ~ s o ̄ b ~ l a ̄ ~ Ø ø ~ n ̆ w a ́ . ~$
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 line [1996 lin] ka ba mor na
m̀ àntù'a lìnì kà bà mōr nā
1SG case Rel.IN and 3PL have hither
"the charge they are bringing against me" (Acts 25:11)
yeltood ayopoi bane ka maliaknama ayopoi mor la
yz̄l-tôod àyópòe bánì kà màliāk-námá ${ }_{\text {àyópòe }}^{\text {a }}$ mōr lā matter-bitter:PL NUM:seven REL.PL and angel-pl NUM:Seven have art
"the seven plagues which the seven angels have" (Rv 15:8)
nipkane [1996 nipkan] ka ba gban'e o la
nịn-kánì kà bà gbáñ' $o=\varnothing$ lā
person-Rel.SG and 3PL seize=3AN ART
"a person whom they have seized" (Acts 25:16) (human VP object)

Onc ka ba tis o ka li zu'oe, ba me mor puten'er ye o na lebis line zu'oe.
J̀nì kà bà tísò=ø kà lì zú'e, bà mè mòr
REL.AN and 3pl give=3AN and 3in become.much, 3PL also have
pú-tèn̆'عr yé ò nà lēbīs línì zù'e.
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)

Būrá-sō' dāa bé ànịnā, òn kà mān nē ōn dāa túm lā. Man-IndF.AN tns Exist adv:there, REL.AN and 1SG with 3AN tns work:IPFV ART. "There was a man there whom I used to work with." ILK
line [1996 lin] ka Kristo bood ye ti pian' la
lìnì kà Kristo bôJd yé tì pìā̆̆' 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 a 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 nịd, òn būudí kà Jewdím kịs
Samaritan person:SG Rel.AN tribe:SG and Jew null.pl hate
"a Samaritan, whose tribe the Jews hate" (Lk 10:33, 1996)
bikane [1996 biig kan] puvg ka o mor la
bị-kànì pôvg kà ò mōr 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
yị̀-kán kà mām Paul bé lā yị́-dâan
house-rel.sg and 1sg.cn Paul exist art house-owner:Sg
"the owner of the house where I, Paul, am" (Rom 16:23, 1976)

### 17.4 Complementised

Complementised clauses are usually introduced by $y \bar{\varepsilon}$ (from *ñı, cf Mampruli, Dagbani ni, Toende yé/ne); less often they appear with kà, but constructions which only permit kà are coordination or catenation. They follow any catenated clauses. They can be coordinated with kà, or contain subclauses coordinated with kà:
ka lin ane ye fu kv maali ti bs'عde nwene tiname daa pu maalif bs'ed si'em la ases su'vm ma'aa, ka ye fo yim ne sumbugusum la.
kà līn á ne yé fù kù māalī=tí bē' $\varepsilon d \bar{\varepsilon} \_\varnothing$ w $\quad w n \quad n \bar{\varepsilon}$ and 3IN.CN COP FOC that 2SG NEG.IRR make=1pl bad CAT resemble with tīnámì dāa pū máalì=f bह̄' $\varepsilon d$ sị̀'əm lá àsé $\varepsilon$ sùm má'àa, 1PL:NZ TNS NEG.IND make=2SG bad INDF.ADV ART except good only kà yé fù yịm n̄ súmbūgusím lā. and that 2SG emerge:IMP with peace ART. "Which is that you will not do us harm, as we did not do you harm but only good, and that you will depart in peace." (Gn 26:29)
 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

### 17.4.1 Purpose

Purpose clauses lack independency marking and have imperative mood, using $d \bar{a}$ for negation. The meaning is sometimes attenuated from "so that" to merely "until." Purpose clauses may be VP adjuncts:

Ò vòl tîım kà ò nóbìr dā záb $\bar{\varepsilon}=\varnothing$.
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 kpen'es sanrega ni ye beog nie.
Kà bà gbán̆'a=bā øø kpêñ'عs sārıgá nì ȳ̄ b̄̄og nịe.
And 3PL seize=3PL CAT put.in prison:SG loc that morning appear.
"They seized them and put them in prison until tomorrow came." (Acts 4:3)

Some verbs take purpose-clause complements, e.g bòod ${ }^{\mathrm{a}}$ "want"; yء̀ $l^{\varepsilon}$ "tell":
$\grave{M} p \bar{u}$ bôวd yर́ ò kūl̄̄=ø.
1SG NEG.IND want that 3AN go.home=NEG.
"I don't want her to go home."

1SG tell=2SG that 2SG NEG.IMP go.home=NEG.
"I've told you not to go home."
$G \bar{u} r^{\mathrm{a} /}$ "guard, watch" in the sense "waiting for an event" may take as complement either a NP headed by gerund, or a purpose clause:

Nidib la daa gur Zakaria yiib na.
Nị̄dīb lā dāa gūr Zakaria y!̣̂ib nā.
Person:PLART TNS watch Zechariah emerge:Ger hither.
"The people were watching for Zechariah's coming out." (Lk 1:21)
... gur ye pu'a la du'a ka o onb biig la.
... gūr ȳ̄ pú'ā lā dư'á kà ò ón̆b bịịig lā.
...watch that woman:SG ART bear and 3AN eat child:SG ART.
"...waiting for the woman to give birth so he could devour her child." (Rv 12:4)

Purpose-clause complements follow expressions of necessity or permission
 lì à [nह̄] tịlás "it is necessary." KB has 258 examples of nar ye to 45 of nar ka.

Fù pū nār yć fù nị́ àláa=ø.
2SG NEG.IND must that 2SG do adv:thus=NEG.
"You're not allowed to do that."

Lì nàr yé/kà fù kūl. "You must go home."
3IN must that/and 2SG go.home.

Yà mór sūer yé yà kūl. "You may go home."
2PL have way:SG that 2PL go.home.

Sūer bé yć/kà tì kūl. "We may go home."
Way:SG exist that/and 1PL go.home.

Li ane tilas ye m keך Jerusalem.
Lì à n $\bar{\varepsilon}$ tịlás yé $\grave{m}$ k $\bar{\varepsilon} \eta$ Jerusalem.
3in cop foc necessity that 1 SG go Jerusalem.
"I must go to Jerusalem." (Mt 16:21, 1996)

Li ane tilas ka minid ala.
Lì à n̄̄ tịlás kà m̀ nị́nìd 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 kà in KB
$N a ̄ r^{a /}$ is occasionally used in a personal construction "deserve that":
babayi' la nar ye ba kvv ba
bà bàyịí là nár yé bà kúv=bā
3PL NUM:two ART must that 3PL kill=3PL
"both of them must be killed" (Lv 20:12)

Ano'one nar ka na nyapi lak titabir la ...
Ànó'onì Ø nár kà ná ňyāŋī Ø lāk tītābīr lā ...?
Who CAT must and IRR prevail cat unstick glue ART ...?
"Who is worthy to open the seal ...?" (Rv 5:2)

### 17.4.2 Content

Complementised clauses with independency marking on the VP are content clauses. They are downranked main clauses, and show the same range of structural features. They occur as complements of verbs of cognition, reporting, and perception like wòm ${ }^{\mathrm{m}}$ "hear", $\check{n} y \bar{\varepsilon}$ "see", $t \bar{\varepsilon} \breve{n}^{\prime} \varepsilon s^{\varepsilon /}$ "think", mị' "know", zī' "not know", bà $\eta^{\varepsilon}$ "come to know", pà'al $l^{\varepsilon}$ "teach, show", kàrìm ${ }^{\mathrm{m}}$ "read", siàak ${ }^{\varepsilon}$ "agree", and may represent both direct and indirect speech after verbs like yغ̀ $l^{\varepsilon}$ "say." KB has 31 examples of tenes ka to 219 of tenes ye, but 162 of wom ka to 105 of wom ye "hear that", and 386 cases of nyع ka to none of nyع ye "see that." Only in this construction can kà introduce a clause with independency marking, and personal pronouns after kà are not ellipted when referring to the previous clause subject.

Note the distinctively main-clause structural features in

Ya tenes ka man ano'one?
Yà tên̆'عs kà m̀ áan̆ ànó'onغ̀=ø?
2PL think and 1SG COP who=CQ?
"Who do you think I am?" (Acts 13:25): question
ban mi' ye biig la kpine la zug
bán mị' ȳ̄ bịìg lā kpị 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 $\bar{\varepsilon}{ }^{\prime}$

Bòj-bān̆'ad $\quad z \bar{\imath} ' \quad y \bar{\varepsilon} \quad t \bar{\varepsilon} \eta \quad$ túlla $\bar{n}=\varnothing$.
Donkey-rider:SG NEG.KNow that ground:SG be.hot=NEG.
"The donkey-rider doesn't know the ground is hot": tone overlay on $t \bar{v} l^{\text {la/ }}$
$\grave{M}$ t $\hat{\varepsilon} \breve{n}^{\prime} \varepsilon s$ kà m̀ lú yā. $\quad$ I think I've fallen" WK: pfv yā 1SG think and 1SG fall PFV.

Fone siak ye fo ya'a ti kae, o na zin'ini fo na'am gbaup la zugoo?
 2SG.CN CAT agree that 2SG if once neg.be, 3AN IRR sit 2SG chieftaincy gbáū lā zúgóo=ø?
skin:SG ART upon=PQ?
"Did you agree that when you are no more, he will sit on your throne?" (1 Kgs 1:24): yá'-clause postlinker adjunct

Command content clauses appear only in reported speech (see below.) The verb $y \grave{\varepsilon} l$ is frequently ellipted before $y \bar{\varepsilon}$ :

Ka Zugsob la ye ... "And the Lord said: ..." (Gn 18:28)
Kà Zūg-sób lā y $\bar{\varepsilon} \ldots$
And Lord art that ...

Pronouns are changed throughout a content clause to reflect its setting, on the same basis as in English indirect speech. Thus, 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 kúkór kà lì yị áràzánà ní nā y $\bar{\varepsilon}$,
And 1sg hear God voice:SG and 3IN emerge heaven loc hither that
ò nịd $\quad$ bá= $\varnothing, ~ y \varepsilon ́ ~ b a ̀ ~ y i ̣ m i ̀=\varnothing ~ t e ̄ \eta ~ l a ̄ ~ n i ́ ~ n a ̄ . ~$
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!'" (Rv 18:4, 1976)

Contrastive 3rd person pronouns are here interpreted as logophoric, representing 1st persons in the original utterance. Bound 3rd persons may also be used in this sense, but especially as subjects, free pronouns are usual.

Festus tans Paul ye o geem ne ... ka Paul lebis ye on pu geem.
Festus tán̆s Paul ý́ ò gè $\check{\text { ñm }}$ n $\bar{\varepsilon} \ldots$ kà Paul lébìs
Festus shout Paul that 3an go.mad FOC ... and Paul reply
$y \bar{\varepsilon} \quad \bar{\jmath} n \quad p \bar{u} \quad g \varepsilon ́ \varepsilon n ̆ m m=\varnothing$.
that 3AN.CN 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)

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.
Dāũ dá bè Ø $\varnothing$ mōrí $\smile o ̀ ~ p u ̛ ' a ̀-y i ̄ m m i ́ r, ~ k a ̀ ~ p u ̛ ' a ̄ ~ l a ̄ ~ y \bar{\varepsilon}$ Man:SG tns Exist cat have 3AN wife-single:SG and wife:SG art that ग̄n pū lém bòวd yé ò sīd lā dí pư'ā yá'asē=ø. 3AN.CN NEG.IND again want that 3AN husband:SG ART take wife:SG again=NEG. "There was a man who had only one wife. [And] the wife said that she did not want her husband to take another wife." KSS p26

Tense and mood marking are unaltered:

Ò dāa yćl yé bà dāa kūl.
3AN TNS say that 3PL TNS go.home.
"She said that they had gone home."

Tì dāa tह̄n̆'عs 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."

After speech verbs the 1976 NT almost always uses such indirect speech, which may extend over several pages, but later Bible versions use $y \bar{\varepsilon}$ followed by direct speech, unaltered except for "resumptive" y $\bar{\varepsilon}$ (see below.)

Indirect speech may include commands. The usual deletion of a 2 sg subject and change of 2 pl to ${ }^{\text {ya }}$ does not occur, even if the addressee is the same as in the original utterance and the pronoun remains 2 nd person; some speakers keep ${ }^{\text {ya }}$ after the verb even when there is a preceding pronoun subject. The construction can express third/first person commands; main clause and $y \bar{\varepsilon}$ may be ellipted informally.

```
[M
    1SG say that 3AN look:IMP ground:SG=LOC.
"[I said] she should look down."
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[M̀ tên̆'عs kà] tì pú'vsìm Wínà'am.
1SG think and 1Pl greet:IMP God.
"[I think] we should praise God."

Reported speech longer than two or three clauses inserts resumptive $\boldsymbol{y} \bar{\varepsilon}$ in roughly every third clause, after any prelinker adjuncts but before clause-linker kà; $y \bar{\varepsilon}$ may also be placed between a postlinker adjunct or a vocative and the subject.

Amaa ye ka on yeli ba ye ...
Àmáa yé kà $\bar{n}$ y $\quad$ ćlì=bā y $\bar{\varepsilon} .$.
But that and 3AN.CN say=3pl that...
"But he [the speaker] had said to them ..." (Acts 25:16, 1976)

Ye ka Paul yel ye o bood ye o kpelim sarega ni.
Yé kà Paul yél yé ò bòod yé ò kpélìm sārıgá nì.
That and Paul say that 3AN want that 3AN remain prison:SG loc.
"But Paul said he wanted to remain in prison...(Acts $25: 21,1976$ )

Alazug ye ka on ke ka ba mor o ba sa'an na ...
Àlá zùg yé kà $\bar{n} \quad$ ké kà bà mōró=ø bà sā'an nā ...
Thus that and 3an.Cn let and 3pL have=3an 3pl before hither...
"So he [the speaker] had made them bring him [Paul] into their presence..."
(Acts 25:26, 1976)

Ka nanana ye o nipi ba Wina'am ne o popielim pia'ad la nu'usin...
Kà nānná-nā yé ò nị̀ì=bá Wínà'am né ò pù-pìəlìm
And now-hither that 3AN do=3pl God with 3an holiness
pîân̆'ad lā nú'usī=n...
speech art hand:PL=LOc...
"And now he committed them to God and the words of his holiness.."
(Acts 20:32, 1976)

O zuanam ne o saamnama, ye ba kelisim.
Ò zưà-nàm né ò sàam-nàmā=ø, yé bà kèlısìm!
3AN friend-PL with 3AN father-PL=VOC that 3PL listen:IMP!
"His friends and his fathers should listen." (Acts 7:2, 1976)

## 18 Negation

Negation is marked in the VP 16.4, inducing a clause-final negative clitic 4.1. The negative clitic follows subordinate clauses 17; exceptions are either due to dislocation or actually represent coordination, as in

Ka li pu yuuge ka o pu'a me kena.
Kà lì pū yúugē $=\varnothing$, kà ò pu'ā mé k $\bar{\varepsilon} \quad n a \overline{\text { a }}$.
And 3in neg.ind delay=NEG, and 3AN wife:sG also come hither.
"Not much later, his wife came too." (Acts 5:7); narrative coordination.

With $\grave{n}$-clauses and $\grave{a}+$ VP nominalisations with negated VPs, the negative clitic is omitted unless they are clause-final in the main clause and have no articles; however, clauses with yà' "if" keep their own negative clitics:

Nịn-bánì pū dít ná kpị.
Person-REL.PL NEG.IND eat:IPFV IRR die.
"People who don't eat will die." WK
$\grave{M}$ n̆yć nị̄n-bánì pū dítā=ø.
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-P̄̄-zót-ȳ̄l dá à né ò sàam bịig mà'àa.
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

Ba ya'a pu niy si'ela, o pv'vsim doog la na lieb zaalim.
Bà yá' pū nịn sị̀əəlā=ø, ò pù'usìm dôog lā ná lịəb zāalím.
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 intentions, opinions or judgments, but not verbs of knowing or informing:

Li pu nar ye fu di fu ba'abiig po'a Herodiase.
Lì pū nār yé fù dí fù bā'-bịig pư'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)

Ti po bood ye dau kaŋa aan ti na'aba.
Tì pū bôod yē dáu-kàjā áan̆ 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)
mam pv ten' $\varepsilon s$ ye o na keligi m pian'ade.
Mām pū tēn̆'عs yé ò nà kēlıgí $\underset{m}{ }$ pìàn̄'ad $\bar{\varepsilon}=\varnothing$.
1SG NEG.IND think that 3AN IRR listen 1SG word:PL=NEG.
"I do not think that he will listen to my words." (Jb 9:16)
linzug ka ti bay ye o pv yi Wina'am san'an naa.
Lìn-zúg kà tì báy yé ò pū yị Wīnà'am sâ'an náa=ø.
Therefore and 1pl realise that 3AN neg.ind emerge God with hither=neg.
"Therefore we realise he has not come from God." (Jn 9:16)
ka o leє pv baך ye li ane one.
kà ò lée pū báy yé lì à n $\bar{\varepsilon}$ ग̄n $\bar{\varepsilon}=\varnothing$.
And 3AN but NEG.IND realise that 3IN COP FOC 3AN.CN=NEG.
"but she didn't realise it was him." (Jn 20:14)

Constituent negation can be achieved by clefting, using Lì kā' X kà/n ... "It's not X that ..." or X ká'e kà/n ... "There's no X that ...", or with relative clauses:

Sogia so' kae' n tum ka yood o meja.
Sógìà-sō' kā'e $n$ túm kà yōod ò mēŋá=ø.
Soldier-IndF.AN NEG.BE CAT work:IPFV and pay:IPFV 3AN self=NEG.
"No soldier works and pays for himself." (1 Cor 9:7, 1976)

Di len ka' fun yel si'el la zug, ka ti nip o yadda.
Lì lèm kā' fún yèl sị̀'əl lā zúg kà tì nị̣ò=ø yáddáa=ø.
3IN again NEG.BE 2SG:NZ say INDF.IN ART upon and 1PL do=3AN assent=NEG.
"It is no longer because of what you said that we believe in him." (Jn 4:42)
... ka zan'as bane ka' Kristo nidib la supir.
... kà zân̆'as bánì kā' Kristo nị́dìb lā súnìr.
... and refuse rel.pl neg.be Christ person:pl art help:Ger.
"... and refused the help of non-Christians." (3 Jn 1:7)

## 19 Information packaging

For the article $l \bar{a}$ ' see 12.6.5; for contrastive personal pronouns see 12.3.1.

### 19.1 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 effect of clefting.

### 19.1.1 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, but the meaning is focus rather than foregrounding:

Wáafù ø dúmō=ø. "A snake bit him." WK
Snake:sG cat bite=3an.
would be a felicitous reply to "What's happened?" as well as "Did a dog bite him?"
Focus-n $\bar{\varepsilon}^{\prime}$ in all its roles is excluded from clauses which are $n$-focussed, with the corresponding VP aspect distinctions present but unmarked:

| $\grave{M}$ zūḡ̄乞ø zábìd. | "My head is hurting." |
| :--- | :--- |
| 1SG head CAT fight:IPFV. | (Reply to "Where is the pain?") |

cf $\grave{M} \quad z u \bar{u} g$ lā pú'alìm $n \bar{\varepsilon} . \quad$ "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:

Ànó'onì 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 $\bar{\varepsilon}^{\prime}$, this is most readily explained by taking interrogative pronouns as intrinsically focussed, though this is only syntactically manifested when they are subjects.

### 19.1.2 Verb phrases

Preceding a VP constituent, the particle $n \bar{\varepsilon} /$ focusses that constituent, while VPfinal $n \bar{\varepsilon} \bar{\varepsilon}^{\prime}$ focusses the entire VP contrastively. $N \bar{\varepsilon}^{\prime}$ may occur only once in a clause.
$N \bar{\varepsilon}$ "with, and" is distinguishable from focus-n $\bar{\varepsilon}$ ' in not being limited to particular clause types and potentially being followed by non-contrastive pronouns.

The aspect particle $n \bar{\varepsilon}^{\prime} \underline{16.1 .1}$ is a specialised use of focus-n $\bar{\varepsilon}^{\prime}$. If aspectual interpretation is possible it prevails over constituent focus. When $n \bar{\varepsilon}^{\prime}$ is excluded by formal constraints, or is present but separated from the verb by free words, any permitted aspect distinctions still exist but are unmarked.
$N \bar{\varepsilon}^{\prime}$ may appear in clauses after catenator-n (but not after catenating kà):

Fu pu ma' $n$ tis ninsaala, amaa fu ma' $n$ tis ne Wina'am Siig Sup.
Fù $p \bar{u} \quad$ má' $n$ tìs nịn $n$-sáalā $=\varnothing$, àmáa fù má
2SG neg.ind lie cat give human:SG=NEG but 2SG lie
$n$ tís nē Wínà'am Sí-sùj.
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)
$N \bar{\varepsilon}^{\prime}$ 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:
$\grave{M} z u \bar{u} \bar{v} \_\varnothing$ zábìd. $\quad$ My head is hurting/hurts." (No aspectual $n \bar{\varepsilon} /$ )
1SG head cat fight:IPFV. Reply to "Where is the pain?"

Ànó'onì ø dít sá'abò=ø?
Who cat eat:IPFV porridge=CQ?
"Who eats/is eating millet porridge?" (No aspectual $n \bar{\varepsilon}^{\prime}$ )

Nominalised clauses:

Ò dāa á nē bịìg. $\quad$ "She was a child."
3AN TNS COP FOC child:SG.
but ón àn̆ bịìg lā zúg "because she's a child"
3AN:NZ COP child:SG ART upon

M̀ yị́ nē Bók. $\quad$ I come from Bawku." SB
1SG emerge foc Bawku.

| but | Meeri one yi Magdala | "Mary who came from Magdala" |
| :--- | :--- | :--- |
| Meeri ónı̀ yī̀ 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 nyzne bvod.
Pîàn̆'am kà m̀ bôod yé fù ňy $\bar{\varepsilon} n \bar{\varepsilon}$ būvd.
Speak:IMP and 1SG want that 2SG see Foc innocence.
"Speak, for I want you to be vindicated." (Jb 33:32)

Content questions:

Bó kà fù kúmmà=ø? "Why are you crying/do you cry?
What and 2SG cry:IPFV=CQ?

Fù nị́nìd bó=ø? "What are you doing/do you do?"
2SG do:IPFV what=CQ?

Fì wá'e yáa=ø? "Where are you going/do you go?"
2SG go where=CQ?

Bùgóm lā yị́t yáa ní ná=ø?
Fire art emerge:IPFV where loc hither=CQ?
"Where is the light coming from?" SB
$\grave{M}$ á $n \bar{\varepsilon}$ dāun. $\quad$ "I am a man."
1SG COP FOC man:SG.
but Mām án̆ bó=ø? "What am I?"
1SG.CN COP what=CQ?

Fv̀ áan̆_ànó'onغ̀=ø? "Who are you?"
2SG COP who=CQ?

Fù bôod bó=ø? "What do you want?"
2SG want what=CQ?
but Fì bôวd n $\bar{\varepsilon}$ bó=ø? "What do you want it with?"
2SG want with what=CQ? $\quad N \bar{\varepsilon}$ must be interpreted as "with" (WK)

Certain words do not prevent focus-n $\bar{\varepsilon}{ }^{\prime}$ from being used in the clause, but cannot themselves be focussed: sv̀jā/ "good", sùm ${ }^{\mathrm{m}}$ "good", b $\bar{\varepsilon}^{\prime} \varepsilon d^{\varepsilon}$ "bad", sìdà "truth" when used as adverbs, and the "two, three exactly" quantifier forms àyị́pā' àtáyā'. AdvPs formed by coordinating such words and NPs with these quantifiers as dependents share the same property.

| Lì àn̆ súpā. | "It's good." |
| :--- | :--- |
| 3IN CoP good:ADV. |  |
| Lì àn̆ bē' $\varepsilon d$. | "It's bad." |
| 3IN COP bad:ABSTR. |  |

[ye ka] o sariakadib a sum ne sida.
ò sàríyà-kādīb án̆ súm $n \bar{\varepsilon}$ sídà.
3AN law-drive:GER COP good:ABSTR with truth.
"His judgment is good and true. (Rv 19:2, 1976)
$N \bar{\varepsilon}^{\prime}$ before such constituents must be interpreted as marking a temporary state even with stative verbs where there is no explicit time marker in the clause 16.1.3.

VP constituent focus with $n \bar{\varepsilon}^{\prime}$, as opposed to focus on the entire VP, is possible only in statements and polar questions. The aspectual sense of $n \bar{\varepsilon}^{\prime}$ must be impossible and the constituent in question must permit $n \bar{\varepsilon}$-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:

| M̀ dá' búy. | "I've bought a donkey." |
| :--- | :--- |
| ("What have you done?") |  |

Nịigí j̀ňbìd n̄̄ mōod. "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:
$\grave{M} p \bar{v} \quad$ dá' bùjā=ø. $\quad$ I haven't bought a donkey."
1SG NEG.IND buy donkey:SG=NEG.
$\grave{M} p \bar{u} \quad$ dá' $n \bar{\varepsilon}$ búnā=ø. "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 nonrecoverable" unlikely; hence $n \bar{\varepsilon}^{\prime}$ before a definite object is usually aspectual:

Nịigí lā ón̆bìd n̄̄ mōod lā.
Cow:PL ART chew:IPFV FOC grass:PL ART.
"The cows are eating the grass."

Nā'-sípbà ón̆bìd $n \bar{\varepsilon}$ mōod lā.
Cow-Indf.PL chew:IPFV Foc grass:PL ART.
"Some cows are eating the grass."

If focus does occur with old-information arguments, it is contrastive.

Line ka ba'amaannib maanne tisid bada la, ba maanne tisidne kikiris, ka pv maanne tisid Wina'am.
Lìnì kà bà'-māannīb mâannì ø tísìd bádà lā, bà màannī REL.IN and idol-sacrificer:PL sacrifice:IPFV CAT give:IPFV idol:PL ART 3PL sacrifice:IPFV $\varnothing$ tísìd $n \bar{\varepsilon}$ kíkịrīs kà pū mâannì $\varnothing$ 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 the copula àĕnya in its ascriptive sense 16.10 is non-referring and prototypically "unpredictable or pragmatically non-recoverable", and therefore is naturally preceded by $n \bar{\varepsilon}^{\prime}$ for ordinary focus:

```
Ò dāa á n\overline{\varepsilon}}\mathrm{ bịig. "She was a child."
```

3AN TNS COP FOC child:SG.

Dīıb á n $\bar{\varepsilon}$ būn-súp. $\quad$ "Food is a good thing."
Food cop Foc thing-good:Sg.
$O$ à $n \bar{\varepsilon}$ bāan̆lím. "She is quiet."
3AN COP FOC quiet:ABSTR.

Lì à n̄̄ būgvsígā. "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 bumbuvda bane lu gon'os suvgin la ane bane wum pian'ad la ...
Kà būn-bv́vdà bànì lù gòň'os súvgv̄=n lā á n $\bar{\varepsilon}$
And thing-planting:PL REL.PL fall thorn:PL among=LOC ART COP FOC
bánì wùm piàn̆'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 ne dua gbinin. Ba zamisid ne bula wa'ab. Ba ane Apam biis.
Bịis lā dị'əmìd nē dúan̆ gbịnnī=n. Bà zàmısìd n̄̄
Child:PL ART play:IPFV Foc dawadawa:Sg base:SG=Loc. 3PL learn:IPFV FOC
būlā wâ'ab. Bà à né À-Pām bị̂is.
shoot:PL dance:SG. 3PL COP FOC PERS-Apam child:PL.
"The children are playing under a dawadawa tree. They are learning the dance of the young shoots. They are Apam's children." KKY p6
(The relationship between Apam and the children is new information.)

In this context proper names are not referential:

O yv'ur na ane Joon. "His name will be John." (Lk 1:60)
Ò yō'vr ná à n $\bar{\varepsilon}$ Joon.
3AN name:SG IRR COP FOC John.

Focus under the scope of a negative is again usually contrastive:

M̀ $k \bar{a}^{\prime} \quad$ dv́'atāa=ø. $\quad$ I'm not a doctor."
1SG NEG.BE doctor:SG=NEG.

M $k \bar{a}$ ' $n \bar{\varepsilon}$ dv́'atāa=ø. $\quad$ I'm not a doctor." ("I'm a nurse.")
1SG NEG.BE FOC doctor:SG=NEG.

Focussed locative complements are typically place names or definite NPs with postpositions, but the fact that a referent is at a known place is new information.

Dāu lā bé nē dó-kànā lā póvgū=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. $\quad$ I'm in the bush." BNY p8
Mām bé $n \bar{\varepsilon} \quad m \overline{ } \quad \mathrm{~g} g \bar{\nu}=n$.
1SG.CN EXIST FOC grass:SG=LOC.

M̀ yị́ n̄ Bók. $\quad$ "I come from Bawku." SB 1SG emerge foc Bawku.

Yadda ninir yitne labaar la wvmmvg ni.
Yàddā-nịnìr yịt nē lábāar lā wv́mmùg ní.
Assent-doing emerge:IPFV FOC news ART hearing Loc.
"Faith comes from hearing the news." (Rom 10:17)

Contrast the existential use of bè, where the locative is an adjunct:

Dàư-sō' bé dó-kànā lā púvgv̄=n.
Man-IndF.AN Exist hut-demst.Sg art inside:SG=LOc.
"There is a certain man in that hut."

There are few examples of $n \bar{\varepsilon}$-focus on an adjunct in my data; one is

Tì dít $s a ̄ ' a b \quad n \bar{\varepsilon}$ zâam. "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 $n \bar{\varepsilon}^{\prime}$, 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 $n \bar{\varepsilon} /$ :

> Ò kù $\theta$ sìd sūmmā lā n̄̄."She sells/is selling the groundnuts." 3AN sell:IPFV groundnut:PL ART FOc. ("They're not free.")

Aspectual sense ruled out by mood:
Gòsìm nē.
"Look!" ("Don't touch." WK)
Look:IMP FOC.

Imperfectives with subjects which are neither agents, nor changing state, nor moving without external agency, and where there is no explicit time limitation:
$\dot{O}$ gị̀m $n \bar{\varepsilon} . \quad$ "He's short." ("I was expecting someone taller.")
3AN be.short FOC.
$\grave{M}$ bóod $\bar{\imath}=f n \bar{\varepsilon}$. "I really love you." WK
1SG want=2SG FOC.

Dāam lā nûud n $\bar{\varepsilon} . \quad$ "The beer is for drinking."
Beer ART drink:IPFV FOC. ("Not washing with!")

Dāká lā zán̆l n̄̄. "The box gets carried in the hands."
Box:SG ART carry.in.hands Foc. ("Not on your head.")

Dāká lā zị̂id n $\bar{\varepsilon}$. "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 (see also 16.2.4):

Ò dìgìl n $\bar{\varepsilon}$. "He's laid it down." ("I thought he'd pick it up.")
3an lay.down foc.

Ò dìgìn $n \bar{\varepsilon}$.
3an lie.down foc.
"He's lain down." DK: "Someone calls at your house and gets no answer; he thinks you're out but I'm explaining that you've gone to bed." WK: "You've said: the child looks filthy. I'm replying: He's been lying down."

Ò zị'ən $n \bar{\varepsilon} . \quad$ "She's pregnant." (Not "She has stood still.")
3AN stand.still Foc. An idiomatic use.

### 19.2 Clefting

Clefting uses a main clause like Lì à $n \bar{\varepsilon}$ "It is ..." or a verbless identificational clause 17.1.5 followed by a $n$-catenation when it is the subject of the catenated clause which appears in the main clause, adnominal kà-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:

Ano'on nwaa yisid nidib tovmbe'عdi basida?
Ànô'on」ø ňwáa_ø yịsīd nị̀dīb tv̂vm-bē' $\varepsilon d i ̄ \_\varnothing ~ b a ́ s ı d a ̀=\varnothing ? ~$
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)

Li ane o pu'a sv'oe li.
Lì á né ò pư'ā $\varnothing$ ø súv=l̄̄.
3IN COP FOC 3AN wife CAT OWn=3IN.
"It is his wife who owns it." (1 Cor 7:4)

う̄nī ø lá kà fù dāa n̆yz̄t.
3AN.cn CAt that and 2SG tNS see:IPFV.
"This is he whom you saw." WK

Bōo乙ø lá kà m̀ n̆y $\bar{\varepsilon} t a ́=\varnothing$ ?
What cat that and 1SG see:IPFV=CQ?
"What is that that I can see?"

With kà, 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 pv'usid Wina'am ka li nar ka ya kad saria.
Lì à né yà tāabā bánì pv̀'vsìd 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)

### 19.3 Preposing

A preposed clause element is followed a kà-catenation with independent tense marking. Preposed elements cannot be clause subjects. Unlike the formally similar nfocus, the default meaning is foregrounding, not focus, and the construction is compatible both with focus-n $\bar{\varepsilon}^{\prime}$ and with $n$-focus:

Asec line an be'ed ma'aa ka m na tun'e nip.
Àséع línì àn̆ bē' $\varepsilon d$ má'àa kà m̀ ná tūn̆'ө $\varnothing$ nị́n.
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)

Bị̀əəl bị̂əl kà kōlīg pê'cl n $\bar{\varepsilon}$.
Little little and river:SG get.full Foc.
"Little by little, and a river is full." (Proverb)

Dinzug ka mam Paul n be sarega ni Yesu Kiristo zug yanam buudbane ka' Jew dim la yela.
Dìn-zúg kà mām Paul n bé sārıgá nì Yesu Kiristo zúg yānám That-upon and 1sg.cn Paul cat exist prison:Sg loc Jesus Christ upon 2Pl.CN bûud-bànì kā' Jewdím lā yćlà.
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)

Objects containing interrogative pronouns are often preposed, with resumptive pronouns need if they are extracted from prepositional phrases.

Bo ka ti na nipe?
"What are we going to do?" (Acts 21:22)
Bó kà tì ná nị̀̀̀ $=\varnothing$ ?
What and 1PL IRR do=cQ?
$N u \overline{ }$ '-bịbisá àlá kà fò n̆y $\overline{\text { žtá }}=\varnothing$ ?
Hand-small:PL NUM:how.many and 2SG see:IPFV=CQ?
"How many fingers can you see?" SB

Ka ano'כnam ka Wina'am sunf da pelig ne ba yvma piisnaasi la?
Kà ànô'on-nàm kà Wínà'am sún̆f dá pغ̀̀lìg né bà
And who-PL and God heart:SG TNS whiten with 3PL
yòmà pịs nāasí lá=ø?
year:PL forty ART=CQ?
"And who was God angry with for forty years?" (Heb 3:17)

Preposing is required for bō in its very frequent use as meaning "why?":

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Bó kà fù kúmmà? "Why are you crying?"
cf *Fù kúm bó? *"What are you crying?"
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Stative verb complements usually remain in situ:

Fù bôod bó=ø?
"What do you want?"
2SG want what=CQ?
but Niggbin bo buudi ka ba na ti mora?
Nị̀n-gbị̣ bó-būudí kà bà ná tī mōrá=ø?
Body:Sg what-sort and 3PL IRR once have=CQ?
"What kind of body will they have?" (1 Cor 15:35)

The complement of the copula àe $\breve{n}^{\text {ya }}$ probably cannot be preposed.

Mām án̆ bó=ø? "What am I?"
1SG.CN COP what=CQ?

Kà fù áan̆_ànó'onغ̀=ø? "Then who are you?"
And 2SG COP who=CQ?

VP adjuncts are often preposed:

Ňwādısá_àtán' kà fù ná l̄̄b nā.
Month:PL NUM:three and 2SG IRR return hither.
"You're to come back in three months." (Foregrounded time AdvP)
vs Tì dít sā'ab nē zâam.
1PL eat:IPFV porridge foc evening.
"We eat millet porridge in the evening." ("When do you eat porridge?": focus)

Prepositional phrases with $w \bar{v} v$ "like" can be preposed 15.
Preposing has no implication of foregrounding within relative clauses, 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:

Mán ňwè' dāu lā zúg kà pōlīs gbán̆' $a=m$.
1SG:Nz hit man:SG ART upon and police seize=1SG.
"The police arrested me because I hit the man." ILK

### 19.4 Dislocation

A clause element placed after a distinctively phrase-final verb form has been dislocated. Manner-adverbs are thereby intensified:
$\grave{M}$ p̂̂'vs yā bédvḡ̄. "Thank you very much."
1SG greet PFV much.

Non-pronoun objects can be dislocated; the sense is "contrary to expectation":
Ò dà' yā múí.
"She's bought rice." ("Of all things!")
3AN buy pFV rice.
vs $O$ dà' n $\bar{\varepsilon}$ múíi.
"She's bought rice." ("What did she buy?")
3AN buy foc rice.

Subordinate clauses may be right-dislocated due to weight (see also 17.1.4):

Amaa Wina'am keya ka ya an noor yinne ne Yesu Kristo ...
Àmáa Wínà'am ké yá kà yà án̆ nōor 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)

Complements may be left-dislocated due to weight, with no preposing or foregrounding kà; a resumptive pronoun must then appear:

Wilkane bes m ni ka pv wanna, m Ba' nwaadi li ne [sic: 1996 n] basid.
Wịl-kànì bè $\smile \grave{m}$ ní kà pū wénnā=ø,
Branch-ReL.SG EXIST 1SG LOC and NEG.IND bear.fruit:IPVF=NEG.
m̀ Bā' n̆wá'adī=lí n básìd.
1SG father:SG cut:IPFV=3IN CAT throw.out:IPFV.
"A branch which is in me and does not bear fruit, my father cuts out." (Jn 15:2)

Onc ka ba tis o ka li zu'oe, ba me mor poten'er ye o na lebis line zu'oe.
Ònì kà bà tísò=ø kà lì zú'e, bà mè mòr
REL.AN and 3PL give=3AN and 3IN become.much, 3pl also have
pú-tèn̆'عr yé ò nà lēbīs línì zù'e.
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)

### 19.5 Presentational constructions

Presentational constructions introduce new entities into discourse using indefinite NPs; here, absence of $1 \bar{a}^{\prime}$ implies indefinite specific reference, not generic. Dependent indefinite pronouns or quantifiers may be used. New entities may be subjects of bغ̀ "be somewhere/exist" or other verbs expressing location, or objects of verbs of finding, seeing etc, often with a following $n$-catenation or adnominal kà catenation:

Dapa atan' n da be.
Dāpá_àtán̆' $n$ dá bè.
Man:PL NUM:three cat tns Exist.
"There were once three men." KSS p16

Dau da be mori o po'a yimmir
Dāu dá bè $\smile$ 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 so' da be mor o bipup ka kikirig dol o.
Kà pư'à-sō' dá bè $\varnothing$ mór ò bị-púy kà kìkịrīg dōlló=ø. And woman-IndF.AN tns exist cat have 3AN child-girl:SG and fairy:sg follow=3AN. "There was a woman whose daughter was oppressed by a devil." (Mk 7:25)

Ka dau daa zin'i Listra ni ka pu tun'e kenna.
Kà dāụ dāa zịñ'i Listra ní kà pū tūn̄'ө乙 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.
Ànịná kà ò n̆yc̄ dáu kà ò yō'vr bûөn 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)

### 19.6 Emphatics

Emphatics (Heath pp202ff) relate constituents to the discourse context. Except for báa and hālí, they follow top-level NPs or AdvPs.
$\boldsymbol{m} \varepsilon$ DK KT SB NT mèn WK; clause finally (all sources) mèn ${ }^{\varepsilon}$ "also, too." It may follow kà + ellipted subject pronoun.

O pu'a me kena. "His wife also came." (Acts 5:7)
Ò pu'ā mé kè nā.
3AN wife:SG also come hither.
bozugo o ane fo biig men.
bō zúgó ò à né fù bịịg mén.
Because 3AN COP FOC 2 SG child:SG also.
"Because he is your child too." (Gn 21:13)

Wina'am tisid ... ka me tisid ...
Wínà'am tísìd ... kà mé tìsìd ...
God give:IPVF ... and also give:IPFV ...
"God gives ... and [God] also gives ..." (1 Cor 15:38)
n̄̄o "just, exactly": e.g. dàa-kàn lā nōo "that very day", and

Fv ya'a mor ya'am, fun noo na dii li malisim.
Fù yá' mōr yā'am, fūn nōo ná díılì mālısím.
2SG if have sense, 2SG.CN exactly IRR eat 3in joy.
"If you have wisdom, it is you who will have joy of it." (Prv 9:12)
kòtà $a^{\text {ne }}$ "at all" appears in Áyìı kòtàa. "Not at all."
mà'àa (LF mà'anè) "only":

Asce line an be'ed ma'aa ka m na tun'e nip.
Àséع línì àn̆ bē'عd má'àa kà m̀ ná tūn̄'ө $\varnothing$ nị́ŋ.
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)
gùllīmm (LF gùllìmnè) "only":

Li ka'ane Wina'am gullim ne?
Lì kā' n $\bar{\varepsilon}$ Wínà'am góllìmn $\varepsilon$ è $=\varnothing=\varnothing$ ?
3IN NEG.BE FOC God only=NEG=PQ?
"Is it not God alone?" (Lk 5:21)
báa (Hausa bâa "not exist") along with a negative VP, means "even" in the AdvP báa bị̀əlá "(not) even a little" and in the NP postdependent báa yīnní "(not) even one":

Da tomi si'el baa bi'elaa.
Dā túmī=ø sị̀əəl báa bị'əláa=ø.
NEG.IMP work=2PL.SUB INDF.IN even slightly=NEG.
"Do no work at all." (Lv 23:31)

Amaa ba pu nyaŋi nye line tu'al baa yinne.
Àmáa bà pō ňyāŋī ø n̆ȳ̄ línì tù'al báa yīnníl=ø.
But 3pl neg.ind prevail cat find rel.in condemn even one=Neg.
"But they could find not one incriminating thing." (Mt 26:60)

Fv du'adib baa yinne kae ka o yv'vr buon alaa.
Fù dū'adīb báa yīnní ká'e kà ò yū'vr bûөn àláa=ø.
2SG relative:pl even one NEG.BE and 3AN name:Sg call:IPFV ADv:thus=NEG.
"Not one of your relatives is named thus." (Lk 1:61)
hālí "even, as far as" precedes the element over which it takes scope, which may be a manner AdvP, place AdvP, prepositional phrase with $n \bar{\varepsilon}$, or clause. Only manner or place AdvPs can follow hālí directly; other AdvPs are preceded by hālí n $\bar{\varepsilon}$.

Before a manner-adverb hālí means "very"; the adverb itself may be ellipted. This is the single commonest function of hālí in KB, with ellipsis usual.

Lì tòe hālí [bédvgō]. "It's very difficult."
3IN be.bitter until much.

Before place AdvPs and $n \bar{\varepsilon}+$ time AdvPs hālí is "until, as far as"; so too before $n$-catenations or narrative kà-clauses, the VPs of which often show the preverb tì.

> hālí nē zịná "up until today"

O daa pun ane ninkvod hali pin'ilvgon sa.
Ò dāa pún à nē nị̄n-kv̂vd hālí pị̆n'ilv́gv̄=n sá.
3AN TNS previously Cop foc person-killer:SG even beginning:SG=Loc since.
"He was a murderer even from the beginning." (Jn 8:44)

Ti nwa'ae li hali paae Nofa.
Tì n̆wá'a=lī hālí $\varnothing$ pāe Nofa.
1PL strike=3IN until cat reach Nophah.
"We struck them even as far as Nophah." (Nm 21:30)

Zugsob la da ke ka kvkom ban'as gban'e Na'ab la, hali ka o ti kpi.
Zūg-sób lā dá kè kà kùkòm bân̆'as gbān̆'e Nâ'ab lā,
Lord art tns let and leper:SG disease seize king:SG ART
hālí kà ò tí kpì.
until and 3AN once die.
"The Lord caused leprosy to afflict the king for the rest of his life."

Elsewhere hālí means "even." Thus, before nominalised clauses which do not express time or place:
hali ne man daa sobi tisi ya si'em la, m daa pu sobi li
hālí nē mán dāa sōbī $\varnothing$ tísì=yā sị'əm lā $\grave{m}$ dāa pō sōbí=l̄̄ ...
even with 1SG:NZ TNS write CAT give=2PL INDF.ADV ART 1SG TNS NEG.IND write=3IN ...
"Despite how ["even with how"] I wrote to you, I did not write it ..."
(2 Cor 7:12)

Hali la'am ne on daa an yzlsum wusa daan la, o da lieb nэŋdaan...
Hālí là'am n $\bar{\varepsilon}$ ón dāa án̆ y $\bar{\varepsilon}$ l-súm wūsā dâan lā,
Even together with 3AN:NZ TNS Cop matter-goodness all owner:SG ART,
ò dà lị̀əb n乞̄ŋ-dâan...
3AN tNs become poverty-owner:SG...
"Even though he had every blessing, he became poor..." (2 Cor 8:9)

Zugsob yel ye, Hali ne man vve nwa...
Zūg-sób yćl y $\bar{\varepsilon}$, Hālí n $\bar{\varepsilon}$ mán vv̄e ňwá ...
Lord say that even with 1sG:Nz be.alive this ...
"The Lord says: Even as I live .." (Rom 14:11)

With hālí (or hālí báa) before main clauses without kà the scope may be the subject, the VP, or a presubject adjunct like a yà'-clause.

Hali baa lampodi'esidib $m \varepsilon$ ninid ala.
Hālí báa làmp̄̄-dị́'əsìdìb mé nị̀ìd àlá.
Even tax-receiver:pl also do:IPFV ADv:thus.
"Even tax-collectors do that." (Mt 5:46)

Hali tuvmbe' $\varepsilon$ d dim nipid ala.
Hālí tùvm-bē'عd dím nịì̀d àlá.
Even deed-bad:pl null.pl do:IPFV adv:thus.
"Even sinners do that." (Lk 6:33)

Hali o be suori kenna ye o tv'vsif.
Hālí ò bè sūer $\varnothing$ k $\bar{\varepsilon} n$ nā yé ò tv̄'vsí=f.
Even 3AN EXIST road:SG cat come:IPFv hither that 3AN meet=2SG.
"He's even on the way coming here to meet you." (Ex 4:14)

Hali baa bama wvsa ya'a na zo ka basif, man kv basi fo.
Hālí báa bàmmā wūsā yá' nà zó kà básì=f, mān kú bāsī=fó=ø.
Even demst.pl all if irr run and leave=2SG, 1SG.CN neg.irr leave=2SG=NEG.
"Even if they all run away and leave you, I will not." (Mt 26:33)

## 20 Greetings and other formulae

(a) Enquiries after health.

Gbị́s wēlá?
Dúe wēlá?

Nịntā $\eta$ á wēlá?
Yó'vך á wēlá?
Fì yị-dímàa?
Nịn-gbịnáa?
Pư'ā nē bịisc̀ $\varepsilon$ ?
"How did you sleep?" or
"How did you get up?"
(morning greetings at first meeting)
"How is the day/afternoon?"
"How is the evening?" literally "night"
"[How are] your household?"
"[How is your] body?" i.e. "How are you?"
"[How are your] wife and children?"
... and so on, often at great length. Replies may be
Àláafù bé.
Àláafù béo.
Àláafù bé $\varepsilon=b a ́$.
"There is health." [Also used as a greeting.]
... for him/her.
... for them.
(b) Blessings follow the pattern Bárıkà né fù/yà ... "Blessing with your ..." with the introductory words usually ellipted; the reply to all of these is Náa.

## K $\bar{n} n k \bar{\varepsilon} n$.

$N \bar{\varepsilon}$ zâam zâam.
Tūvmā! or Tv̄vmā tūvmā!
$N \bar{\varepsilon}$ sóňsıgā.

N $\varepsilon$ fù būrıyá-sòク.
Né fù yv̀̀m-pāalíg.
(c) Prayers. Reply Àmị! "Amen!"

Win ná lēbısī=f nē láafi yà.

Win ná sūŋ̄̄=f.
Win ná tā'así=f.
"Welcome!" K $\bar{\varepsilon} n$, gerund of $k \bar{\varepsilon} \check{n}$ "come"
"Good evening."
"(Blessing on your) work!"; includes practically anything which could be regarded as work, making this the commonest daytime greeting. "(Blessing on your) conversation"; to a group talking, or to a person sitting quietly alone (as conversing with his or her own wīn ${ }^{\mathrm{n} \varepsilon /}$.) "Merry Christmas."
"Happy New Year."
"Safe journey!" literally "[I pray that] God will bring you back in health."
"God will help you"; usually expresses thanks
"Safe journey!" ("God will help you travel.")
(d) Statements of fact and commands. Reply Tò "OK", or as appropriate.

Bēogū lā.
Àtínì dáarì lā.
Gbịsìm súnā.
Kpèlımī súm.
Pù'usìm yịn.
(e) Miscellaneous formulae
$\grave{M} p \hat{v} ' v s$ yā [bédvḡ̄].
Gáafàrà.
Kābīr kāburí!

Dị̀m sūgvrú.
$\grave{M}$ bélìm $n \bar{\varepsilon}$.

X lábāar á wēlá?

M̀ mōr kû'өm náa?

Win yél sídà.

Fù wúm Kūsáalè $\varepsilon$ ?
$\bar{\varepsilon} \varepsilon n ̆$, m̀ wúm.
Áyìı, m̀ pū wv́mmā.
"See you tomorrow!" ("That's tomorrow.")
"See you on Monday."
"Sleep well."
"Remain well"; "Goodbye", to those remaining.
"Greet (those) at home"; "Goodbye", to leaver.
Reply Tò "OK", or Bà nà wōm "They will hear."

## 21 Specific lexical fields

### 21.1 Kinship terms

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.

| My | father | is my | sàam ${ }^{\text {ma }}$ or less formally bā' |
| :---: | :---: | :---: | :---: |
|  | father's elder brother |  | sàam-kpēcn̆m ${ }^{\mathrm{m}}$ |
|  | father's younger brother |  | sàam-pịt ${ }^{\text {a/ }}$ |
|  | father's sister |  | pùgudìb ${ }^{\text {a }}$ |
| My | mother | is my | mà |
|  | mother's elder sister |  |  |
|  | or senior co-wife |  | $m a ̀-k p \bar{\varepsilon} \varepsilon n \check{m}{ }^{\text {m }}$ |
|  | mother's younger sister |  |  |
|  | or junior co-wife |  | mà-bịl ${ }^{\text {a }}$ or mà-pịt ${ }^{\text {a/ }}$ |
|  | mother's co-wives | are my | mà nám ${ }^{\text {a }}$ |
|  | mother's brother | is my | án̆sì ${ }^{\text {a }}$ |

I am my mother's brother's ān̆sí $\eta^{\text {a }}$; to all the other relatives above I am bịi $g^{a}$ "child" or specifically dà-kòon̆r $\varepsilon^{\varepsilon}$ "son" or pư'à-yùa "daughter." Although the Kusaasi are not matrilineal, the mother's brother is felt to be a particularly close relation with a traditionally benevolent role towards his sister's child.

There are no special terms for aunts or uncles by marriage.

My grandparent is my yáab ${ }^{\mathrm{a}}$ ( M yāa-dáu, F yāa-pư'áa)
grandchild yáa ${ }^{\text {a }}$

These words are also used for ancestor/descendant.

My elder sibling of my own sex is my bịer $r^{\varepsilon /}$
younger sibling of my own sex is my pịtú
sibling of opposite sex is my tāunn̆

These words are also used for cousins, with seniority, as always, going by family branch.

| My | wife | is my | yị-pư'áa or simply pu'a ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: |
|  | wife's parent |  | dị̀mm ${ }^{\text {ma }}$ ( M dị̀əm-dāu, F dị̀əm-puāk ${ }^{\text {a }}$ ) |
|  | wife's sibling |  | dàkịig ${ }^{\text {a }}$ ( M dàkì-dāu, F dàkị-pūāk ${ }^{\text {a }}$ |

Dị̀ $m^{\text {ma }}$ 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 mà mà "my mother" or $\grave{m}$ bā' "my father." Parents-in-law are greatly respected, but with siblings-in-law there is a traditional reciprocal joking relationship; certain whole ethnic groups are said to bear this relationship to each other, called "playmate" in local English. At Bùgóm-tōon̆r ${ }^{\varepsilon}$, the Fire Festival, one throws eggs at one's brothers-in-law.

I am my wife's parents' bịìig "child" and my wife's siblings' dàkịì ${ }^{\text {a }}$.

| My | husband is my | $s i ̄ d^{\text {a }}$ |
| :---: | :---: | :---: |
|  | husband's parent | dàyáam ${ }^{\text {ma }}$ ( M dàyāam-dáu, F dàyāam-púák ${ }^{\text {a }}$ |
|  | husband's elder brother | sìd-kpē $\varepsilon$ n̆ ${ }^{\text {m }}$ |
|  | husband's younger brother | sìd-bịl ${ }^{\text {a }}$ |
|  | husband's sister | sìd-puāk ${ }^{\text {a }}$ |

I am my husband's parents' bịị ${ }^{\text {a }}$ "child"; all my husband's siblings (of both sexes) call me $p{\underset{C}{~ ' a ̄ a ~}}^{\mathrm{a}}$ "wife."

My co-wife is my nịn-tāa, "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.

Two men married to sisters are dàkị̀-tù $\theta s^{\varepsilon}$; two women married to brothers are nị̀n-tāas ${ }^{\varepsilon}$, "co-wives." "Fiancée" is pur'à-c̄lín ${ }^{\text {a }}$.

### 21.2 Personal names

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 $\dot{N}$ - is a syllabic nasal assimilated to the point of articulation of a following consonant. Most names are based on common nouns, but a few are based on adjectives, and some on whole VPs, or even clauses.

On 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 ( $\operatorname{si} g \bar{i} r^{\varepsilon /}$ ) assigned to a newborn child through the father's consultation with a diviner ( $b \overline{\bar{a}^{\prime}} a$ ); this may be the $w \bar{i} n^{\mathrm{n} \varepsilon /} \underline{1.1}$ of an ancestor, or of a spiritually powerful tree:

| $\grave{A}-W \bar{i} n^{\text {ne/ }}$ | Awini | person with a $\operatorname{si} g \bar{l}^{\text {in }} r^{\varepsilon /}$ from father's family |
| :---: | :---: | :---: |
| $\dot{A}-B \bar{v} g \bar{v} r^{\varepsilon}$ | Abugri | person with a $\operatorname{si} g \bar{g}^{\prime} r^{\varepsilon /}$ from mother's family |
| $\dot{A}-T ı \grave{ı} g^{\text {a }}$ | Atiga | "tree" as sīgī $r^{\text {c/ }}$ |
| $\grave{A}-K \bar{u} d \bar{v} g{ }^{\text {a }}$ | Akudugu | "piece of iron" (sc. as a marker on a treesīgī $\left.r^{\varepsilon /}\right)$; displaced as a common noun by the $\mathrm{pl}-\mathrm{as}-\mathrm{sg} k \bar{u} t^{\varepsilon}$ |

A younger sibling of $\grave{A}-W \bar{i} n^{\mathrm{n} \varepsilon /}$ with the same $\operatorname{si} g \overline{\mathrm{i}} r^{\varepsilon /}$ is called $\grave{A}-W i n-b i ̣ l^{\mathrm{a}}$ "Awimbillah", of $\grave{A}-K u ̄ d \bar{v} g^{\circ}, \grave{A}-K u ̀ d-b i ̣ l a ~ " A k u d i b i l l a h " ~ e t c . ~ N a m e s ~ f o r ~ g i r l s ~ m a y ~ f o l l o w ~$ the pattern $\grave{A}-W i n-p u a ́ k{ }^{\text {a }}$ "Awimpoaka."

Other names refer to birth circumstances:

| $\grave{A}-N a ̀ ' a b^{\text {a }}$ | Anaba | "chief" but in the sense "afterbirth" (because a chief leaves his house after his retainers): sole survivor of twins |
| :---: | :---: | :---: |
| À-Fūug ${ }^{\text {/ }}$ | Afugu | "clothing": child born with a caul |
| $\grave{A}-T \bar{u} l^{\text {l }}$ | Atuli | (tùlì $\mathrm{g}^{\varepsilon}$ "invert"): breech-delivered child |

A whole clause is seen as a birth-circumstance personal name in
À-Tìım bódı̀g yā $\quad$ "The medicine has got lost."
Many names relate to customs intended to break a cycle of stillbirths. One such custom is the apotropaic practice of throwing away the dead child or just burying it in a pot; the next surviving child may then be called e.g.

| $\grave{A}-$ Tàmpūvr | Tampuri | "ashpit, rubbish tip" |
| :--- | :--- | :--- |
| $\dot{A}-D \bar{v} k^{\nu /}$ | Aruk | "pot" |

Another strategy is pretended adoption by an outsider, resulting in names like Jambeedu "Fulani", or

| À-Sāan ${ }^{\text {a/ }}$ | Asana | "guest, stranger" |
| :---: | :---: | :---: |
| À-Sāan-dú | Sandow | "guest" + dāu "man" |
| À-Zàngbèog ${ }^{\text {a }}$ | Azangbego | "Hausa person" |
| À-Nàsà-puāk ${ }^{\text {a }}$ | Anasapoaka | "European woman"; also "child delivered by a European midwife" |

Names based on adjectives:

| $\grave{N}-D \bar{a} v g^{\circ}$ | Ndago | "male" |
| :--- | :--- | :--- |
| $\grave{N}-P u \bar{a} k^{\mathrm{a}}$ | Mpoaka | "female" |
| $\dot{N}-$ Bịl $^{\mathrm{a}}$ | Mbillah | "little" |

Muslims often use day-of-the-week names depending on birth. The system does not cover all weekdays; examples are À-Tínì "Girl born on Monday", À-Tàláatà "Girl born on Tuesday", Àrzúmà "Boy born on Friday", À-Síbì "Boy born on Saturday."

Muslims also have formal Arabic names, sometimes adapted into Kusaal, like Dàhàmáanì/Dàsmáanì YAbdu-r-Raћmaan. KKY p6 has the girl's name Amoryam À-M̄̄r Yām "Has Common Sense", perhaps adapting Maryam "Mary."

### 21.3 Ethnic groups and clans

The great majority of ethnic group names are $g a \mid s \varepsilon$ or $a \mid b a$. The corresponding languages belong to the $l \varepsilon$ subgroup of $r \varepsilon \mid a a$, and the place inhabited has $\mathrm{sg} g 0$.

| Ethnic group (pl) | Language | Place |  |
| :---: | :---: | :---: | :---: |
| Kūsâas ${ }^{\text {® }}$ | Kūsâal ${ }^{\text {c }}$ | Kūsâvg ${ }^{\text {a }}$ | Kusaasi |
| Ňwāmpūrīs ${ }^{\varepsilon /}$ | Ňwāmpūrīl ${ }^{\text {c/ }}$ | $\check{N ̌ w a ̄ m p u ̄ r u ̄ g o r ~}$ | Mamprussi |
| Bārīs ${ }^{\text {¢ }}$ | Bāt ${ }^{\text {/ }}$ | Bārūg ${ }^{\text {/ }}$ | Bisa |
| Mòos ${ }^{\text {® }}$ | Mòol ${ }^{\text {E }}$ | Mòog ${ }^{\text {ºm }}$ | Mossi |
| Dàgbāmma/ | Dàgbān ${ }^{\text {n } /}$ | Dàgbāun ${ }^{\text {a/ }}$ | Dagomba |
| Bìm ${ }^{\text {ma }}$ | $B i n^{\text {ne }}$ | Bìun ${ }^{\text {a }}$ | Moba |
| Sìmịis ${ }^{\text {e }}$ | Sìmịil ${ }^{\text {E }}$ | Sìmị̂ug ${ }^{\text {a }}$ | Fulbe |
| Yàan̆s ${ }^{\text {a }}$ | Yàan ${ }^{\text {n }}$ |  | Yansi |
| Gōrís ${ }^{\text {® }}$ | Gōrín ${ }^{\text {ne }}$ |  | Farefare |
| Yārīs ${ }^{\text {c/ }}$ | Yāt ${ }^{\text {¢ }}$ |  | Yarsi |
| Zàngbècd ${ }^{\varepsilon}$ | Zàngbècl ${ }^{\text {E }}$ |  | Hausa |
| Bùlìs ${ }^{\text {e }}$ | Bùl ${ }^{\text {l }}$ |  | Bulsa |
| Tàlis ${ }^{\text {E }}$ | Tàlìn ${ }^{\text {n }}$ |  | Tallensi |
| Nàbıdìb ${ }^{\text {a }}$ | Nàbìr ${ }^{\text {c }}$ |  | Nabdema |
| Bùsâan̆s ${ }^{\text {a }}$ | Bùsâan̆l ${ }^{\text {a }}$ |  | Bisa |
| Nàsàa(r)-nàm ${ }^{\text {a }}$ | Nàsāal ${ }^{\text {r }}$ |  | European |
| Kàmbùmis ${ }^{\varepsilon}$ | Kàmbùnì ${ }^{\varepsilon}$ |  | Ashanti |

Note Tù̀nn ${ }^{\text {n }}$ "Toende area", Tùөnnìr ${ }^{\varepsilon}$ "Toende dialect of Kusaal", Àg̀̀ll $l^{\varepsilon}$ "Agolle area", Àg̀̀ll ${ }^{1 \varepsilon}$ "Agolle dialect of Kusaal": Ò pinàn̆'ad À̀gòl. "She speaks Agolle Kusaal."

| Clan (pl) | Place |  |
| :---: | :---: | :---: |
| Kùtām ${ }^{\text {ma/ }}$ | Kı̀tāun ${ }^{\text {/ }}$ | WK's clan |
| Zùes ${ }^{\text {® }}$ |  |  |
| Wịid-nàm ${ }^{\text {a }}$ | Wịidùg ${ }^{\text { }}$ |  |
| Nàbıdib ${ }^{\text {a }}$ | Nàbıdı̀ ${ }^{\text { }}$ |  |
| Gòos ${ }^{\varepsilon}$ | Gòog ${ }^{\text {º}}$ |  |
| $S a^{\prime}-$ dàbù $\theta S^{\varepsilon}$ or Sà -dàbù ${ }^{\text {b }}{ }^{\text {a }}$ | Sà'-dàbòog ${ }^{\text {a }}$ |  |
| Nà'-dàm ${ }^{\text {ma }}$ | Nà'-dàun ${ }^{\text {º }}$ |  |
| Gòm-dìm ${ }^{\text {a }}$ | Gòm ${ }^{\text {m }}$ |  |

Subclans of Zùes ${ }^{\varepsilon}$ include Zùà-sābılís ${ }^{\varepsilon}$ "Black Zoose" and Zưà-wịib ${ }^{\text {a }}$ or Zưàwịis ${ }^{\varepsilon}$ "Red Zoose." Clan Nàbıdìba is distinct from the ethnic group (WK.)

### 21.4 Place names

For Kusaal place names in English-language contexts see 1.1. This section was improved by consultation with John Turl (see References.) Many Kusaal place names have transparent meanings.

| $B j k^{\circ}$ | Bawku | "pit, geographical depression" |
| :---: | :---: | :---: |
| Kūk ${ }^{\text {a/ }}$ | Koka | "mahogany tree" |
| Kùkpàrìga | Kokpariga | "palm tree" |
| Tèmpáan ${ }^{\text {ne }}$ | Tempane | perhaps "new villages" |
| Mư'à-nōor ${ }^{\text {/ }}$ | Mogonori | "lakeside" ("lake-mouth") |
| Bàs-yōn ${ }^{\text {ne/ }}$ | Basyonde | "abandon sacks" ? reason for name |
| Kūgōr ${ }^{\varepsilon /}$ | Kugri | "stone" |
| $B \bar{u} g \bar{u}^{\varepsilon}$ | Bugri | $b \bar{u} g \bar{v}^{\varepsilon}$, object housing a $w \bar{i} n^{\mathrm{n} \varepsilon /}$ |
| Widi-ňyá'an ${ }^{\text {a }}$ | Woriyanga | archaic for wìd-n̆yá' $a \eta^{\text {a }}$ "mare" |
| Bị-nà'ab ${ }^{\text {a }}$ | Binaba | "prince" |
| Gàarù | Garu | Hausa gàaruu "town/compound wall" |
| Wịid-nà'ab ${ }^{\text {a }}$ | Widinaba | "chief of clan Wịid ${ }^{\text {a }}$ |
| Pūsīg ${ }^{\text {a/ }}$ | Pusiga | "tamarind" |
| Tịl ${ }^{1 / 1}$ | Tilli | "tree trunk" (Hasiyatu Abubakari, p.c.) |
| Pùlımà Kû'өm ${ }^{\text {m }}$ | Pulimakom | "water by pùlımà grass" |
| Wìdāan ${ }^{\text {a }}$ | Widana | for Wid-dāan ${ }^{\text {a }}$ "Horse-Owner", title of a chief's n̄̄-dị̂' $\partial s^{\text {a }}$ "linguist." |
| Mị'isìg ${ }^{\text {a }}$ | Missiga | Explained locally as "mission", i.e. of the Assemblies of God; perhaps influenced by mị̀'isùgo "baptism" |
| Sā-bịl ${ }^{\text {a }}$ | Zebilla | from *sāal $=$ Farefare sáagá "kind of grass used for brooms" |


| Sā-pịəlì ${ }^{\text {a }}$ | Sapeliga | "Isoberlinia Doka" |
| :---: | :---: | :---: |
| Kòl-tā'amís ${ }^{\text {® }}$ | Kultamse | "dog almonds, Andira inermis" |
| Kùlvgún ${ }^{\text {a }}$ | Kulungungu | Bisa Kuurgongu "Crooked Sheanut" |
| Dènùg ${ }^{\text {ºm }}$ | Denugu | origin unknown |
| Àgòl ${ }^{1}$ | Agolle | cf àgól ${ }^{\text {l }}$ "upwards" |
| Tùөn ${ }^{\text {n }}$ | Toende | cf tù $\mathrm{n}^{\mathrm{n} \varepsilon}$ "in front", "West" |
| Bārūg ${ }^{\text {/ }}$ | North WK | "Bisa country" |
| Ňyá'an ${ }^{\text {a }}$ | East WK | "behind" |
| Zūēyā | South WK | "hills", i.e. Gambaga Escarpment |
| Tùөn ${ }^{\text {n }}$ | West WK | "in front" |

KB has ya-dagobvg yà dàgòbì $g^{\text {a }}$ ("your left hand") for "south" and ya-datiuy yà dàtiun $\eta^{3}$ ("your right hand") for "north," along with ya-nya'ap "east", ya-tuona "west."

Stems referring to ethnic groups and clans create place names by adding the suffix -gว: Kūsâvg ${ }^{\text {0 }}$ "Kusaasi country", Mò ${ }^{\text {o }}$ "Mossi country." They need not always be established settlements: Kùtāun $\eta^{\text {/ }}$ "any place inhabited by clan Kotamba."

Places outside Kūsâvg ${ }^{\circ}$ generally do not have Kusaal names (an exception is Sājkâan̆s ${ }^{\varepsilon}$ "Sankanse" in Burkina Faso.) For "Accra" the Twi-derived Ankara is usual. Toende has Wa'arok for "Ouagadougou", but I could not elicit any Agolle equivalent.

The White Volta is simply kōlī $g^{\text {a }}$ "river."

## 22 Texts

### 22.1 Balaam's Donkey

Numbers 22:21-35, KB.

Balaam da duoe beogun loo o buyv 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 boŋ, ka o yammis ayi' dol o. Boŋ la da nyє Zugsob maliak la ka o zi'e suor la zug ka fuoe su'vgu zanl o nu'ugin, ka o bupi kpen' moogi gaad. Ka Balaam pin'ili bu'vd buy la ye o leb suor povg.

Zugsob maliak la da tolisi zi'en lombon'od ayi' bane ka ba me' zaŋguoma ayi' bey, ka suobaanlig beє li teysuk la. Buy la n da nyє Zugsob maliak la, o da miee labin zaŋguom la urig Balaam nobir. Ka o lem bv' o ya'as.

Zugsob maliak la da len vurigi tolis zi'en tuon zin'ikanc ka so' ku nyani fendig datiuy bé dagobuga. Buy la da len nye Zugsob maliak la, o da digin ne Balaam wusa teŋin, ka Balaam sunf duoe hali ka o vob bon la ne o dansaar. Ka Zugsob ke ka bvy la ya'ae o noori pian' Balaam ye, "Bo kimm ka m maalif ka li ke ka fu bv'vm noor atan' sa?" Balaam da lebis o ye, "Fv morim ne maan galim! M ya'a morin su'vgu m nu'ugin
 fu ban'ad saya wusa ti paae zinaa? Fu nam mi' nye ka m maal anwa tisi foo?" Ka o lعbis ye, "Ayei!"

Ka Zugsob yo'og Balaam nini ka o nyє maliak la zi'e suor la teysuk ka fuoe su'vgu zanl. Ka o igin ka vanbin teŋin. Zugsob maliak la da bu'os o ye, "Bo ka fu bu' buy la noor atan' sa? M kena ye m ginif bozugo ken la ka' so'vm m nini nii. Noor atan' ka buy la nyєєm ka yuk. Buŋ la ya'a pu yukine, anwaa m kuvnif ka basin boy la." Balaam da lebisi yel Zugsob maliak la ye, "M tom taal, m pa'a pu bay ye fo zi'en $\varepsilon$ suorin la ye fo geyi ma. Nannanna li ya'a pu malisi fo m na lebi kul." Ka maliak la
 Balaam dol Balak na'ayikpem la keŋ.
 Balaam tns rise morning=loc cat tie 3an donkey:SG cat accompany Moab
ná'-yị-kpém lā $\varnothing$ kév.
chief-house-elder:PL ART CAT go.
"Balaam got up in the morning, saddled his donkey and went with the courtiers of the king of Moab."

Àmáa Wínà'am sún̆f dà dùe nē ón k $\bar{\varepsilon} \eta$ lā, kà $Z \bar{u} g$-sób málįāk
But God heart:SG tNs rise with 3AN:NZ go ART, and Lord angel:SG kịdıgī $\varnothing$ zị̂’ə sūөr lā zúg yと́ ò gịךó=ø.
meet CAT stand road:SG ART upon that 3AN obstruct=3AN.
"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 bàn̆'ad né ò bùy, kà ò yàmmìs ày!̣́' dōlló=ø.
Balaam TNS ride:IPFV FOC 3AN donkey:SG, and 3AN slave:PL NUM:two accompany=3AN. "Balaam was riding his donkey, and his two slaves accompanied him."

Bòn lā dá ňys̀ Zūg-sób málīāk lá kà ò zị́e sūөr lā zúg Donkey:SG ART tns see Lord angel:Sg ART and 3AN be.standing road:SG ART upon kà fúe sò'vgì ø zán̆l ò nú'ugī=n, kà ò bv́nì ø kpèn̆' and draw knife:SG cat have.in.hand 3an hand:SG=LOC, and 3AN cut.across cat enter mōogī 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 pịn̆'ilī øø bō'vd búy lā yé ò léb sūөr pôvg. 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."

Zūg-sób málīāk lā dá tòlısì ø zị̂'ən lòmbòň'od àyị' bánì kà bà mé Lord angel:SG ART TNS do.next cat stand orchard:PL NUM:two rel.PL and 3PL build
 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."
 Donkey:SG ART=NZ TNS see Lord angel:SG ART, 3AN TNS squeeze cat hide.behind zàngùөm lā $\varnothing$ ūrīg Balaam nóbìr. Kà ò lćm bú'o=ø yâ'as. wall:sg art cat scrape Balaam leg:sg. And 3an again beat=3an 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."

Zūg-sób málịāk lā dá lèm vūrıgī ø tōlīs ø zị’ən tùөn
Lord angel:SG ART TNS again shift.along cat do.next cat stand in.front
 place-rel.SG and indf.An neg.IRR prevail cat turn right or left=neg.
"Then the angel of the Lord moved along to stand in front of a place where nobody could turn to the right or the left."

Bùn lá=ø dà lèm n̆ȳ̄ Zūg-sób málīāk lā, ò dà dìgìn n $\bar{\varepsilon}$ Donkey:SG ART=NZ TNS again see Lord angel:SG ART, 3AN TNS lie.down with Balaam wūsā $t \bar{\varepsilon} \eta \bar{i}=n, \quad$ kà Balaam sún̆f dūe hālí kà ò vōb Balaam all ground:SG=LOC, and Balaam heart:SG rise so.far and 3AN strike bón 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 Zūg-sób ké kà bùn lā yá'e ò nōorī ø piān̆' Balaam y $\bar{\varepsilon}$, And Lord let and donkey:SG ART open 3AN mouth:SG CAT speak Balaam that B̄̄ kịmm kà m̀ máalì=f kà lì ké kà fù bú'v=m nōor átán̆' sá=ø? what IDEO and 1SG make=2SG and 3IN let and 2SG beat=1SG time:SG NUM:three hence=co? "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 lèbısō=ø ȳ̄, Fv̀ mórī=m n $\bar{\varepsilon} \smile \varnothing$ mâan $\varnothing$ gálìm! M̀ yá' Balaam tns reply=3AN that, 2SG have=1SG FOC CAT make:IPFV CAT joke:IPFv! 1SG if $m \bar{r} \bar{i}=n$ sú'vgì $\grave{m}$ nú'ugī=n, $\grave{m}$ nāan $k \bar{v} v=n i ́=f$ 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.'"

Bùn lā dá lèbìs Balaam ȳ̄, Mān kā' né fù m $\bar{\varepsilon} \eta$ bón ónì kà Donkey:SG Art tns reply Balaam that, 1SG.CN neg.be foc 2SG self donkey:Sg rel.an and fù bān̆'ad sāŋá wūsā $\varnothing$ tí pāe zịnáa=ø=ø? Fù nám mị'乙 ø n̆yé kà 2SG ride:IPFV time all CAT once reach today=NEG=PQ? 2SG already know CAT see and m̀ mâal àňwá $\varnothing$ tísì=fò=ø? Kà ò lćbìs y $\bar{\varepsilon}$, Áỳ̀ı! 1SG make thus CAT give $2 \mathrm{SG}=\mathrm{CQ}$ ? 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.'"

Kà Zūg－sób yô＇og Balaam nịnì kà ò ňyc̄ málīāk lā 〔ø zị＇e sūөr And Lord open Balaam eye：PL and 3AN see angel：SG ART CAT be．standing road：SG lā tén－sūk，kà fúe sò＇vgì $\varnothing ~ z a ̄ n ̆ l . ~ K a ̀ ~ o ̀ ~ i ́ g i ̀ n ~ k a ̀ ~ v a ́ b i ̀ n ~ t \varepsilon ̄ \eta i ̄=n . ~$ 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．＂

Zūg－sób málīāk lā dá bù＇өsō＝ø yē，Bó kà fù bū＇bú刀 lā
Lord angel：Sg ART TNS ask＝3AN that，What and 2SG beat donkey：SG ART nōor átán̆＇sá＝ø？M̀ ${ }^{\prime}$ ？$\quad n \bar{a} \quad y \varepsilon ́ ~ m ̀ ~ g i ̣ \eta i ́=f ~ b \overline{~ z u ́ g o ̄ ~ k \bar{\varepsilon} n ~ l a ̄ ~}$ time：SG NUM：three hence＝CQ？1SG come hither that 1SG obstruct＝2SG because go：GER ART
 NEG．BE good：ABSTR 1SG eye：PL LOC＝NEG．Time：SG NUM：three and donkey：SG ART see＝1SG kà yūk．Bùy là yá＇pū yūkī＝ní àn̆wáa＝ø m̀ kv̄v＝ní＝f kà and deviate．Donkey：SG ART if NEG．IND deviate＝DP thus＝NEG 1 SG kill＝DP＝2SG and básī＝n bún 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 lèbısì ø yél Zūg－sób málīāk lā y $\bar{\varepsilon}, ~ \grave{M}$ túm tâal，ì pá＇ Balaam tns reply cat say Lord angel：SG ART that，1SG work fault：SG，1SG TNS $p \bar{u}$ báy yé fù zị̂＇e n̄̄ sūөrí＝n lā yé fù gị $\eta i ́=m a ̄=\varnothing$ ． NEG．IND realise that 2 SG be．standing FOC road：SG＝LOC ART that 2 SG obstruct＝1SG＝NEG．
Nānná－nā，lì yá＇pū mālısí＝f̄̄＝ø，$\quad$ m ná lēbī ø kūl．
Now，$\quad$ IIN if NEG．IND be．pleasing＝2SG＝NEG，1SG IRR return CAT go．home．
＂Balaam replied to the angel of the Lord：＇I have transgressed．I did not realise that you were standiing in the road to obstruct me．Now，if it is not pleasing to you，I will return home．＇＂

Kà màlīāk lā lébısì ø yèl Balaam y $\bar{\varepsilon}$, Dòl nị̆dīb lā〕ø k $\bar{\varepsilon} \eta$ ，
And angel：sg art reply cat say Balaam that，Accompany person：pl art cat go， àmáa yह̀lìm nē mán yé fù yél sị＇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 dōl Balak ná＇－yị－kpém lā」ø kév．
And Balaam accompany Balak chief－house－elder：Pl art cat go．
＂So Balaam went with Balak＇s courtiers．＂

### 22.2 Three Murderers

Kusaal Solima ne Siilima p16. This fable, found throughout Africa, Europe, and Asia, ultimately derives from a Buddhist Jātaka tale (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.

Nịn-kúvdìbá àtán̆'. "Three murderers."
Person-killer:PL NUM:three.
Dāpá àtán̆' $n$ dá bè. Bà dà à nē dáp-kān̄dā súpā. 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 zịň'inì ø gbān̆'e yé bà dûөm乙ø īa búdàalìm And day:SG one and 3PL gather CAT sit CAT grab that 3PL rise:IMP CAT seek courage lâ'ad $n$ gịnnī $\varnothing$ kū nį̣dīb má'àa kà dā lćm tùm sị'əlā=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 $\varnothing$ Ø īa sû'vs n $\bar{\varepsilon}$ záň'anà $n \bar{\varepsilon}$ tí-dāad n $\bar{\varepsilon}$ pịmá n $\bar{\varepsilon}$ 3PL truly rise CAT seek knife:PL with bludgeon:PL with bow:PL with arrow:PL with lô'ad, $n \bar{\varepsilon}$ kpānā $n \bar{\varepsilon}$ málì súnā $n$ pị̆n'ilī $\varnothing$ gịnnī $\varnothing$ ịəəd quiver:PL with spear:PL with gun:PL well cat begin Cat wander:IPFV CAT seek:IPFV nịd $d \bar{b} b \quad y \varepsilon ́ \quad$ bà yá' ňy $\bar{\varepsilon}$ sō' bān kū.
person:PL that 3PL if find INDF.AN 3PL.CN 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."
 3PL go.round thus with month:PL NUM:three with day:PL nUM:three. 3PL nEG.IND find $n i ̣ ̄ d \bar{\imath} \smile \quad \varnothing$ ná $k \bar{v} v=\varnothing$. Kà kpélìm mōr $k \bar{\varepsilon} n \quad n \bar{\varepsilon} \quad k \bar{\varepsilon} n \quad n \bar{\varepsilon} \quad k \bar{\varepsilon} n$. 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."
 Day:PL NUM:five day:SG 3PL find with far hence and INDF.IN stand black:SG CAT
 like person:SG like, and 3PL elder:SG ART that 3PL go:IMP CAT kill=3AN, that 3AN nULL.AN
 if already be.able and have foc item-IndF.IN all, 3PL IRR prevail cat kill=3AN. "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; even if he was capable (?) and had every piece of equipment, they would be able to kill him."

And DEMST.AN intercept:IPFV there, and DEMST.AN intercept:IPFV there, 3PL once go CAT pāa_ø n̆yć kà lì kā' nịdá=ø, kà á n $\bar{\varepsilon}$ bōtú kà lịgıdī pê'cl reach CAT see and 3IN NEG.BE person:SG=NEG, and COP FOC sack:SG and money fill mà'àa má'àa má.
only only IDEO.
"And this one blocked this way, and that one blocked that way, but once they got there they saw that it wasn't a person but a bag chock full of money."
 And 3PL say, So.then, and now this, 1PL that once do money this how=cQ? "They said: 'Well, now! What are we going to do with this money?'"

Kà bà y $\bar{\varepsilon}$, bà nà pūdīg n $\bar{\varepsilon}$. Àmáa bà yé lì nár kà bà yịs lịggrdī lā $n$ And 3PL say, 3PL IRR share FOC. But 3PL that 3in must and 3pl extract money art cat kēŋ Ø dá' dāam Ø ná nū yịìgá kà ňyāan pūdīg lịgıd̄̄ 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 yịs lịgıd̄̄ lā bị'əlá ȳ bịị lā kémø dá yv̄vr 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."
 Child:SG ART=NZ go:IPFV ART, 3AN think:IPFV FOC 3AN:NZ IRR do INDF.ADV CAT kill REL.PL remain ànị́nā lā, kà váe lịgıdī lā wūsā wūsān sū'e, ò yèlí ò m $\bar{\varepsilon} \eta y \bar{\varepsilon}$, there ART, and gather money art all all CAT own, 3AN say 3AN self that, ò nà dā' n $\bar{\varepsilon}$ dāam, kà bó tì-kv̄vdím $n$ lós dāamí=n lā 3AN IRR buy FOc beer, and seek medicine-killing CAT immerse beer=LOC ART $n$ pāa ø tíl=bá kà bà nūu乙ø kpị kà ò sv̄'e lịgıdī lā wūsā. Cat reach cat give=3Pl 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."

Kà síd dà' dāam lā, kà bó tì-kv̄vdím $n$ lós.
And truly buy beer ART, and seek medicine-killing cat immerse.
"And indeed he bought the beer and sought poison to put in it."

Zị̂'isíg $\bar{\varepsilon}=\varnothing$, kà bà bàyị́' lá=ø kpèlìm lā mé gbān̆'e n $\bar{\varepsilon}$ yé bà kū NEG.KNOW=NEG, and 3PL NUM:two ART=NZ remain ART also grab FOC that 3PL kill
bịig lá=ø kēŋ dāam lā dâ'ab lā, kà mé sū'e lị̆gıdī lā.
child:SG ART=NZ go beer ART buy:GER ART, and also own money art.
"Unbeknownst, the two who had stayed behind had also decided to kill the youth who had gone to buy the beer and themselves keep the money."

Bịig lá=ǹ mōr dāam lā乙 ø pāa nā lā, kà ò $\eta a \bar{a}$ kiá $k p \bar{\varepsilon}$, Child:SG ART=NZ have beer ART CAT reach hither ART, and DEMST.AN cut here,
kà $\bar{n}$ kíá $k p \bar{\varepsilon}, ~ n ~ k i ̣ ́ o=\varnothing ~ \varnothing ~ k v ̄, ~ k a ̀ ~ y v ̄ ' v n ~ z a ́ \eta ~ d a ̄ a m ~ l a ̄ \smile ø ~$ and 3AN.CN cut here, cat cut=3AN cat kill, and then take beer art cat nū wán wán, lì pū yúug $\bar{\varepsilon}=\varnothing$, kà bà wūsā wūsā mé kpélìm kpị drink IDEO IDEO, 3IN NEG.IND delay=NEG and 3PL all all also immediately die zìn̆-kàn lā nós kà bà sō' sō' pū n̆yāŋī ø pâam lā'af lā place-dEm.SG ART exactly and 3PL INDF.AN INDF.AN NEG.IND prevail CAT receive cowry:SG ART báa yīnní $\varnothing$ mōrī ø kūlí bà yáa=n $\bar{\varepsilon}=\varnothing$.
not.one Cat have cat go.home 3PL house:PL=LOC=NEG.
"When the youth arrived back with the beer, this one cut him here and that one cut him there, cutting him to death, and they then picked up the beer and drank it in gulps; before long both of them died immediately in the exact same place, and none of them was able to take even a single coin home."
 3IN.CN and Kusaasi:PL that 2SG if think or act bad that 2SG give 2SG neighbour:SG, fù mâanní fù mē yâ'as lā.
2SG make:IPFV 2SG self again ART.
"That's why the Kusaasi say: if you think or do evil toward your neighbour, you're doing it to yourself in return."

### 22.3 Proverbs

Kusaal Solima ne Siilima pp38ff.; other proverbs appear in the grammar above.

Ku'om kaadi lebisne m geegun.
Kù'өm káadì Ø lébìs né m̀ gz̄ogv̄=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'өm zót nē binān̆'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'asìd n̄ $z \bar{\varepsilon} ө r \bar{i}=n$.
Stone:PL gather:IPFV FOC hill:SG=Loc.
"Stones build up on a hill." (The rich get richer and the poor get poorer.)

Awiak seung zi' senne.
À-wīāk $\quad s \bar{\varepsilon} o \check{o n g} \quad z \bar{i}{ }^{\prime} \quad \operatorname{sínn} \bar{\varepsilon}=\varnothing$.
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.
$P \bar{u} \quad \check{n} y \bar{\varepsilon}$ sāa kúvb̄$=\varnothing, \quad$ kà $\check{n} y \bar{\varepsilon}$ sāa nị̂ib.
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.
Bà $p \bar{v}$ nōkíd nā'-bịnnì $\varnothing$ lōbıgíd náaf̄̄=ø.
3PL NEG.IND take:IPFV cow-dung:SG CAT throw.at:IPFV Cow:SG=NEG.
"They don't take cow dung and throw it at the cow." (Coals to Newcastle.)

Zu'om ya'a ye o na lobug, bangim ka o none kugir.
Zū'өm yá' yé ò nà lōbīg, bàjı̀m kà ò nò nè kūgīr.
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."

Balerigu zi' ye o a balerigu, ka tadim mi' ye o [a] tadim.
Bālērvgū ø zī' yé ò à bālērvgó=ø, kà tādīm mị' yé ò à tādīm. 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.
Fù yá' bōod támpịiing sị̂in̆d, fù pū lém zòt lịəך dâvg n̆yōogō=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.
Mōodī ø pị̂lìg kà yū'adā bé.
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.
Bì-dìbìg kúnní ò bā̀ yír n̄̄ nōb-kôog 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.
À-dị'e būvd pū zịñ'i ná'-yị $r \varepsilon ́=\varnothing$.
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 $y \bar{\varepsilon}$ bālērv̄g, kà fù y $\bar{\varepsilon} \quad z u \bar{g}-m a ́ u ̛ k$.
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.
Bùj-dāvg pū kāasídí ò tīrâan ténī=né=ø.
Donkey-male:SG NEG.IND cry.out:IPFV 3AN neighbour:SG land:SG=LOC=NEG.
"The jackass doesn't bray in his neighbour's territory."

Kpeem ane te'eg, o tigidne balaya.
Kpē $\varepsilon n ̆ m ~ a ́ ~ n \bar{\varepsilon} ~ t \hat{\varepsilon} ' \varepsilon g, ~ o ̀ ~ t i ̀ g i ̀ d ~ n \bar{\varepsilon}$ bálàyà.
Elder:SG COP FOC baobab:SG, 3AN sate:IPFV FOC stick:PL.
"An elder is a baobab - no shortage of sticks." (Uneasy lies the head ...)

## From Tony Naden's dictionary:

Baas kae ka nwamis di'e poog.
Bāas ká'e kà n̆wāamīs dị’e pōog.
Dog:PL NEG.BE and monkey:PL receive farm:SG.
"There are no dogs and monkeys have got the farm." (When the cat's away ...)

A proverb related to me by KT:

Sāan-súy á nē yị-dâan án̆sìb.
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.)

## 23 Vocabulary

Words are ordered by Short Forms. Vowel glottalisation and the distinctions $n / n ॅ, ~ \partial / e / e / \varepsilon, i / \iota / i, ~ \theta / o / \rho$ and $u / v / u$ are ignored in the ordering; $\eta$ follows $n$.

The abbreviations $n$ adj pron adv ideo $q s v d v$ stand respectively for noun, adjective, pronoun, adverb, ideophone, quantifier, single-aspect and dual-aspect verb.

Nouns are listed under the sg. Adjectives are listed under the ga|se class form if extant; if not, $g$ o|d $\varepsilon$ or $r \varepsilon \mid a a$. Dual-aspect verbs are listed under the perfective; other forms are listed only if irregular. Regular deverbal nominals are not listed. Compounds are not listed if they are regularly formed and have transparent meanings. Those that are listed are included under the entry for the first element. For compound adjectives see 12.6.1.1.

Personal and place names are not listed: see $\underline{21}$ for examples.
Binomial names of plants are mostly taken from Haaf (see References); he checked the identifications carefully with botanical experts.

Arabic words have probably all been transmitted via other languages.

## A

à- personifier 12.5.1
$\bar{a} a n ̆ d i ̄ g{ }^{\mathrm{a}} \mathrm{pl}$ āan̆dīs ${ }^{\varepsilon}$ cb àan̆d- $n$. black plum tree, Vitex doniana
$\bar{a} a n ̆ d i ̄ r r^{\varepsilon} p l a ̄ a n ̆ d a ̄ n$. black plum fruit
àan̆s ${ }^{\varepsilon} d v$. tear
àbòlá q. adv. how many-fold?
àbv̀y!̣' àbìtán̆' àbùnāasí q. adv. twice, three times etc
à-dàalv́ ${ }^{\top}$ pl à-dàalís ${ }^{\varepsilon}$ à-dàalímìs ${ }^{\varepsilon}$ cb à-dàalv́n- $n$. stork
àen̆ ${ }^{\text {ya }}$ ger àan̆lím ${ }^{\mathrm{m}} s v$. be something/somehow $\underline{16.10}$
àen̆ dv. get torn; pfv adj àan̆lv́n ${ }^{3}$ torn
à-gâvn̆g ${ }^{\rho}$ pl à-gâan̆d ${ }^{\varepsilon} c b$ à- $g a ̄ n ̆-n$. pied crow
àgól ${ }^{l \varepsilon}$ àgōlá $a d v$. upwards
Àgòl ${ }^{l \varepsilon} n$. Agolle district of Kusaasi territory; n. Agolle Kusaal dialect
à-kōrā-dị̂əm ${ }^{\text {ma }}$ pl à-kōrā-dị̂əm-nàm ${ }^{\text {a }} n$. praying mantis
àlá $a d v$. thus
àlá $q$. so many; how many?
àláafù $n$. health (in greetings); cf láafıyà
Àláasìd dâar ${ }^{\varepsilon} n$. Sunday (Arabic)
Àlàmịisì dâar ${ }^{\varepsilon} n$. Thursday (Arabic)
Àlárıbà dâar ${ }^{\varepsilon} n$. Wednesday (Arabic)
àlá zù $g^{\circ}$ clause adjunct therefore
àlópìr ${ }^{\varepsilon}$ pl àlópìyà $n$. aeroplane (English)
àmáa clause adjunct but (Hausa, from Arabic)
àmēŋá adv. really, truly
àmị́ amen (Arabic Paamiin)
à-mús ${ }^{\varepsilon}$ pl à-mús-nàm ${ }^{\mathrm{a}} n$. cat; cf Hausa mussàa id
ànāasí $q$. four
ànị adv. there
ànịi q. eight
ànị nā' $a d v$. there
ànịnà $a d v$. promptly
ànô'on ${ }^{\varepsilon}$ pron. who?
àn̆rù $\eta^{3}$ pl àn̆rımà cb àn̆rùn- n. boat (written aarup in the 1976/1996 NT)
$\bar{a} n s^{\varepsilon} d v$. pluck (leaves)
án̆sìb ${ }^{\mathrm{a}}$ pl ān̆s-nám ${ }^{\mathrm{a}}$ cb ān̆s- $n$. mother's brother
$\bar{a} n \sin ^{\mathrm{i}} g^{\varepsilon /} d v$. break at an angle
ān̆sín ${ }^{\mathrm{a}} \mathrm{pl}$ ān̆sís $s^{\varepsilon}$ cb ān̆sī $\eta$ - $n$. (man's) sister's child
àntù'a $p l$ àntù' $\theta s^{\varepsilon} C b$ àntư'à- $n$. lawsuit
ànū q. five
àňwá adv. like this
ānzúrıfà n. silver (Hausa azùrfaa)
àràkóň' q. one
àràzàk ${ }^{\mathrm{a}}$ pl àràzà' $a s^{\varepsilon}$ cb àràzà'- generally pl: n. wealth, riches (Arabic Par-rizq)
àràzánà $n$. heaven (Arabic Pal-fanna)
Àrzúmà dâarع $n$. Friday (Arabic)
àséع clause adjunct/preposition except, unless (Hausa sai)
Àsịbıtì dâar ${ }^{\varepsilon} n$. Saturday (Arabic)
àsīdā adv. truly

àtán̆' q. three
Àtàláatà dâar ${ }^{\varepsilon} n$. Tuesday (Arabic)
àtáyāl q. three exactly
Àtínì dâar ${ }^{\varepsilon} n$. Monday (Arabic)
àtìuk ${ }^{5} n$. sea (Hausa tèeku)
àwánā' adv. like this
àwāe q. nine
ày!̣́' q. two
áyìı no 17.1.5
àyị́nā' q. two exactly
àyópòe q. seven
àyú $ө$ bì $q$. six

## B

bà pron. they (right-bound); ba them (enclitic)
$b \bar{a}^{\prime /} p l$ bā'-nám ${ }^{\text {a }} c b$ bā'- $n$. father
bāa pl bāas ${ }^{\varepsilon}$ cb bà- $n$. dog
báa (Hausa bâa "not exist") in emphatics (not) even
bā'a pl bā'aba cb bà'- n. diviner; bà'-kòlı̀g ${ }^{\mathrm{J}}$ pl bà'-kònn ${ }^{\mathrm{n} \varepsilon}$ cb bà'-kòl-n. diviner's bag bā'a pl bā'as ${ }^{\varepsilon} c b$ bà'- $n$. peg to hang things on
bà'an ${ }^{n \varepsilon} p l$ bà'anà cb bà'an- n. stocks (punishment)
bàan̆lì ga pl bàan̆lìs ${ }^{\varepsilon}$ adj. narrow, slender
bāan̆líga adj. quiet
$b a ̄ a n ̆ l i ́ m ~ m ~ a d v . ~ q u i e t l y ~$
bà'arع pl bàdà bà'a cb bà'- n. idol
bābá postposition beside; cf bābī $r^{\varepsilon /}$ sphere of activity
bàbıgā́l q. many
bákpàe n. week (Hausa bakwài "seven": also "week" in Ghana)
bàlàar ${ }^{\varepsilon}$ pl bàlàyà cb bàlà- n. stick, staff, club
bàlànìr ${ }^{\varepsilon}$ pl bàlànà cb bàlàn- n. hat
bālērū $g^{\jmath /} p l$ bālह̄rīd $d^{\varepsilon /} b a ̄ l \bar{\varepsilon} r i \bar{i} s^{\varepsilon /}$ cb bālér- $n$. ugly person; cf $l \bar{\varepsilon} r^{\varepsilon}$ get ugly
bàmmā' pron. these
bàn ${ }^{\varepsilon}$ pron. these
bán pron. they (subject of $\grave{n}$-clause); bān ${ }^{\varepsilon}$ they, them (contrastive)
$b a ̄ n ̆ ' d v$. ride
bānāa pl bānāas ${ }^{\varepsilon}$ cb bànà- (tone sic) n. traditional "fugu" smock
bàn̆'ad ${ }^{\mathrm{a}} \mathrm{pl}$ bàn̆'ad-nàm ${ }^{\mathrm{a}} n$. ill person
$b a \bar{n} ' a l^{\varepsilon /} d v$. make to ride (horse, bicycle)
bān̆'as ${ }^{\varepsilon}$ cb bàn̆'- n. pl as sg disease
bàn-dāvg ${ }^{\circ}$ pl bàn-dāad ${ }^{\varepsilon}$ cb bàn-dà- $n$. crocodile
bān-kúsćl $l^{l \varepsilon}$ pl bān-kúsēlá cb bān-kúsc̄l-n. lizard
bā $\eta^{\text {a }} \mathrm{pl}$ bāan̆s ${ }^{\varepsilon}$ cb bàn- $n$. ring, chain, fetter
bà $\eta^{\text {a }} n$. agama lizard
$b a ̀ \eta^{\varepsilon} d v$. come to know
báp wallop!
Bārī $g^{\mathrm{a} / ~ p l ~ B a ̄ r i ̄ s}{ }^{\varepsilon /} c b$ Bār-n. Bisa person (not only the Bareka, WK)
bárıkà n. blessing (Arabic baraka)
Bārūg ${ }^{\text {// }} n$. Bisa country; north
$b a ̀ s^{\varepsilon} d v$. go away; abandon; throw out
$B a \bar{t} t^{\varepsilon /} n$. Bisa language
bàtán̆' q. three (after a personal pronoun)
bàunŋ̀̀ n. found only as in Ò kpèn̆' báupù. He was circumcised. (Songhay "pool")
bày $\bar{\varepsilon} o g^{3 /}$ betrayer of secrets (cf y $\bar{\varepsilon} \varepsilon s^{\varepsilon /}$ )
bàyị' q. two (after a personal pronoun)
bàyópòe q. seven (after a personal pronoun)
$b \grave{\varepsilon}$ ger bèlím ${ }^{\mathrm{m}} s v$. exist; be in a place $\underline{16.10}$
$b \bar{\varepsilon} d \bar{i} g^{\varepsilon /} d v$. go rotten
bèdì ${ }^{\circ}$ bèdìr ${ }^{\varepsilon}$ pl bèdà cb bèd- adj. great
$b \varepsilon ̀ d v g \bar{v}^{\prime}$ q. much, a lot
b $\bar{\varepsilon} \varepsilon$ clause adjunct or; in polar questions 17.1.2
$b \varepsilon ̀ k \varepsilon ̀ k \varepsilon ̀ o n ̆ g^{3}$ or $b \varepsilon ̇ k \varepsilon ̀ o \check{o n g}{ }^{3} n$. very early morning
bèlìm ${ }^{\mathrm{m}} d v$. beg
$b \varepsilon ̇ l i ̀ s{ }^{\varepsilon} d v$. comfort
$b \bar{\varepsilon} n^{\mathrm{n} \varepsilon} p l$ bēnā cb bèn-n. end
$b \varepsilon ̀ n ̆ ' ~ g e r ~ b \overline{n ̃} ̆ ' \varepsilon s^{\varepsilon} d v$. fall ill
$b \varepsilon ̇ n ̌ s i ̀ ~ g^{\varepsilon} d v$. serve soup
$b \varepsilon \eta^{\varepsilon} d v$. mark out a boundary
$b \bar{\varepsilon} \eta i ́ d^{\varepsilon} c b$ b $\bar{\varepsilon} \eta-n$. pl bean leaves, Vigna unguiculata; b $\bar{\varepsilon} \eta i ́ d ~ n \bar{\varepsilon} k i ̣ l n$. beanleaf-andmillet, a traditional snack

$b \bar{\varepsilon} o g^{3} n$. tomorrow; Kà bēog nị́e kà ... The next day ...

bēogó clause adjunct tomorrow
$b \bar{\varepsilon} o g \bar{v}=n^{\varepsilon /} n$. morning
$b \varepsilon ̀ r i ̀ \eta^{\mathrm{a}} \mathrm{pl}$ bèrıgìs ${ }^{\varepsilon}$ sic $n$. a plant used for fibre (KED), Hibiscus cannabinus
bērıgā cb bèrìg- pl leaves of bèrì̀ used for soup (KED)
$b \bar{\varepsilon} s \bar{u} g^{\top} p l ~ b \bar{\varepsilon} s i ̄ d^{\varepsilon} c b$ bès- $n$. a kind of wide-mouthed pot


bịól ${ }^{l \varepsilon}$ pl bịəlá adj. naked
$b \grave{̀ l} l^{\varepsilon} d v$. accompany
bị̀'əlá q. a little; bị̀'əl bị'əl q. and adv. a very little; little by little
$b \overline{1}{ }^{-1} \not m^{\mathrm{m}} \mathrm{pl}$ bị'əm-nàm ${ }^{\mathrm{a}}$ bị̀'əmmā LF $c b$ bị'əm- $n$. enemy
bịəən ${ }^{\mathrm{n} \varepsilon} \mathrm{pl}$ bị̀ənā $c b$ bị̀ən- $n$. shin
$b i ̣ ̀ r r^{\varepsilon /} p l$ bìēyá $c b$ bina $-n$. elder sibling of the same sex
$b i ̣ ' \partial s^{\varepsilon} d v$. doubt
$b i ̣ g i ̀ s^{\varepsilon} d v$. show, teach
bịiig ${ }^{\mathrm{a}}$ pl bịiis ${ }^{\varepsilon}$ cb bị- bị- $n$. child; bị-díbì $\eta^{\mathrm{a}} n$. boy; bị-lịa $n$. baby; bị-nà' $a b^{\mathrm{a}}$ n. prince; $b i ̣-p i ̣ t ~ t^{\mathrm{a} /} p l$ bì-pịtítía $c b$ bị̀-pịt- $n$. father's younger brother; bị-pú $\eta^{\mathrm{a}} n$. girl
$b \grave{1}^{\prime} i g^{\varepsilon} d v$. ripen, become pregnant
bịilífo pl bịilí cb bịil- $n$. seed
bịilím ${ }^{\mathrm{m}} n$. childhood
$b \bar{\imath} \imath m^{\mathrm{m} /} c b$ bī- $n$. soup, stew
bị'isím ${ }^{\mathrm{m}} n$. milk (human or animal)
bị̀'isì $r^{\varepsilon}$ pl bị̀'isà cb bị'is- n. woman's breast
bịl ${ }^{\mathrm{a}}$ pl bị̂bīs ${ }^{\varepsilon}$ cb bịl－or bị̀－$a d j$ ．little，small
$b i ̣ i ̀ i ̀ g^{\varepsilon} d v$ ．roll（transitive）
bịlìm ${ }^{\mathrm{m}} d v$ ．roll（intransitive）
bìmbìm ${ }^{\mathrm{m} \varepsilon}$ pl bìmbìmà $c b$ bìmbìm－$n$ ．altar NT（KED：mound or pillar of earth）
$B i ̀ n{ }^{\text {ne }} p l B_{i ̀ m}{ }^{\text {ma }} c b$ Bìn－$n$ ．Moba，Bimoba person（not only Bemba，WK）
$B i ̀ n{ }^{\text {ne }} n$ ．Moba language
$b i ̣ n n^{\mathrm{n} \varepsilon} n$ ．excrement
Bìu ${ }^{3} n$ ．Moba country
bò $d v$ ．seek；bòsd ${ }^{\mathrm{a}}$ ipfv want，like，love（sexual，romantic）；ipfv ger bòsdìm ${ }^{\mathrm{m}}$ will
bう̄ cb bò－pron．what？why？；bò－būudī what sort of ．．？；b̄̄－zúḡ̄ clause adjunct because； bō－zúg ${ }^{\circ}$ why？；bò－wị̀n ${ }^{\text {n }}$ what time of day？；bō kị́mm＂exactly what？＂
$b \grave{b i ̀ ~} g^{\varepsilon} d v$ ．wrap round，tie round
$b \grave{d i ̀ ~} g^{\varepsilon} d v$ ．lose，become lost
bòdう̀bj̀dう̀ n．bread
bòk ${ }^{\circ} \mathrm{pl}$ bù＇ad ${ }^{\varepsilon}$ cb bú＇à－n．pit
bōsīr ${ }^{\varepsilon} p l$ bōsā cb bòs－$n$ ．puff adder
bōtūn．sack
$b \bar{v} ' d v$ ．beat
buà ${ }^{\varepsilon} d v$ ．split
bù＇ar ${ }^{\varepsilon}$ pl bư＇àa cb bư＇à－n．hole
bū＇ar ${ }^{\varepsilon /} p l$ bu＇áa cb bu＇ā－$n$ ．skin bottle
$b v ̀ d^{\varepsilon} g e r ~ b \bar{v} d \bar{\imath} g^{\mathrm{a}} b \bar{v} d \bar{v} g{ }^{\top} d v$ ．plant seeds
bùdàalìm ${ }^{\mathrm{m}} n$ ．manhood，courage
bùdìm ${ }^{\mathrm{m}} d v$ ．get confused
bùdımís ${ }^{\varepsilon} n$ ．confusion
bù＇e $d v$ ．pour out
$b u ̀ g^{\varepsilon} d v$ ．get drunk（Hausa bùgu）
$b \bar{v} g \bar{u} d^{\mathrm{a}} n$ ．client of a $b \overline{\mathrm{a}}$＇$a$ traditional diviner
bùgulìm ${ }^{\mathrm{m}} d v$ ．cast lots
$b \bar{v} g \bar{v} r^{\varepsilon} p l b \bar{u} g a \bar{c} c b$ bùg－$n$ ．dwelling－place of a $w \bar{i} n^{\mathrm{n} \varepsilon /}$ localised spirit；also a $w \bar{i} n^{\mathrm{n} \varepsilon /}$ as a $\operatorname{si} g i ̄ r^{\varepsilon /} \underline{21.2}$ inherited from one＇s mother＇s family
bùgóm ${ }^{\mathrm{m}}$ cb bùgōm－bùgóm－n．fire；Bùgóm－tōכn̆r ${ }^{\varepsilon} n$ ．Fire Festival
$b \bar{v} g \bar{v} s^{\text {a／}} s v$ ．be soft
būgusíga būgusír${ }^{\varepsilon} p l$ būgusá cb būgūs－adj．soft，weak
būgvsígā＇adv．softly
$b \bar{v} g u s i ́ m{ }^{\mathrm{m}} n$ ．softness，weakness
$b \bar{u} k^{\varepsilon /} d v$ ．weaken
$b u ̀ k^{\varepsilon} d v$ ．cast lots
bù $l^{\varepsilon} d v$ ．germinate，ooze
$b \bar{u} l^{l \varepsilon} p l$ būlā $n$ ．shoot，sprout
$b u ̀ l^{\varepsilon} d v$ ．astonish

Bùl ${ }^{l \varepsilon} n$. Buli language
Bùlì $g^{\text {a }}$ pl Bùlìs ${ }^{\varepsilon}$ cb Bùl- n. Bulsa person
bùlì ${ }^{\text {a }} \mathrm{pl}$ bùlìs ${ }^{\varepsilon}$ cb bùl- $n$. well, pond
bùmbàrì ${ }^{\text {a }}$ pl bùmbàrìs ${ }^{\varepsilon}$ cb bùmbàr- $n$. ant
bùn ${ }^{\varepsilon} d v$. reap, harvest
$b \bar{v} n^{\mathrm{n} \varepsilon /} \mathrm{pl}$ būná būn-nám ${ }^{\mathrm{a}} c b$ būn- $n$. thing (concrete or abstract); būn-búvdiff $n$. plant; būn-gị́ $\eta^{\mathrm{a}} n$. short chap (informal, joking); būn-kón̆bùg ${ }^{\circ}$ pl būn-kón̆bìd ${ }^{\varepsilon}$ cb kj̀n̆b- (sic) n. animal; būn-kúdùg ${ }^{\circ} n$. old man
$b \bar{n}-d a ̂ a r^{\varepsilon}$ proadverb which day?
bù $\eta^{\mathrm{a}} \mathrm{pl}$ bùmìs ${ }^{\varepsilon}$ cb bùj- $n$. donkey
$b u ̀ \eta^{\varepsilon} d v$. take a short cut
$b u ̀ \theta l^{\varepsilon} d v$. call, summon; Ò yū'vr bûon X. She is called X.
bùer ${ }^{\varepsilon}$ pl buèyà cb bùà- n. grain store, silo
$b u \bar{\prime} \theta s^{\varepsilon} d v$. ask; ger bū'өsúg${ }^{\circ} n$. question; bu'oskaŋa this question (Jn 18:34)
$b u ̀-p i ̣ i g a ̄ ~ q . ~ a d v$. ten times
būráa n. man, male adult (in ILK, but characteristically Toende Kusaal; see dāư) būrıyá $n$. Christmas (Twi/Fante bronya)
bùrkìn ${ }^{\mathrm{a}}$ pl bùrkìn-nàm ${ }^{\mathrm{a}}$ cb bùrkìn- $n$. free person; honourable person (Songhay)
Bùsâan̆l $l^{\varepsilon} n$. Bisa language
Bùsán ${ }^{\text {a }}$ pl Bùsâaňs ${ }^{\varepsilon}$ cb Bùsāŋ- n. Bisa person
$b \bar{t} t \bar{\imath} \eta^{\mathrm{a}} \mathrm{pl}$ būtīıs${ }^{\varepsilon}$; cb bùtì $\eta$ - $n$. cup (in general; originally "seed-planting [cup]")
$b \bar{v} v d^{\varepsilon} n$. pl as sg innocence
būudī cb bùud- $n$. kind, sort, ethnic group
$b \bar{v} v g^{\mathrm{a}} p l \mathrm{~b} \bar{v} v s^{\varepsilon} c b$ bù- $n$. goat; bù-dìbì $g^{\mathrm{a}} n$. male kid

## D

dà tense particle before two days ago, tense particle
dā not with imperative mood 16.4
dàa tense particle day after tomorrow
dāa tense particle before yesterday, tense particle
dà' $d v$. buy
dà'a pl dà'as ${ }^{\varepsilon}$ cb dà'- n. market
dà'abìr ${ }^{\varepsilon} n$. slave
dàalìm ${ }^{\mathrm{m}} n$. masculinity
dàalím ${ }^{\mathrm{m}} \mathrm{pl}$ dàalímìs ${ }^{\varepsilon} n$. male organs
dāam ${ }^{\mathrm{m} /}$ cb dā-n. millet beer, "pito"; dā-nûur ${ }^{\varepsilon} n$. beer-drinking; dā-bịn ${ }^{\mathrm{n} \varepsilon} c b$ dā-bịn- $n$. beer residue; NT yeast (cf bịin ${ }^{\mathrm{n} \varepsilon}$ )
dàam ${ }^{\mathrm{m}} d v$. disturb, trouble (Hausa dàamaa)
dāan ${ }^{\mathrm{a}}$ pl dàan-nàm ${ }^{\mathrm{a}}$ cb dàan- $n$. owner of ... 12.5.2
dāar ${ }^{\varepsilon}$ pl dābá cb dà- n. day (24-hour period); dà-pịigā $n$. ten days
dāa-sị' $\varepsilon r \bar{\varepsilon}$ clause adjunct perhaps
dàbịə $m^{\mathrm{m}}$ tone sic $n$. fear
dàbịog ${ }^{\top}$ pl dàbịə $\partial{ }^{\varepsilon}$ cb dàbì à- n. coward
dàbısìr ${ }^{\varepsilon} p l$ dàbısà $c b$ dàbìs- $n$. day (as one of several)
dā'el $d v$. push; blow (of wind)
Dàgâad ${ }^{\mathrm{a}}$ pl Dàgáadìb ${ }^{\mathrm{a}}$ Dàgâad-nàm${ }^{\mathrm{a}}$ cb Dàgâad-n. Dagaaba person (L prefix sic)
Dàgbānne/ pl Dàgbāmma/ cb Dàgbān- n. Dagomba person
Dàgbānne/ $n$. Dagbani language
Dàgbāun $\eta^{\prime / n}$. Dagomba country, Dagbon
dàgòbì $g^{\mathrm{a}} n$. left-hand; yà dàgòbì $g^{\mathrm{a}}$ South KB
dāká pl dāká-nàma cb dāká- n. box (Hausa àdakàa from Portuguese arca)
dàkịi $g^{\mathrm{a}} \mathrm{pl}$ dàkịis ${ }^{\varepsilon}$ cb dàkị̀- $n$. wife's sibling; dàkị-dāun $n$. wife's brother; dàkị-pūāka $n$. wife's sister; dàkì-tùa $n$. wife's sister's husband
dà-kj̀on̆r $r^{\varepsilon}$ pl dà-kòn̆yà cb dà-kòn̆- $n$. unmarried son, bachelor
dàm ${ }^{\mathrm{m}}$ ipfv dàmmì ${ }^{\mathrm{a}} d v$. shake
dàmà'a n. liar cf mà'
dàmà'am ${ }^{\mathrm{m}} n$. lie, untruth, lying
dàmà'ar ${ }^{\varepsilon} n$. lie, untruth
dāmpūsāar ${ }^{\varepsilon} n$. stick
dànsàar ${ }^{\varepsilon} n$. staff, club
dànkj̀ク³ n. measles
dà-pāala/ $n$. young man, son
dārúk ${ }^{0} n$. a kind of large pot
dà-sā $\eta^{\mathrm{a}}$ pl dà-sāaňs ${ }^{\varepsilon}$ dà-sām ${ }^{\mathrm{ma}}$ cb dà-sà $\eta$ - $n$. young man
dà-tāa pl dà-tāas ${ }^{\varepsilon}$ cb dà-tà- $n$. enemy
dàtìu $\eta^{3} n$. right-hand; yà dàtìu $\eta^{3}$ North KB
dāu pl dāpa cb dàu-dàp-n. man (as opposed to woman)
dàvg ${ }^{3} \mathrm{pl}$ dàad ${ }^{\varepsilon}$ cb dà- $n$. piece of wood, log; pl also: wood (material); dà-kịəd ${ }^{\mathrm{a}} n$. wood-cutter; dà-kpị̀ $\partial d^{\mathrm{a}} n$. carpenter; dà-pūvdír${ }^{\varepsilon} n$. cross-piece, pl dà-pūvdá $n$. used as sg cross NT
dāvg ${ }^{\circ}$ pl dāad ${ }^{\varepsilon}$ cb dà- $a d j$. male
dàwàlì $g^{\mathrm{a}} n$. hot humid season before the rains
dàwān ${ }^{n \varepsilon /} p l$ dàwāná cb dàwān- n. pigeon
dàyáam ${ }^{\text {ma }} p l$ dàyāam-nám ${ }^{\text {a }}$ cb dàyāam- $n$. husband's parent; dàyāam-dáu $n$. husband's father; dàyāam-puák ${ }^{\mathrm{a}} n$. husband's mother
dàyūug ${ }^{\rho /}$ pl dàyūud ${ }^{\varepsilon /}$ cb dàyū-n. rat
dèbìr $r^{\varepsilon} p l d \varepsilon ̀ b a ̀ ~ n . ~ m a t, ~ p a l l e t, ~ b e d ~$
$d \grave{\varepsilon} \varepsilon g^{\text {a }} p l d \grave{\varepsilon} \varepsilon S^{\varepsilon} n$. warthog
$d \bar{\varepsilon} \varepsilon \eta^{\mathrm{a}} \mathrm{pl} d \bar{\varepsilon} \varepsilon \check{n} s^{\varepsilon} d \bar{\varepsilon} \varepsilon m \bar{i} s^{\varepsilon} d \bar{\varepsilon} \varepsilon n a \overline{c b} d \varepsilon ̀ \varepsilon \eta-q$. first
$d \bar{\varepsilon}{ }^{\text {la/ }}$ ger d $\bar{\varepsilon} l l v ́ g{ }^{\circ}$ d $\bar{\varepsilon} l l i ́ m^{\mathrm{m}} s v$. be leaning on something (of a person)
$d \grave{l} l \grave{\imath} m^{\mathrm{m}} d v$. begin to lean on something (of a person)
$d \bar{\varepsilon} \eta^{\mathrm{a}} \mathrm{pl} d \bar{\varepsilon} m \bar{\iota} s^{\varepsilon} c b d \varepsilon ̀ \eta-n$. accidental bruise; defect
$d \varepsilon ̀ \eta^{\varepsilon} d v$. go, do first
dèjìm preverb beforehand
dì pron. it (right-bound) $=l \grave{\imath}$
dì ipfv dìt $t^{\mathrm{a}}$ imp dìma $d v$. eat, receive; ger dīıb $n$. food; Ò dì pu'ā. He's married a wife. Ò dì n̆yán. She's ashamed.
dīā'a $d \nu$. get dirty
diā'ad ${ }^{\varepsilon /}$ n. dirt
$d i ̣ ' e l d v$. receive, get
dị̀əm ${ }^{\text {ma }}$ pl dị̀əm-nàm ${ }^{\text {a }}$ cb dịəm- $n$. wife's parent; also in polite address to an unrelated person of opposite sex and similar or greater age than onself; dịəəm-dāū $n$. wife's father; dị̀zm-pūāk ${ }^{\mathrm{a}} n$. wife's mother
$d i ̣ ' ə m^{\mathrm{m}} d v$. play, not be serious
dị'əmà n. festival
$d \bar{l} \cdot \partial S^{\varepsilon /} d v$. receive (many things)

dīgısán. pl lairs
$d \bar{i} g \bar{\imath} l^{\varepsilon /} d v$. lay down
$\operatorname{dìgìn}^{\varepsilon} d v$. lie down
dìgìr $r^{\varepsilon} p l$ dìgà $c b$ dìg- $n$. dwarf
$d_{\imath \imath} s^{\varepsilon} d v$. feed; ag dìıs ${ }^{\text {a }} n$. glutton
dìssún ${ }^{3}$ pl dìısímà dìısís ${ }^{\varepsilon}$ cb dìısún- $n$. spoon
dìm ${ }^{\mathrm{a}}$ dummy head pronoun, animate pl; dìn ${ }^{\mathrm{n} \varepsilon}$ inanimate $s g$
dín pron. it (subject of $\grave{n}$-clause)
dīn $n^{\varepsilon}$ pron. it (contrastive) $=l \bar{i} n^{\varepsilon}$
dìnd $\bar{\varepsilon} o g^{9 /}$ pl dìnd $\bar{\varepsilon} \varepsilon d^{\varepsilon /}$ cb dìnd $\bar{\varepsilon}-n$. chameleon
dìndìıs ${ }^{\mathrm{a}} n$. glutton
dìn zúg ${ }^{\circ}$ proadverb therefore
dìtú ${ }^{\top} n$. right-hand (see dàtìu $\eta{ }^{\text {) }}$ )
dì-zōrū $g^{\text {/ }}$ pl dì-zōrá cb dì-zōr- n. crumb
d̄̄l ${ }^{\text {la/ }}$ ger dōllím ${ }^{\mathrm{m}}$ sv. accompany in a subordinate role; Ànó'oǹ̀ dōllí=fò? Who has come with you? (to an elderly patient.) Bà dòl n $\bar{\varepsilon}$ tāabā. They went together.
$d \bar{o} l \bar{\imath} g^{\varepsilon /} d v$. make accompany, send along with
$d \bar{\jmath} l \bar{\imath} s^{\varepsilon /} d v$. investigate, trace
$d \bar{n} n{ }^{\prime} \bar{\imath} g^{\varepsilon /} d v$. stretch oneself
dòn̆' $\sim s^{\varepsilon} d v$. water plants


$d \bar{v} i p f v d \bar{v} t^{\mathrm{a}}$ imp dùm ${ }^{\mathrm{a}} d v$. go up
$d u^{\prime} \grave{a}^{\mathrm{a}} d v$. bear, give birth, beget; $a g d \bar{v} ' a d^{\mathrm{a}} n$. elder relation
$d \dot{v}{ }^{\prime} a l^{\varepsilon} d v$. make interest (of a loan)
$d \overline{v^{\prime}} a m^{\mathrm{m}} n$. birth
dùan̆ pl dòon̆s ${ }^{\varepsilon}$ cb dòn̆-n. dawadawa, Parkia clappertoniana
dv́'atà n. doctor (English)
$d u \bar{e}{ }^{\prime} d v$. raise, rise
$d \bar{v} g^{\varepsilon} d v$. cook

$d u ̀ m^{\mathrm{m}} d v$. bite
$d \bar{u} m^{\mathrm{m} \varepsilon} d \bar{u} m^{\mathrm{n} \varepsilon} p l d \bar{u} m a \bar{c} c b$ dùm- $n$. knee
dòndùug ${ }^{\circ} \mathrm{pl}$ dùndùud ${ }^{\varepsilon} \mathrm{Cb}$ dùndù- $n$. cobra
dūnıyā cb dūnıyá- $n$. world (Arabic dunyaa)
dūnná adv. this year
dū ${ }^{\mathrm{a}} \mathrm{pl}$ dūmīs ${ }^{\varepsilon}$ cb dùn- n. mosquito
dūөr ${ }^{\varepsilon /}$ pl dūēyá cb dūā- n. stick
$d u \bar{u}^{\prime} \theta s^{\varepsilon /} d v$. lift up, honour
$d u ̀ r^{\mathrm{a}} s v$. be many
$d \bar{u} ' u n^{\varepsilon /} d v$. pass water
$d \bar{u} ' u n i ́ m{ }^{\mathrm{m}} c b$ dū'un- $n$. urine
dūvsá n. pl. steps

## E

$\bar{\varepsilon} \varepsilon \check{n}$ yes 17.1.5
$\bar{\varepsilon} \varepsilon \breve{n}$ or $\bar{\varepsilon} \varepsilon \breve{n}$ tí see $\check{n} y \bar{\varepsilon} \varepsilon$, n̆y $\bar{\varepsilon} \varepsilon$ tí auxiliary tense marker habitually
$\bar{\varepsilon} \varepsilon n \breve{n} b^{\varepsilon /} d v$. lay a foundation
$\bar{\varepsilon} \varepsilon n ̆ \operatorname{bír}^{\varepsilon} n$. (physical) foundation
غ̀n̆bìs ${ }^{\varepsilon} d v$. scratch
غ̀ñ $d^{\varepsilon} d v$. block up, plug up
غ̇n̆dì $g^{\varepsilon} d v$. unblock, unplug
$\bar{\varepsilon} \breve{n} r \bar{i} g^{\varepsilon /} d v$. shift along (e.g. a bench)

## F

$f^{\circ}$ pron. you sg (enclitic)
fäan̆ $q$. every
fāen̆'dv. save; ag fāan̆d ${ }^{\mathrm{a} /}$ fāan̆gíd $^{\mathrm{a}} n$. saviour 11
$f a ̄ n ̆ d v$. grab, rob
fáss ideo. for pị̀əlì $g^{a}$ white
$f \bar{\varepsilon} \varepsilon g^{\varepsilon /} d v$. (of food) get old, cold
$f \bar{\varepsilon} n ̆ d \bar{\imath} g^{\varepsilon /} d v$. turn round (tone uncertain)

fịəb ${ }^{\varepsilon} d v$. beat
fị'ig $g^{\varepsilon} d v$. cut off
fịin q. a little (liquid)
fitlá n. lamp (Hausa fịtilàa); KB sg fitir pl fita
$f^{\prime} o s^{\varepsilon /} d v$. blow, puff (wind); ger fōosúg ${ }^{\circ} n$. hypocrisy NT
fù pron. you sg (right-bound)
fùe $d v$. draw out
$f \bar{f} f u ̄ m^{\mathrm{m} \varepsilon} \mathrm{pl}$ fūfūmā cb fūfúm- $n$. envy; stye (believed to result from envy) fún pron. you $\operatorname{sg}$ (as subject of $\grave{n}$-clause); fūn SF fúnè LF you $s g$ (contrastive)
$f u ̄ u g^{\partial /} p l f u \bar{u} d^{\varepsilon /} f u u^{\varepsilon /} c b f u \overline{-} n$. shirt, clothing; pl also: cloth

## G

gàad ${ }^{\varepsilon} d v$. pass, surpass $\underline{17.2 .1}$
gáafàrà formula sorry! (Hausa gaafaràa, ultimately from Arabic)
gà'al $l^{\varepsilon} d v$. button up
gà' $a m^{\mathrm{m}} d v$. grind teeth
gāan̆' pl gāan̆s ${ }^{\varepsilon /}$ cb gān̆- $n$. Nigerian ebony, Diospyros mespilliformis
gàas ${ }^{\varepsilon} d v$. pass by
gādv $g a \bar{a} d \bar{v} g^{\partial /} p l$ gād $\bar{v}-n a ́ m^{\mathrm{a}}$ gāt ${ }^{\varepsilon /} c b$ gād- $g a \bar{a} d \bar{v}-n$. bed (Hausa gadoo)
gàlìm ${ }^{\mathrm{m}} d v$. joke
gàlìs ${ }^{\varepsilon} d v$. exceed, get to be too much
gān̆ $r^{\varepsilon /} p l$ gān̆yá cb $g a \bar{n} n ̆$ - $n$. fruit of Nigerian ebony
gà $\eta^{\varepsilon} d v$. step over
$g \bar{a} \eta^{\varepsilon /} d v$. choose
$g b a ̄ n ̆ ' e^{\prime} d v$. catch
gbáňyà'a n. lazy person
gbán̆yà'am ${ }^{\mathrm{m}} n$. laziness; 1976 NT gonya'am
gbàun ${ }^{\circ}$ pl gbànà cb gbàn- gbàung- $n$. book WK
$g b a ̄ u \eta^{\prime l} p l$ gbāná cb gbān- gbāun $\eta$ - $n$. animal skin WK; animal skin, book DK
$g b \hat{\varepsilon} \varepsilon \check{n} m^{\mathrm{m}} c b$ gbēn̆-n. sleep
$g b \varepsilon{ }^{\prime}{ }^{\circ} g^{3} p l ~ g b \varepsilon ̀ ' \varepsilon d^{\varepsilon} g b \varepsilon ̀ d a ̀ ~ c b ~ g b \grave{'}$ ' $n$. forehead; shore of a lake
$g b \bar{\varepsilon} r^{\varepsilon /} p l$ gbēyá cb gbēr-n. thigh
gbī gīm $^{\mathrm{n} \varepsilon} \mathrm{pl}$ gbī gımā cb gbìgìm-n. lion
gbị̀n $n^{\mathrm{n}} \mathrm{pl}$ gbịnà cb gbịn- $n$. buttock; base (e.g. of a mountain); postposition beneath
gbịn-vòวn̆ $r^{\varepsilon} n$. anus
$g b i ̣ s^{\varepsilon} d v$. sleep
$g \bar{\varepsilon} \varepsilon l^{\varepsilon /} d v$. place between one's legs (Pattern H sic)
$g \bar{\varepsilon} \varepsilon \check{n} m^{\mathrm{m} /} d \nu$. go mad, madden
$g \bar{\varepsilon} \varepsilon \check{n} m i ́ s s^{\varepsilon} n$. pl as sg madness

gél ${ }^{l \varepsilon} p l$ gz̄lá cb gēl-n. egg
$g \bar{\varepsilon} \check{n} d v$. get tired; pfv adj gēch̆lú ${ }^{\circ}$ tired
$g \varepsilon \bar{n} \breve{n}^{\prime} d v$. get angry
$g \bar{\varepsilon} o g^{3} n$. place between one's legs (Pattern A sic)
gịinnlím ${ }^{\mathrm{m}} n$. shortness
gìk ${ }^{\mathrm{a}} \mathrm{pl}$ gìgìs ${ }^{\varepsilon}$ cb gìg-n. dumb person
gìgılìm ${ }^{\mathrm{m}} d v$. become dumb
gịli $g^{\varepsilon /}$ ipfv $g i ̣ n n^{\text {na/ }} d v$. go around
$g \bar{i} m^{\mathrm{ma}} \mathrm{sv}$. be short
gị̀na pl gị̀mā cb gịn- $a d j$. short
$g i ̣ \eta^{\varepsilon} d v$. scrimp
$g_{i!} \eta^{\varepsilon /} d v$. surround, intercept, obstruct
gị̄nā adv. shortly
gị̀īlím ${ }^{\mathrm{m}} n$. shortness
$g \overline{d i ̄} g^{\varepsilon /} g$ ò' $^{\prime} n^{\varepsilon} d v$. look up
$g \bar{\jmath} l^{\text {la/ }} g \overline{\sigma^{\mathrm{a}}}$ gō'eyal $s v$. be looking up
gòn̆ $d v$. hunt; ipfv gòon̆ $d^{\mathrm{a}}$ wander, ger gòon̆dìm ${ }^{\mathrm{m}}$ wandering
Gòog ${ }^{\mathrm{a}} \mathrm{pl} \mathrm{Gò}^{\mathrm{os}}{ }^{\varepsilon}$ n. clan name
Gòog ${ }^{\rho}$ n. place of the Gòos ${ }^{\varepsilon}$ Goosi clan
$g$ g̀' $^{\prime} n^{\varepsilon} d v$. look up
$g \bar{\partial} r^{\mathrm{a} /} s v$. be looking up
gōs ${ }^{\varepsilon} i p f v$ gōsī $d^{\mathrm{a} /}$ gōt ${ }^{\mathrm{a} /}$ imp gòsìm $^{\mathrm{a}}$ gòm ${ }^{\mathrm{a}}$ ger gósì $g^{\mathrm{a}} d v$. look; ag gōt ${ }^{\mathrm{a} /} n$. seer, prophet
$g u{ }^{\prime} d v$. guard, protect
$g \grave{l} l^{\varepsilon} d v$. suspend
gùl ${ }^{\text {la }}$ ger gūlı̄ $b^{\top} s v$. be suspended
gòllīmm SF gùllìmnè LF emphatic only
gòm ${ }^{\mathrm{m} \varepsilon} \mathrm{pl}$ gùmà $n$. kapok fruit; also thread WK
Gòm ${ }^{\mathrm{m} \varepsilon} n$. place of the clan Gòm-dìm ${ }^{\mathrm{a}}$

gùn̆'a pl gòn̆'כs ${ }^{\varepsilon}$ cb gòn̆'- n. thorn; Acacia; gòn̆'-sābılíga Acacia hockii
gù $\eta^{\mathrm{a}} \mathrm{pl}$ gùmìs ${ }^{\varepsilon}$ cb gùn- $n$. kapok tree, Ceiba pentandra
gùngōm ${ }^{\mathrm{m} \varepsilon} n$. kapok material
gūral ger gūrím ${ }^{\mathrm{m}} \mathrm{sv}$. be on guard, watch for 17.4.1
$G \overline{r i ́ n}{ }^{\mathrm{n} \varepsilon} n$. Farefare language
$G \bar{u} r^{\prime} \eta^{\mathrm{a}} p l G \bar{u} r^{\prime} s^{\varepsilon} n$. Farefare person
$g \bar{u}^{\prime} u l^{\varepsilon /} d v$. put on guard
gò'vlìm ${ }^{\mathrm{m}} d v$. become half-ripe
gùvr ${ }^{\varepsilon}$ pl gùyà $c b$ gù- $n$. upland; bank of river
gūvr ${ }^{\varepsilon} p l$ gūyā cb gù- n. ridge of back
$g u \bar{\prime} u s^{\varepsilon /} d v$. take care, watch out
$g \bar{v}^{\prime} v s^{\varepsilon} n$. pl half-ripe fruit

## H

hālí emphatic even, until (? Arabic ћattaa)

## I

$i ̄ a ̄ d v$. seek
$i ̄ a \breve{n}^{\prime} a s^{\varepsilon /} d v$. leap


$\overline{1} g \bar{i} l^{\varepsilon /} d v$. make to kneel
ìgìn $n^{\varepsilon} d v$. kneel down
úılı pl īılá cb īıl-n. horn
ịsī $r^{\varepsilon} p l$ ịs $a \bar{a} c b ~ i ̣ ̀ s-n . ~ s c a r ~$
$\grave{i} \sin ^{\varepsilon} d v$. get up early

## K

kà and, that $\underline{17}$
$k \bar{a} d v$. bail (water)
$k a \bar{a} b^{\varepsilon /} d v$. offer, invite
$k a ̄ a l^{\varepsilon /} d v$. count
$k a \bar{a} s^{\varepsilon /} d v$. cry out, weep; (cock) crow
kà'asìgè LF only; sv. not exist 16.4
$k a ̄ b i ̄ g^{\varepsilon /} d v$. ladle out (liquid)
$k a \overline{b i} r^{\varepsilon /}$ ger kābırí $d v$. call out asking for admission $\underline{20}$
$k a ̀ d^{\varepsilon} d v$. drive away; kàd sàríyà $d v$. judge; ag sàríyà-kāt ${ }^{\text {a }} n$. judge NT
kā'e ger kā'alím ${ }^{\mathrm{m}}$ sv. not exist, not be, not have 16.44 .3
kāl ${ }^{1 \varepsilon /} p l$ kālá cb kāl- n. number
kàlıgā' q. few
kàm ${ }^{\mathrm{a}}$ q. every
Kàmbùnìr ${ }^{\varepsilon} n$. Twi language
Kàmbù $\eta^{\mathrm{a}}$ pl Kàmbùmìs ${ }^{\varepsilon}$ cb Kàmbùn- n. Ashanti person
kàn ${ }^{\varepsilon}$ pron. this, that
kàn̆ $b^{\varepsilon}$ ger kān̆bīr $r^{\varepsilon} d v$. scorch
$k a ̄ n ̆ d \bar{v} g^{\circ} a d j$. fat, tough (person)
kànā' pron. this, that
$k a ̀ r^{\mathrm{a}} s v$. be few
kàrìm ${ }^{\mathrm{m}} d v$. read
kàs $\bar{t}^{\mathrm{t}}$ / $n$. witness; testimony (Mooré kàsétò "proof, testimony"; probably ultimately from French cachet); pl kàsc̄tíb ${ }^{\mathrm{a}}$ witnesses
$k \bar{\varepsilon} i p f v k \bar{\varepsilon} t^{\mathrm{a} / ~ i m p ~ k}{ }^{\mathrm{\varepsilon}} l^{\mathrm{a}} d v$. let, cause to ... 17.2.2

$k \varepsilon ̀ \varepsilon s^{\varepsilon} d v$. say farewell to
kèlì $g^{\varepsilon}$ or kèlìs ${ }^{\varepsilon} d v$. listen
$k \bar{\varepsilon} \check{n}$ ipfv $k \bar{\varepsilon} n^{\mathrm{a} / ~ i m p ~ k e ̀ m ~}{ }^{\mathrm{a}}$ ger $k \bar{\varepsilon} n^{\mathrm{n} \varepsilon /} d v$. come (with nā 16.9); k $\bar{\varepsilon} n k \bar{\varepsilon} n$ welcome! $2 \underline{0}$
$k \bar{\varepsilon} \eta^{\varepsilon /} i p f v k \bar{\varepsilon} n^{\text {na/ }} \operatorname{imp} k \varepsilon ̀ m^{\text {a }}$ (with sà 16.9) dv. go; walk; ag k $\bar{\varepsilon} n^{\text {na/ }} n$. traveller
kérıfà or kárıfà (Hausa karfèe); in telling time, e.g. kérıfà àtán̆' three o'clock $k ̣^{\prime}$ cb kị- $k \bar{a}-n$. cereal, millet; kị-dà'ar ${ }^{\varepsilon} p l$ kị-dà'adà $n$. purchased millet; $k \bar{a}-w \bar{\varepsilon} n n i ̄ r^{\varepsilon}$ $p l$ kā-wēnnā cb kā-wén- n. corn
kịà $d v$. cut
$k i ̣ ̆ d \bar{\imath} g^{\varepsilon /} d v$. cross over, meet; $\grave{A}$-Kịdıgī Bū'өs $n$. the constellation Orion
$k i ̄ ' \imath b^{\prime /} n$. soap; WK uses the Mampruli loan kịibú cb kịib- instead
kịinnf ${ }^{\supset}$ pl kịinní n. millet seed
$k i ̀ ı s^{\varepsilon} d v$. listen
$k i ̄ ' i s^{\varepsilon /} d v$. deny
kìkàm ${ }^{\text {m }}$ pl kìkàmà n. fig
kìkà $\eta^{\mathrm{a}}$ kìnkà ${ }^{\mathrm{a}}$ pl kìkàmìs ${ }^{\varepsilon}$ cb kìkàn- n. fig tree, Ficus capensis
kìkịrī $g^{\text {a/ }}$ pl kìkịris ${ }^{\varepsilon /}$ cb kikị̆r-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 kìkịrīs ${ }^{\varepsilon /}$ hostile to man live in the bush: "Their feet are attached backwards to confuse trackers." WK; kìkịr-bê' $\varepsilon d^{\varepsilon} n$. NT evil spirit, demon (KB just uses kìkịrīga/)
kịlī $m^{\mathrm{m} /} d v$. become, change into
$k \grave{m} m^{\mathrm{m}} d v$. tend flock, herd; ag kòn̆b-kīm ${ }^{\text {na }} n$. herdsman, shepherd
$k i ̣ r^{\varepsilon}$ ger kìkị́rù $g{ }^{\circ} k i ̣ r i ̄ b^{\circ} d v$. hurry, tremble
kị $s^{\mathrm{a} /}$ ger kị́sì $g^{\mathrm{O}}$ ag kịis $\mathrm{a}^{\mathrm{a} /}$ kịsī $d^{\mathrm{a} /} s v$. hate
kịsù $g^{\circ}$ adj. hateful, taboo
kò $d v$. get broken, break (intransitive); pfv adj kòolv́ $\eta^{\circ}$ broken
kòbıgā (SF and LF identical) q. one hundred; kj̀bısị two hundred
kōbīr ${ }^{\varepsilon}$ pl kj̄bā cb kòb- n. bone
$k \bar{o} d \bar{\imath} g^{\varepsilon /} d v$. slaughter (one animal) by cutting its throat
kj̄dv́n. banana (Twi kwadu)
$k \grave{l^{\varepsilon}} d v$. put something around the neck
kòlıbìr ${ }^{\varepsilon}$ pl kòlıbà $n$. bottle

kòlù ${ }^{\circ}$ pl kòn ${ }^{\text {n }}$ cb kòlùg-n. sack, bag
$k \overline{ } m^{\mathrm{m} /}$ cb kラ̄m- $n$. hunger
kj̄n̆' postposition alone, by oneself; also kラ̄n̆'okj̄
$k \bar{n} h \bar{v} g^{\circ}$ pl kōn̆bīd $d^{\varepsilon}$ cb kòn̆b- (also used as cb of būn-kón̆bù $g^{\circ}$ animal) n. animal hair or human body hair; cf $z u \bar{\theta} \theta$ v́ ${ }^{\circ}$; kòn̆b-kīm ${ }^{\text {na }}$ pl kj̀n̆b-kīmmīb ${ }^{\text {a }} n$. shepherd, herdsman
$k j ̀ n s^{\varepsilon} d v$. cough
kj̀n̆sìm ${ }^{\mathrm{m}} d v$. cough
$k \grave{\prime} \circ g^{\varepsilon} d v$. break (transitive or intransitive)
$k{ }^{\prime} ' \partial s^{\varepsilon} d v$. break several times
$k \bar{\partial} t^{\varepsilon /} d v$. slaughter (several animals) by cutting their throats
kòtà $a^{\mathrm{n} \varepsilon}$ emphatic at all
kótù n. lawcourt (English)
$k p a ̀ ' d v$. nail, fasten
kpà'a pl kpà'a-nàma $n$. rich person
$k p a \overline{a d}{ }^{\mathrm{a} /}$ pl kpāadíb${ }^{\mathrm{a}}$ cb kpāad- n. farmer, cultivator
$k^{2} a^{\prime} a^{\mathrm{m}} n$. riches
$k p \bar{a} a n ̆ m^{\mathrm{m} /} c b$ kpā̆̆-n. grease, ointment; kpā̆̆n-són̆'odìm ${ }^{\mathrm{m}} n$. anointing oil kpàkūr $\varepsilon^{\varepsilon /} p l$ kpàkūyá cb kpàkv̄r- n. tortoise
kpān ${ }^{\mathrm{n} \varepsilon}$ pl kpānā cb kpàn- n. spear
kpàn̆dìr ${ }^{\varepsilon}$ pl kpàn̆dà cb kpàn̆d- $n$. baboon
$k p a ̀ r^{\varepsilon} d v$. lock
kpār-k̂̂on̆ $g^{3} p l$ kpār-kêeňd ${ }^{\varepsilon}$ cb kpār-kéň- $n$. rag

$k p \bar{\varepsilon} a d v$. here

$k p \bar{\varepsilon} \varepsilon \check{n} m^{\mathrm{ma} /} s v$. be older than
$k p \bar{l} l a ́ ~ a d v$. here
kpèlìm preverb still; immediately after
$k p \grave{l}{ }^{2} m^{\mathrm{m}} d v$. remain
$k p \varepsilon ̀ n ~ r e d u c e d ~ f o r m ~ o f ~ t h e ~ p r e v e r b ~ k p e ̀ l i ̀ m ~$
$k p \varepsilon ̀ n ̆ ' ~ d v$. enter
$k p \bar{\varepsilon} \check{n} d \bar{i} r^{\varepsilon /} p l$ kpēñdá cb kpēñd-n. cheek
$k p \varepsilon ̀ n ̄ ' \varepsilon s^{\varepsilon} d v$. make enter
$k p \varepsilon^{\prime} \eta^{\varepsilon} d v$. strengthen
$k p \bar{\varepsilon} o n ̆ \eta^{3} n$. seniority
kpị dv. die; pfv adj kpịilívo dead
kpị̀'a pl kpị̀'əs ${ }^{\varepsilon}$ cb kpìià'- n. neighbour
$k p i a ̀ ' d v$. shape wood with axe etc
kpị'e dv. approach
$k p i ̣{ }^{1} \not \partial m^{\mathrm{ma}} s v$. be strong, hard
kpịibì $g^{\mathrm{a}}$ pl kp!̣ibìs ${ }^{\varepsilon}$ cb kpịib-n. orphan
$k p \grave{i} \mathrm{~g}^{\varepsilon} d v$. go out (fire)
$k p i ̄ ' l l i ́ m{ }^{\mathrm{m}} d v$. finish, come to an end

$k p i ̣ i s^{\varepsilon} d v$. quench (fire)
kpīkpịnn ${ }^{\text {na/ }}$ pl kpīkpịnníb ${ }^{\mathrm{a}}$ cb kpīkpịn- $n$. merchant


kpìsùkpị̀ ${ }^{l \varepsilon} n$. fist
kpùkpàr ${ }^{\varepsilon}$ pl kpùkpàrà n. palm tree fruit
kpùkpàrì $g^{a}$ pl kpùkpàrìs ${ }^{\varepsilon}$ cb kpùkpàr- n. palm tree, Borassus akeassii
kpùkpàun ${ }^{3}$ pl kpùkpàmà cb kpùkpàun $\eta$ - n. arm, wing
kù not; negates irrealis mood 16.4
$k \bar{v} d v$. kill (= Mooré kú)
$k \bar{v} d v$. gather, threaten (of rain): Sāa kv́ yā. It looks like rain (= Mooré kúr) $k u \bar{a} d v$. hoe, farm
kū'alín ${ }^{\text {a }}$ pl kū'alímìs ${ }^{\varepsilon} k \bar{u} ' a l i ́ s{ }^{\varepsilon} c b$ kū'alín- n. sleeveless traditional smock $k u ̀ d^{\varepsilon} d v$. work iron
$k \dot{d} d i ̀ g^{\varepsilon} d v$. shrivel up, dry out, age
$k \bar{v} d \bar{i} m^{\mathrm{m}} n$. the olden days; also for ku$l \bar{l} m ~ q v$
$k \bar{v} d \bar{v} g{ }^{3} k \bar{v} d \bar{i} r^{\varepsilon} p l ~ k \bar{u} d a \bar{l} k \bar{v} t^{\varepsilon} c b$ kùd- $a d j$. old
kūd̄$g^{\circ} \mathrm{pl} k \bar{u} t^{\varepsilon}$ (used as sg) cb kùt- n. iron, nail; sg only in names $\underline{21.2}$
$k u \bar{g} \bar{v}^{\varepsilon /}$ pl kūgá cb kūg-n. stone
$k \bar{v} k^{\mathrm{a}} \mathrm{pl} k \bar{v} g \bar{v} s^{\varepsilon} c b$ kùg-n. chair
kùk ${ }^{\mathrm{a}} n$. ghost
$k \bar{v} k^{\mathrm{a} /} n$. mahogany tree, Khaya senegalensis; cf Hausa kuukàa
kùkòm ${ }^{\mathrm{m} \varepsilon}$ pl kùkòmà cb kùkòm- $n$. leper

kùkpàrì $g^{\mathrm{a}}$ see kpùkpàrì $g^{\mathrm{a}}$ id
$k u \bar{l} l^{\varepsilon}$ ger kūlī $g^{\mathrm{a} /} d v$. return home; transitive marry (woman subject, man object)
kūlīm tense-slot adjunct always
kùlì $\eta^{\text {a }}$ pl kùlımìs ${ }^{\varepsilon}$ kùlìs ${ }^{\varepsilon}$ cb kùlì $\eta$ - n. door
kòm ${ }^{\mathrm{m}} d v$. cry, weep
$k \bar{u} m^{\mathrm{m}} c b$ kùm- $n$. death; kùm-vū'vgír${ }^{\varepsilon} n$. resurrection NT
kùndv̀'ar $p l$ kùndv̀'adà cb kùndư'à- $n$. barren woman
kùndù $\eta^{\mathrm{a}}$ pl kùndùmìs ${ }^{\varepsilon}$ kùndùnà $n$. jackal, hyena
 current in a river
$k u ̀ \theta s^{\varepsilon} d v$. sell
kùrkūr ${ }^{\varepsilon /}$ pl kùrkūyá cb kùrkūr-n. pig
Kūsáa pl Kūsâas ${ }^{\varepsilon}$ cb Kūsá- n. Kusaasi person
Kūsâal ${ }^{\varepsilon} n$. Kusaal language
Kūsâvg ${ }^{\circ} n$. Kusaasi country
Kùtān ${ }^{\mathrm{n} \varepsilon /}$ pl Kùtām ${ }^{\mathrm{ma/}}$ cb Kùtān- n. member of WK's clan
Kv̀tāun $\eta^{\text {/ }} n$. country of clan Kv̀tām ${ }^{\text {ma/ Kutamba }}$
kv̄v clause adjunct or; in polar questions 17.1.2 (Hausa koo)

$k \dot{v} l^{\varepsilon} d v$. get drunk
$k \bar{v} v s^{\varepsilon /} d \nu$. settle (of a legal judgment)

L
lā' article 12.6.5
là' dv. laugh
lā'af๋ n. cowrie; pl lịgıdī n. cowries, money; cb lịg- là'-; là'-bịəlíf$n$ n. small coin láafiyà $n$. health (Arabic Pal-Saafiya); replaced by laafe láafi in 1996 NT and KB
là' $a m^{\mathrm{m}} d v$. associate with; preverb together; là'am $n \bar{\varepsilon}$ together with
là' $a s^{\varepsilon} d v$. gather together (transitive); Bà là'as tāabā They gathered together.
làbāarع cb làbà- n. news (Arabic Pal-Paxbaar)
làbìya $s v$. be crouching, hiding behind something (? Hausa labèe)
làbì $l^{\varepsilon} d v$. make crouch behind something
làbìn ${ }^{\varepsilon} d v$. crouch behind something
làbìs ${ }^{\varepsilon} d v$. walk stealthily
lābīs ${ }^{\text {a/ }} s v$. be wide
lābısíga lābısír${ }^{\varepsilon}$ pl lābısá cb lābīs- adj. wide
lābısím ${ }^{\mathrm{m}} n$. width
lāk ${ }^{\varepsilon /} d v$. open (eye, book)
lälla/ $s v$. be distant
lālī̀ $g^{\varepsilon /} d v$. get to be far, make far
lāllí $a d v$. far off
lāllína pl lāllís ${ }^{\varepsilon}$ cb lāllín- adj. distant
lāllv́g ${ }^{\circ}$ pl lāllá cb lāl- adj. distant
lām ${ }^{\mathrm{m} \varepsilon /}$ pl lāmá cb lām- n. gum (of tooth); lām-fôog ${ }^{\circ}$ pl lām-fôod ${ }^{\varepsilon}$ adj. toothless
làmpj̄-ḍ̣̂'əs ${ }^{\mathrm{a}} n$. tax collector (French l'impôt)
lān ${ }^{\mathrm{n} \varepsilon}$ pl lānā cb làn- $n$. testicle
lànnì $g^{\mathrm{a}}$ pl lànnìs ${ }^{\varepsilon}$ cb lànnì $g$ - $n$. squirrel
$l^{\prime} \eta^{\varepsilon /} d v$. set alight
làngáv $\eta^{\circ}$ pl làngáam ${ }^{\mathrm{m} \varepsilon}$ làngāamá cb làngāvŋ- n. crab (cf màngáv $\eta^{\circ}$ id)
lāทím ${ }^{\mathrm{m}} d v$. wander around searching
lāuk ${ }^{0} p l \overline{l a}^{\prime} a d^{\varepsilon} c b$ là'- $n$. item of goods pl goods
là'v $\eta^{3} p l$ là'amà $n$. fishing net
$l \varepsilon ̀ b^{\varepsilon}$ ger $l \bar{\varepsilon} b \bar{~} g^{\mathrm{a}} d v$. return (intrans)
lèbì $g^{\varepsilon} d v$. turn over; return
$l \varepsilon ̀ b i ̀ s^{\varepsilon} d v$. answer; send back; divorce (wife)
lèv tense-slot adjunct but
lèm preverb again
lèm ${ }^{\mathrm{m}}$ ipfv lèmmì $d^{\mathrm{a}} d v$. sip, taste
$l \bar{\varepsilon} r^{\varepsilon} d v$. get ugly
lì pron. it (right-bound); ll it (enclitic)
lị ipfv lịt ${ }^{\mathrm{a}} \mathrm{imp}$ lị̀m ${ }^{\mathrm{a}}$ ger lịii $g^{\mathrm{a}} d v$. fall
lī $d v$. block up
lịa where is ...? 17.1.5
$l i ̣ d i ̀ g^{\varepsilon} d v$. turn a shirt WK
lìdì $g^{\varepsilon} d v$. astonish, be amazed
lịə $b^{\varepsilon} d v$. become
$l i ̣ ่ ' \partial l^{\varepsilon} d v$. approach, come near
lị̂'əm ${ }^{\mathrm{m} \varepsilon} \mathrm{pl}$ l $\mathrm{l}^{\prime} \partial m a ́ n$. fruit of yellow plum tree
lị́ə $\eta^{\mathrm{a}} \mathrm{pl}$ līəәmís ${ }^{\varepsilon}$ cb lịəəク-n. axe

$l i ̣ g^{\varepsilon} d v$. patch
lịgìl $l^{\varepsilon} d v$. cover
lịgìn ${ }^{\varepsilon} d v$. cover oneself
līıbīr ${ }^{\varepsilon}$ pl līıbā cb lı̀ıb-n. twin
lịk ${ }^{\mathrm{a}} \mathrm{pl} l_{\text {lịgīs }}{ }^{\varepsilon} n$. darkness
lìlāalína pl lìlāalís ${ }^{\varepsilon}$ lìlāalímìs ${ }^{\varepsilon}$ cb lìlāalín- n. swallow
lín pron. it (subject of $\grave{n}$-clause); līn $n^{\varepsilon}$ it (contrastive)
lin ${ }^{\varepsilon}$ pron. that
lìná pron. that
lō $d v$. tie
$l_{\bar{\prime}} b^{\varepsilon}$ or $l_{\bar{\jmath} b \bar{b}} g^{\varepsilon /} d v$. throw stones at
lōbıdíg ${ }^{\mathrm{a}} \mathrm{pl}$ lōbıdís $^{\varepsilon}$ n. water drawing vessel
lōdī $g^{\mathrm{a} / ~ p l ~ l o ̄ d i ̄} s^{\varepsilon /}$ cb lōd- $n$. corner; l̄̄dıgín kúg-sú $\eta^{3}$ cornerstone NT
$l \bar{o} d \bar{q} g^{\varepsilon /} d v$. untie
lòk ${ }^{\top} \mathrm{pl}$ lù'ad ${ }^{\varepsilon} \mathrm{cb}$ lu'à $-n$. quiver (for arrows)
lòmbòn̆'og ${ }^{\top} \mathrm{pl}$ lı̀mbòn̆'od ${ }^{\varepsilon}$ cb lòmbòn̆'- n. garden (Hausa làmbuu; second element remodelled by analogy with bòn̆'og ${ }^{\circ}$ "swamp; ricefield")

$l \bar{\nu}^{\prime} \eta^{\varepsilon /} d v$. go across river, road etc
lóř pl lóyà lósm ${ }^{\text {ma }}$ cb lór- n. car, lorry (English)
$l \grave{s^{\varepsilon}} d v$. dip, immerse in liquid
lù ipfv lùt ${ }^{\mathrm{a}} \mathrm{imp}$ lùm ${ }^{\mathrm{a}} d v$. fall
$l u \overline{b^{\varepsilon}}$ ger lūbī $r^{\varepsilon /} d v$. buck, kick, struggle, throw off rider
$l u \overline{g^{\varepsilon}} d v$. swim
$l \bar{v} g \bar{u} r^{\varepsilon} n$. organ, member

## M

m̀ pron. I (right-bound); $m^{\mathrm{a}}$ me (enclitic)
mà $c b$ mà- $n$. mother; pl mà nám ${ }^{\text {a }}$ (tone sic) mother's sisters/co-wives; mà-bịi $g^{\mathrm{a}} n$. sibling with same mother; mà-bịl ${ }^{\text {a }} n$. mother's younger sister or junior co-wife; mà-kp $\bar{\varepsilon} \varepsilon \check{n} m^{\mathrm{m}} n$. mother's elder sister or senior co-wife; mà-pīt ${ }^{\mathrm{t} /} n$. mother's younger sister
$m a ̀ ' d v$. lie, deceive
mà'àa SF mà'anè LF emphatic only
màal ${ }^{\varepsilon} d v$. prepare, sacrifice; ag màal-māan ${ }^{\text {na }} n$. sacrificer; priest NT; traditionally just a worker who conducts the actual slaying for the tè $\eta-d \bar{a} a n^{\mathrm{a}}$ earth-priest
$m a{ }^{\prime} a l^{\varepsilon /} d v$. make cool, wet
$m a ̄ a n^{\mathrm{n} \varepsilon} \mathrm{pl}$ māanā cb màan- $n$. (physical) sacrifice
má'an ${ }^{\mathrm{n} \varepsilon}$ pl mā'aná cb mā'an- $n$. okra
mā'as ${ }^{\mathrm{a} /} s v$. be cool, wet
mā'asíga mā'asír ${ }^{\varepsilon}$ pl mā'asá cb mā'as- adj. cool, wet
mā'asígā' adv. coolly
mā'asím ${ }^{\mathrm{m}} n$. coolness, wetness
$m a ̄ d \bar{i} g^{\varepsilon /} d v$. overflow, abound
$m a{ }^{\prime} e^{\prime} d v$. cool down
$m a ̀ k^{\varepsilon} d v$. crumple up
$m a \bar{k}{ }^{\varepsilon /} d v$. measure, judge

written malek in NT versions before 2016
màlìf $p l$ màlì n. gun, rifle (ultimately Arabic)
màlıgìm preverb again
$m a ̄ l \bar{i} s^{\mathrm{a} /} s v$. be sweet, pleasant
mālısíga mālısír ${ }^{\varepsilon}$ pl mālısá cb mālīs- adj. sweet, pleasant
mālısím ${ }^{\mathrm{m}}$ n. sweetness
mālısín ${ }^{\mathrm{a}} \mathrm{pl}$ mālısís ${ }^{\varepsilon}$ cb mālısín- adj. sweet, pleasant
mālū $\eta^{\top}$ pl mālımā cb màlv̀n- n. sacrifice
mām pron. I, me
mán pron. I (as subject of ǹ-clause); mān SF mánè LF I, me (contrastive)
màngáv ${ }^{\circ} \mathrm{pl}$ màngáam ${ }^{\mathrm{m} \varepsilon}$ màngāamá cb màngāvŋ- $n$. crab (cf làngáv ${ }^{3}$ id)
màuk ${ }^{\top} \mathrm{pl}$ mà'ad ${ }^{\varepsilon} a d j$. crumpled up
$m \grave{\varepsilon} d v$. build
$m \varepsilon ̀ m \varepsilon ̀ n^{\varepsilon}$ emphatic too, also; mè-kàmà -soever 12.3.3
$m \bar{\varepsilon} d^{\varepsilon} d v$. mash up
$m \varepsilon ̀ \varepsilon \eta^{\mathrm{a}} \mathrm{pl} m \grave{\varepsilon} \varepsilon m i s^{\varepsilon} c b m \varepsilon ̀ \varepsilon \eta-n$. turtle
$m e ̀ l ı g i ̀ m ~ m ~ n . ~ d e w ~$
$m \bar{\varepsilon} \eta^{\mathrm{a} /}$ pron. self
$m \bar{\varepsilon} \eta i ́ r r^{\varepsilon} a d j$. genuine
$m \bar{\varepsilon} t^{\varepsilon /}$ cb mét-n. pl as sg pus
mị̀' ger mị̂'ilím ${ }^{\mathrm{m}}$ sv. know; ag gbàn-mịi'id ${ }^{\mathrm{a} /} n$. scribe ("book-knower") NT
mịe $d v$. squeeze(?); uncertain meaning and tones
mịífo pl mịiní n. okra seed
$m \grave{̣}$ 'ig $g^{\varepsilon} d v$. become sour
mị̀is ${ }^{\text {a }} s v$. be sour
mị̀'isù $g^{\text {ºn }}$ pl mị̀'isà cb mị̀'is- $a d j$. sour
$m i ̣ l i ̄ ̀ ~ g^{\varepsilon /} d v$. get dirty
mìmịilím ${ }^{\mathrm{m}}$ mìmịilív́g ${ }^{\circ} n$. sweetness
mịt see that it doesn't happen that... 16.4; always mid in $K B$
$m \bar{\jmath} d v$. strive, struggle
$m \bar{\jmath} d^{\varepsilon} d v$. swell
$m \bar{\partial} d \bar{l} g^{\varepsilon /} d v$. be patient, endure
mòlìf pl mòlı̀ cb mòl- n. gazelle
$m \bar{\jmath} n^{\varepsilon} d v$. grind millet to make $s a \overline{ } \quad a b^{\supset}$ porridge
$m \bar{\jmath} \eta^{\varepsilon /} d v$. refuse to lend

Mò̀g ${ }^{\circ} n$. Mossi realm; Mò̀g Nâ'aba $n$. Moro Naba, King of the Mossi
$m \bar{o} l^{\varepsilon /} d v$. proclaim; ag mōol-môon ${ }^{\text {na }} n$. proclaimer
Mòol $l^{\varepsilon} n$. Mooré language
Mōr ${ }^{\varepsilon /}$ pl Móom ${ }^{\text {ma }}$ cb Mōr- $n$. Muslim
mōr ${ }^{\mathrm{a} /}$ ger mōrím ${ }^{\mathrm{m}}$ sv. have, possess; mōr nā bring 16.9
Mùa $p l$ Mòos ${ }^{\varepsilon}$ cb Mò- n. Mossi person
$m u{ }^{\prime} \dot{a}^{\mathrm{a}} d \nu$. suck (of a baby)
mưàk ${ }^{\mathrm{a}} \mathrm{pl}$ mò'as ${ }^{\varepsilon} c b$ mú'à- n. maggot
mù'ar pl mư'àa mù'adà cb mư'à- n. dam; reservoir
$m \dot{\prime} ' a s^{\varepsilon} d v$. give (to baby) to suck
mù'e $d v$. redden; catch fire/ignite; become intense, severe
mùi cb mùì- n. pl as sg rice
$m u ̀ l^{\varepsilon} d v$. itch
$m u ̀ m{ }^{\mathrm{m}} d v$. bury

## N

ǹ clause nominaliser 17.3
$n$ clause catenator 17.2
$\grave{n}$ - personifier before an adjective 12.5.1
$n^{\varepsilon}$ discontinuous-past marker 16.2.2
$n^{\varepsilon} n \bar{\imath} /$ locative particle 13.2
nà positive irrealis mood marker 16.3
$n \bar{a} / V P$-final particle hither
$n a \overline{d v}$. join
náa reply to greetings invoking blessings
nà'ab ${ }^{\mathrm{a}}$ pl nà'-nàm ${ }^{\mathrm{a}}$ cb nà'- n. chief, king; nà'-bịì $g^{\mathrm{a}} n$. prince/princess; nà'-yị̀ $r^{\varepsilon /} n$. palace; nà'-y!̣i-kpém ${ }^{\text {ma } n . ~ p l ~ k i n g / c h i e f ' s ~ r e t a i n e r s ~}$
náaf $p l$ nịìí cb nā'- n. cow; nā'-lór$n$. place in compound for tying up cows; nā'-dâvg ${ }^{\top} p l n a \bar{a}^{\prime}-d a ̂ a d^{\varepsilon} c b n a \bar{a}^{\prime}-d a ́-n$. ox; nā'-dá-kūөdír${ }^{\varepsilon} n$. ox for ploughing nàam ${ }^{\mathrm{m}} d v$. happen
nā' $a m^{\mathrm{m}} \mathrm{cb}$ nà'am- $n$. chieftaincy, kingdom
nāan next, afterwards = ňyāan
nāan or nāanı̄ in that case 17.1.4
$n \bar{a} a n^{\varepsilon /} d v$. starting at ... do ... 17.2.1
nà'anā' adv. easily
nà'as ${ }^{\varepsilon} d v$. honour; ger nà'asì $n$. honour
Nàbìd ${ }^{\mathrm{a}}$ pl Nàbıdìba cb Nàbìd- n. Nabdema person; also a Kusaasi clan name (WK)
Nàbıdı̀ ${ }^{\circ} n$. Nabdema country
Nàbìr $\varepsilon n$. Nabit language
$N a ̀$ '-dàm ${ }^{\text {ma }} n$. clan name
$N a ̀ '-d a ̀ u \eta^{\circ} n$. place of clan Nadamba
nà'-dàwān ${ }^{\mathrm{n} \varepsilon /} n$. pigeon KED (= dàwānn ${ }^{\mathrm{n} / /}$ )
$n a ̄ e d v$. finish
nàm auxiliary tense marker still, yet
nàm ${ }^{\text {a }}$ pluraliser 5.1
$n \bar{a} m \bar{i} s^{\varepsilon /} d v$. persecute, suffer
$n a ̄ n^{\varepsilon} d \nu$. love, respect, appreciate
nà'-n $\bar{\varepsilon} s i ̄ n n \bar{\varepsilon} o g^{\partial /} n$. centipede WK
nānná adv. now
nānná-nā́ adv. now
nānzū'us ${ }^{\varepsilon /}$ n. pepper tones uncertain
nā $\eta^{\mathrm{a}} \mathrm{pl}$ nāmīs ${ }^{\varepsilon}$ cb nàn- $n$. scorpion
nāral ger nārím ${ }^{\mathrm{m}}$ sv. be obliged to; impersonal: to be necessary; with following purpose clause 17.4.1; negated: be obliged not to
nàrò $\eta^{\circ}$ pl nàrımà cb nàrùj- $a d j$. necessary
Nàsāal ${ }^{\varepsilon} n$. English/French language
Nàsāara pl Nàsàa-nàm ${ }^{\text {a }}$ Nàsàar-nàm ${ }^{\text {a }}$ cb Nàsàa- Nàsàar-n. European person (Arabic Nasªaraa "Christians"); Nàsàa-bịi $g^{\text {a }} n$. European child
nàyịig ${ }^{\mathrm{a}}$ pl nàyịig-nàm ${ }^{\mathrm{a}}$ này!̣is ${ }^{\varepsilon} n$. thief
nàyịigìm ${ }^{\mathrm{m}} n$. thievery
nà'-zòm ${ }^{\mathrm{m} \varepsilon} n$. locust
$n \bar{\varepsilon}$ preposition with; linking NPs and AdvPs and
$n \bar{\varepsilon} /$ focus particle 19.1.2; aspectual marker 16.1.1
$n \bar{\varepsilon} \prime$ meaningless particle after objects of $w \bar{v} v$ and $w \bar{\varepsilon} n^{\text {na/ }} \underline{15}$
$n \bar{\varepsilon}^{\prime \prime}$ pron. this
$n \varepsilon ̇ \varepsilon l^{\varepsilon} d v$. reveal
$n \varepsilon ̀ \varepsilon m^{\mathrm{m}} a d v$. for free
$n \bar{\varepsilon} \varepsilon m^{\mathrm{m} /} d v$. grind with a millstone
$n \bar{\varepsilon} \varepsilon r^{\varepsilon /} n$. millstone
$n \varepsilon ̀ \varepsilon s^{\varepsilon} d v$. reveal; nદ̀ $\varepsilon s i{ }^{m}{ }^{\mathrm{m}} n$. light
$n \bar{\varepsilon} m-n \hat{\varepsilon} \varepsilon r^{\varepsilon} p l n \bar{\varepsilon} m-n \varepsilon ́ y a ̀ ~ n$. someone who grinds
$n \bar{\varepsilon} n^{\text {na/ }}$ ger nēnním ${ }^{\mathrm{m}}$ sv. envy; nịn-nén ${ }^{\text {na }} a g$ envious person
nē'ŋá pron. this
nèog ${ }^{\circ} n \varepsilon ̀ \varepsilon r^{\varepsilon} p l n \varepsilon ̀ \varepsilon d^{\varepsilon} n غ ̀ y a ̀ ~ c b ~ n غ ̀-~ a d j . ~ e m p t y ~$
$n \bar{\varepsilon} s i ̄ n n \bar{\varepsilon} o g^{j /} p l n \varepsilon \overline{s i} n n \varepsilon \bar{\varepsilon} \varepsilon d^{\varepsilon /}$ cb nēsīnné- $n$. envious person WK; others: centipede ǹfá! Well done!
$n \bar{\imath}$ locative particle: see $n^{\varepsilon}$
$n i ̣ d v$. rain
 nịnnpūnān ${ }^{\text {na/ }}$ pl nịnnpūnānníbá $c b$ nịnnpūnán- $n$. disrespectful person; nịnsábılìs ${ }^{\varepsilon} n$. Africans
nị̀e $d v$. appear, reveal
 one-eyed; nịn-dáa pl nịin-dâas ${ }^{\varepsilon}$ cb nịn $n$-dá- $n$. face; nịn-gótì $\eta^{a} n$. mirror pl nịngótìs ${ }^{\varepsilon} n$. spectacles, glasses; nịn-kúgudì ${ }^{\text {a }}$ pl nịn-kúgudìs ${ }^{\varepsilon} n$. eyebrow; nịntâ'am ${ }^{\mathrm{m}} n$. tear(s); nịn-múa $n$. concentration ("eye-redness"); m̀ nịní mù'e n $\bar{\varepsilon} . .$. I'm concentrating on ...
nịi ${ }^{\mathrm{a}} \mathrm{pl}$ nịimís ${ }^{\varepsilon}$ nịis ${ }^{\varepsilon}$ cb nịin- $n$. bird
$n i ̣ ̀ m{ }^{\mathrm{n} \varepsilon /} n \underset{1}{1} m^{\mathrm{n} \varepsilon /}$ pl nị̀má cb nị̀m- $n$. meat
nịn-báalì $g^{\mathrm{a}} n$. pity; nịnn-bâal-zōor ${ }^{\varepsilon} n$. pity; Ò zòtō nịn-báalìg. He has pity on him.
$n i ̣ n \eta^{\mathrm{a}} \mathrm{pl} n \grave{i l i} s^{\varepsilon}$ cb nị̀n- nị̀n- $n$. body (uncommon); nịn-tōllím ${ }^{\mathrm{m}} n$. fever; nịn-tāa pl nịntāas ${ }^{\varepsilon}$ cb nị̀n-tà- n. co-wife (Ghanaian English: "rival"); husband's brother's wife; nị̀n-gbị̆ $\eta^{\prime /}$ pl nịn-gbịná cb nị̀n-gbịn- n. body (pl often as sg); nịn-gòor$n$. neck nịn-pôvd ${ }^{\varepsilon}$ n. pl as $s g$ pus
nịntā $\eta^{\mathrm{a} /}$ pl nị̄ntāan̆s ${ }^{\varepsilon /}$ cb nịntán- $n$. heat of the day, early afternoon
$n i ̣ \eta^{\varepsilon} d v$. do
$n$ lā that is ... 17.1.5
ǹnāas $q$. four, in counting
ǹnịi $q$. eight, in counting
ǹnū $q$. five, in counting
$n \check{n} w a ̀$ this is ...; n n̆wà nā this here is ... 17.1.5
$n \bar{d} d v$. tread
$n o ̄ b^{\varepsilon} d v$. get fat
nōbī $g^{\varepsilon /} d v$. grow (e.g. child, plant)
nóbìr ${ }^{\varepsilon}$ pl nōbá $c b$ nōb- n. leg, foot; nōb-bị́l ${ }^{\mathrm{a}} n$. toe; nōb-yíun $\eta^{\circ}$ adj. one-legged; nōb-ịñ'a n. toenail; nōb-púmpàū $\eta^{\supset} n$. foot
$n \overline{ } k^{\varepsilon /} d v$. pick up, take up
nò $\eta^{\varepsilon}$ ag nว̀jì $d^{\mathrm{a}}$ (tone sic) sv. love (family, spiritual); irreg ma-imperative: nòjìm ${ }^{\mathrm{a}}$
nว̄ $\eta^{\supset /} c b$ nธ̄ $\eta-n$. poverty; nō $\eta$-dâan ${ }^{\text {a }} n$. poor person
nònìlím ${ }^{\mathrm{m}} n$. love
nōo emphatic exactly, just
nōor ${ }^{\varepsilon /}$ pl nōyá cb n̄̄- n. mouth; command, message, opinion; n̄̄-dị̂'əs ${ }^{\text {a }}$ n. in Ghanaian English "linguist", councillor who speaks on a chief's behalf on all official occasions (the Akan okyeame); Wínà'am nó-dị̂'əs ${ }^{\text {a }}$ ("God's linguist") prophet NT/KB; n̄̄-lôor ${ }^{\varepsilon} n$. fasting ("mouth-tying", as throughout West Africa); n̄̄-nâare

nว̄or ${ }^{\varepsilon /}$ nว̄orím ${ }^{\mathrm{m}}$ times 12.4.1
ǹpòe $q$. seven, in counting
ǹtán̆' q. three, in counting
$n u \overline{d v}$. drink
nūal pl nōos ${ }^{\varepsilon /}$ cb n̄̄-n. hen; n̄̄-dâvg ${ }^{\circ} n$. cock; n̄̄-n̆yâ'an ${ }^{\text {a }} n$. (specifically female) hen; Nō-n̆yâ'aŋ-né-ò-Bịis the Pleiades
$n u \overline{l i} g^{\varepsilon /} d v$. make drink
$n u ̄ l i ̄ s^{\varepsilon /} d v$. make drink
nû'ug ${ }^{\circ} \mathrm{pl}$ nû'us ${ }^{\varepsilon} c b$ nū'- $n$. hand, arm; nū'-bị́l ${ }^{\mathrm{a}}$ pl nū'-bịbìs ${ }^{\varepsilon} n$. finger; nū'-dâvg ${ }^{\circ}$ n. thumb; nū'-yíú $\eta^{\circ} a d j$. one-armed; nū'-ịn'a pl nū'-ह̂n̆' $\varepsilon s^{\varepsilon}$ cb nū'-દ́n̆'- $n$. fingernail; $n u \bar{'}-w \varepsilon ̂ n ̄ ' \varepsilon d^{a} n$. mediator
n̆wà deictic this
$\check{n} w a \bar{a}^{\prime} d v$. smash, break up
$\check{n} w a \bar{a} \eta^{\mathrm{a}} \mathrm{pl}$ n̆wāamīs ${ }^{\varepsilon} c b$ n̆wàan- n. monkey
 $\check{N} w a ̄ d-d a ́ r^{\varepsilon} n$. Venus
n̆wà'e $d v$. cut wood
$\check{n} w a \bar{a}^{\prime} e^{\prime} d v$. strike, break
ǹwāe q. nine, in counting
$\check{n} w a ̄ m^{\mathrm{m} \varepsilon}$ WK ňwānn ${ }^{\mathrm{n} \varepsilon}$ SB pl ňwāmā SB WK NT n̆wānā NT cb n̆wàm- ňwàn- $n$. calabash
Ňwāmpūrī $g^{\text {a/ }} p l$ Ňwāmpūrīs ${ }^{\varepsilon /}$ cb $N \check{N} w a ̄ m p u ́ r-n$. Mamprussi person
Ňwāmpūrī $\bar{\varepsilon}^{\varepsilon /} n$. Mampruli language
$\check{N} w a ̄ m p u ̄ r \bar{v} g^{\jmath /} n$. Mamprussi country
$\check{n} w \varepsilon{ }^{\prime} ' d v$. beat; ňwè' X nû'ug make an agreement with X ; ňw ${ }^{\prime}$ ňyō'og boast
 $\check{n} w i ̄-t \varepsilon ́ k i ̀ r^{\varepsilon} p l ~ n ̆ w i ̣-t \varepsilon ́ k a ̀ ~ n . ~ r o p e ~ f o r ~ p u l l i n g ~$
$\check{n} w i ̣ i l g^{\varepsilon /} d v$. make a rope
$\check{n y} y \bar{a}^{\prime} a l^{\varepsilon /} d v$. leave behind
n̆yāan tense-slot adjunct next, afterwards

n̆yá'an ${ }^{\mathrm{a}}$ postposition behind; East; ňyà'an-dòlla ňyà'an-dòl ${ }^{\text {l }}$ pl n̆yà'an-dòllà ňyà'andòllìb ${ }^{\mathrm{a}}$ cb n̆yà'an-dòl- $n$. disciple NT; tones unexpected, Pattern $L$
n̆yā'ar $p l$ ňyā'a cb ňyà'- n. root
$\check{n y} y \bar{a} e^{\mathrm{n} \varepsilon /} a d v$. in the light, brightly, clearly
ňyālv́ $\eta^{\circ}$ pl n̆yālımá cb n̆yālv̄ŋ- adj. wonderful
$\check{n y a ̀ n}{ }^{\mathrm{n} \varepsilon} n$. shame; Ò dì n̆yán. He's ashamed.
$\check{n y a ̄} \eta^{\varepsilon /} d v$. overcome 17.2.1
n̆yàuk ${ }^{3} \mathrm{pl}$ n̆yà' $a d^{\varepsilon} a d j$. only (eye) 12.6.1.1
$\check{n y} y \bar{\varepsilon} i p f v \check{n} y \bar{\varepsilon} t^{\mathrm{a} /}{ }^{\text {imp }} \check{n} y \varepsilon ̀ m^{\mathrm{a}} d v$. see, find; n̆y $\bar{\varepsilon}$ láafiyà get well
$\check{n} y \bar{\varepsilon} \varepsilon, \check{n} y \bar{\varepsilon} \varepsilon$ tí auxiliary tense marker habitually
$\check{n} y \bar{\varepsilon} ' \varepsilon r^{\varepsilon /} p l$ n̆yz̄dá $c b \check{n} y \bar{\varepsilon} '-n$. next-younger sibling
n̆yè $\varepsilon s^{\mathrm{a}} s v$. be self-confident
$\check{n y} y$ c̀ $s i{ }^{\mathrm{m}}{ }^{\mathrm{m}} n$. self-confidence

$\check{n} y \varepsilon ̀ \varepsilon s i ́ \eta \bar{a}^{\prime} a d v$. self-confidently
ǹy!̣́' q. two, in counting
$\check{n y y ̣ ̄ n} n{ }^{\text {n } \varepsilon / ~ p l ~ n ̆ y i ̣ n n a ́ ~ c b ~ n ̌ y i ̣ n ~} n-n$. tooth
nyyịrífo pl ňyịirí n. a kind of edible seed, egusi: Colocynthis citrullus
$\check{n} y \overline{o ̄} \partial d^{\varepsilon} n$. intestines
$\check{n y} \bar{y}^{\prime} \circ g^{\circ /} n$. chest
n̆yōog ${ }^{\circ} n$. sympathy: Ò zòtō n̆yōog. She sympathises with him.
n̆yōor ${ }^{\varepsilon}$ pl n̆yōyā cb n̆yò- n. nose; breath; n̆yò-vūr $r^{\varepsilon /} p l$ n̆yò-vōyá cb n̆yò-vūr-n. life; ňyò-vūr-pâal ${ }^{\varepsilon}$ n. new life NT
$\check{n y}{ }^{\prime}{ }^{\prime} \cdot s^{\varepsilon /} n$. smoke
ǹyûeb q. six, in counting
n̆yūur ${ }^{\varepsilon /}$ pl n̆yūyá cb n̆yū- n. yam

## 0

ò pron. he, she (right-bound); ${ }^{\circ}$ LF [ $\left.\sigma\right]$ him, her (enclitic)
ón pron. he, she (subject of $\grave{n}$-clause); $\overline{n^{\varepsilon}}$ he, she (contrastive)
òn ${ }^{\varepsilon}$ pron. this, that (animate $s g$ )
う̀ňb ${ }^{\varepsilon}$ ger $\overline{\text { onnb }}{ }^{1} r^{\varepsilon} d v$. chew
̀̀j $\bar{a} /$ pron. this, that (animate sg)
$\bar{\jmath} \partial s^{\varepsilon /} d v$. warm oneself; Ò $\grave{\partial s i ̀ d ~ n \varepsilon}$ búgóm lā. She's warming herself at the fire.

## $\mathbf{P}$

pà' tense particle earlier today
pà'al ${ }^{\varepsilon} d v$. teach, inform; ag pā'an ${ }^{\text {na }} p l$ pā'annīb $b^{\text {a }} c b$ pà'an- $n$. teacher
pà'al ${ }^{\varepsilon} d v$. put on top of something
pāalíg${ }^{\mathrm{a}}$ páal ${ }^{l \varepsilon}$ pl pāalís ${ }^{\varepsilon}$ pāalá cb pāal- adj. new
pāalím ${ }^{\mathrm{m}} a d v$. recently
pāalv́ adv. openly
pàan̆lv́ $\eta^{3}$ pl pàan̆límìs ${ }^{\varepsilon} n$. spider's web
pàam ${ }^{\mathrm{m}} d v$. receive a gift
pàas ${ }^{\varepsilon} d v$. add up to, amount to
$p a \bar{e}{ }^{/} d v$. reach
$p a ̀ k^{\varepsilon} d v$. surprise
pàk ${ }^{\varepsilon} d v$. take off from the top
pāmm SF pāmné LF $q$. much, a lot
pàn̆'alı̀m ${ }^{\mathrm{m}} d v$. dedicate
pàňsì $g^{\varepsilon} d v$. lack
pàn $\eta^{\mathrm{a}}$ pl pàan̆s ${ }^{\varepsilon}$ cb pàn- $n$. power
pà' tì tense-slot adjunct perhaps
$p \varepsilon ̀ b i ̀ s^{\varepsilon} d v$. blow (of wind)
pغ̀bısìm ${ }^{\mathrm{m}} p \dot{\varepsilon} b ı s{ }^{\circ} g^{3} n$. wind
$p$ ' $^{\prime} \varepsilon l^{\varepsilon} d v$. fill; pfv adj pغ̀' $\varepsilon l v ́ \eta{ }^{\circ}$ full
peclvg ${ }^{\circ}$ in $z u \bar{u}-p \varepsilon ́ \varepsilon l \grave{v} g^{\circ}$ bald; cf Dau so' zug ya'a pie "If a man has gone bald" (Lv 13:40) and Mooré pểoogè "go bald"
$p \varepsilon^{\prime} \varepsilon s^{\varepsilon} d v$. add up to, amount to
$p \varepsilon ̀ l i ̀ g^{\varepsilon} d v$. whiten, go white
$p \varepsilon ̀ l i ̀ s{ }^{\varepsilon} d v$. sharpen
$p \varepsilon n^{n \varepsilon} n$. vagina
$p \bar{\varepsilon}^{\prime} \eta^{\varepsilon /} d v$. borrow; knock over WK

$p \bar{\varepsilon}^{\prime} o g^{\rho /} p l p \bar{\varepsilon} ' \varepsilon s^{\varepsilon /} c b p \bar{\varepsilon}^{\prime}-n$. sheep; p $\bar{\varepsilon}$ '-sá'a n. ewe lamb
$p \bar{\varepsilon} s i \overline{ } g^{\varepsilon /} d v$. sacrifice
$p i \bar{a} d v$. dig up

píăn̆'-zùnà $n$. foreign language
pịbì $g^{\varepsilon} d v$. uncover
pị̂bìl ${ }^{\varepsilon} d v$. cover up
pịbīn ${ }^{\text {ne }}$ pl pị̂bınā cb pị̀bìn- $n$. (physical) covering
$p i ̣ d^{\varepsilon} d v$. put on (hat, shoes, rings); clothing item as object; with indirect object put (hat, shoes, rings) on someone else
$p i ̣ d^{\varepsilon} d v$. get bloated
pìdì $g^{\varepsilon} d v$. take off (hat, shoes, rings)
$p i ̣ e^{/} d v$. wash (part of one's own body)
$p i ̣ ə b^{\varepsilon} d v$. blow (e.g. flute)
pị̀lì $g^{\mathrm{a}}$ pị̀l ${ }^{\text {l }}$ pl p!̣̀əlà pịəlìs ${ }^{\varepsilon}$ cb pị̀l- adj. white; Kusaal, like many local languages, has
 "black", for all darker shades, and pịəlì $g^{a}$ "white" for all lighter shades. Though any colour can be allocated to one of only three terms, many other standard colour expressions exist, e.g. wōv támpūvr n $\bar{\varepsilon}$ "like ash", i.e "grey."
pịəlìm ${ }^{\mathrm{m}} n$. whiteness
$p i ̀ \partial s^{\varepsilon} d v$. fool someone
$p i ̣ ə s^{\varepsilon /} d v$. wash
pịigā q. ten
pịim ${ }^{\mathrm{m} /}$ pl pị̀má cb pị̀m- n. arrow
píın̆fo pl pīıní cb pīın- n. genet
pịinī cb pịin- $p l$ as sg (?) n. gift
$p i ̣ l^{\varepsilon} d v$. cover
pịlì $g^{\varepsilon} d v$. uncover
$p i ̣ \breve{n}^{\prime} i i^{\varepsilon /} d v$. begin
pīpịrī $g^{\mathrm{a} /}$ pl $p \bar{p} \overline{p i ̣} r i ̄ s^{\varepsilon /} c b$ pīpír- $n$. desert
pịsị́ $q$. twenty
pịtú pl pịtíb ${ }^{\mathrm{a}}$ cb pị̀t- $n$. younger sibling of the same sex
$p \bar{\partial} d v$. swear
$p o ̀ n ̆ d^{\varepsilon} d v$. crouch down
$p \bar{n} \breve{n}^{\prime} \mathfrak{l}^{\varepsilon /} d v$. cause to rot
pòn̆'olìm ${ }^{\mathrm{m}} d v$. cripple, get crippled
pòn̆'or ${ }^{\varepsilon}$ pl pòn̆dà cb pòn̆'- n. cripple
pòn̆r $r^{a}$ ger pōn̆rūb ${ }^{\circ} s v$. be near
$p \grave{\partial} d^{\mathrm{a}} s v$. be few, small
pòsdì $g^{\mathrm{a}}$ pòsdìr ${ }^{\varepsilon}$ pl pòodà cb pòod- $a d j$. few, small
pòodìm ${ }^{\mathrm{m}} n$. fewness
$p \bar{\partial} g^{\rho /} p l p \bar{\nu} \partial d^{\varepsilon /} p \bar{\jmath} t^{\varepsilon /} c b$ $\bar{\nu}-n$. field, farm
$p$ ò' $\lrcorner g^{\varepsilon} d v$. diminish, belittle
$p \bar{\jmath} o r^{\varepsilon /} n$. "slogan" of a clan, part of its traditional genealogy WK; from pō swear (cf Farefare pote, pore "nom de famille, nom par lequel on jure", also "oath")
$p \bar{v}$ not: negates indicative mood 16.4
$p \bar{u} d v$. divide


 young woman; pư'à-sān̆'am na $n$. adulterer; pú'à-yùa n. daughter
$p u \bar{a} k^{\mathrm{a}} p l p \bar{v}^{\prime} a s^{\varepsilon} a d j$. female (human only)
pù'alìm ${ }^{\mathrm{m}} d v$. cook
pù'alìm ${ }^{\mathrm{m}} d v$. harm, damage; pfv adj pv̀'alv́ $\eta^{3}$ damaged
pò'alìm ${ }^{\mathrm{m}} n$. femininity
pò'alím ${ }^{\mathrm{m}} \mathrm{pl}$ pù'alímìs ${ }^{\varepsilon}$ cb pù'alím- $n$. female sex organs
$p u ̀ d^{\varepsilon} d v$. name
$p \bar{v} d \bar{\imath} g^{\varepsilon /} d v$. divide, share out
pùgudìba pl pùgùd-nàm ${ }^{\mathrm{a}}$ cb pùgùd- $n$. father's sister
pù-kòon̆r $r^{\varepsilon} p l$ pì-kòn̆yà $c b$ pù-kj̀n̆- $n$. widow
pū-kpāad ${ }^{a}$ pl pū-kpāadíb ${ }^{\text {a }}$ cb irreg pū-kpá- $n$. farmer
pùlımà n. a species of grass, Imperata cylindrica
pùmpōog ${ }^{\circ} n$. housefly
pùn preverb previously, already
$p u ̄ n ̆ ' e l d v$. rot
pūsī $g^{\mathrm{a} /} p l$ pūsīs ${ }^{\varepsilon /}$ cb pūs- $n$. tamarind
$p u \overline{s i ̄} r^{\varepsilon /} p l$ pūsá $n$. tamarind fruit
$p \overline{\text {-súk }}{ }^{\mathrm{a}} p l p \bar{u}$-súgùs ${ }^{\varepsilon} n$. half
$p \bar{v} t^{\varepsilon /} n$. pl as sg contents of stomach WK
pūum ${ }^{\mathrm{m} /}$ cb pūum-n. flowers
$p \bar{v} v g^{\mathrm{a}} c b$ pv̀- $n$. belly; Pu'ā lā mór p $\bar{v} v g$ The woman is pregnant; $p \bar{v} v g \bar{v}=n^{\varepsilon /}$ postposition inside; pù-pịəlìm ${ }^{\mathrm{m}} n$. holiness; pù-tغ̀n̆' $\varepsilon r^{\varepsilon} p l p \grave{-}$-tèn̆dà cb pù-tèn̆'- mind $p \bar{v} v r^{\varepsilon /}$ n. stomach
$p^{\prime} \grave{' v}^{\varepsilon} d v$. greet, worship, thank; ger pù'vsìm ${ }^{m} n$. worship; ger pù'vsù $g{ }^{\circ} n$. thanks; pù'usùg dôog ${ }^{3}$ NT temple

## S

sà tense particle yesterday
sà $V P$-final particle hence, ago
$s \bar{a} ' d v$. be in distress
sàa tense particle tomorrow
sāa pl sāas ${ }^{\varepsilon}$ cb sà- n. rain; sky; as subject of íāňk ${ }^{\varepsilon /}$ "leap": lightning; sāa dínd $\bar{\varepsilon} o g^{د /}$ rainbow ("rain chameleon"); sāa zúg ${ }^{\circ} n$. sky
$s \bar{a}^{\prime} a b^{3} c b$ sà'- $n$. millet porridge, "TZ", the staple food of the Kusaasi
sāafi (?tones) n. lock, key (Twi safẽ)
sàal ${ }^{\mathrm{a}} \mathrm{pl}$ sàalìb ${ }^{\mathrm{a}}$ cb sàal- $n$. human (perhaps as "hairless" cf būn-kón̆bù ${ }^{\text {º }}$ ); sàal-bịịig ${ }^{\text {a }}$ pl sàal-bịis $s^{\varepsilon} n$. human being
sàalínāa $a d v$. smoothly
sàam ${ }^{\text {ma }}$ pl sàam-nàm ${ }^{\mathrm{a}}$ cb sàam- $n$. father; sàam-kp $\bar{\varepsilon} \varepsilon \check{n} m^{\mathrm{m}} n$. father's elder brother; sàam-pị̀t ${ }^{\text {a/ }}$ pl sàam-pịitíb ${ }^{\text {a }} c b$ sàam-pịt $n$. father's younger brother
sāam ${ }^{\mathrm{m} / d v}$. mash, crumble
$s \bar{a}^{\prime} a n^{\varepsilon /}$ postposition in the presence of, in the opinion of
sāan ${ }^{\mathrm{a} /}$ pl sáam ${ }^{\text {ma }}$ cb sāan- $n$. guest, stranger
sáannìm ${ }^{\mathrm{m}} n$. strangerhood
sàb $\bar{\varepsilon} o g^{\circ} \mathrm{pl}$ sàb $\bar{\varepsilon} \varepsilon d^{\varepsilon} c b$ sàbè- $n$. wind, storm
sābılíg ${ }^{\mathrm{a}}$ sābíl ${ }^{\varepsilon} \mathrm{pl}$ sābılís ${ }^{\varepsilon}$ sābılá cb sābīl- adj. black [see note on pịəlì $g^{\mathrm{a}}$ ]
sàbùa pl sàbùes ${ }^{\varepsilon}$ cb sàbưà- n. lover, girlfriend
Sà'-dàbj̀ $g^{\circ} n$. place of the clan Sarabose
Sà'-dàbùa pl Sà'-dàbùes ${ }^{\varepsilon}$ Sà'-dàbù $\theta b^{a} n$. clan name
sādıgím since, because 17.3.1
sāenn̆ WK sāen̆̆ ${ }^{\text {ya }} \mathrm{DK} p l$ sāan̆b ${ }^{\mathrm{a}}$ cb sàn̆- $n$. blacksmith
sākárù ${ }^{\top}$ pl sākárìd ${ }^{\varepsilon}$ cb sākár- $n$. fox
sàlıbìr ${ }^{\varepsilon} n$. bridle
sālımā cb sàlìm-n. pl as sg gold
sām ${ }^{\mathrm{n} \varepsilon /} \mathrm{pl}$ sāmá $c b$ sām- $n$. debt; sām-kpâ'as ${ }^{\mathrm{a}} n$. household servant
sāmán ${ }^{n \varepsilon} p l$ sāmánà $c b$ sāmán- $n$. open space in front of a zàk ${ }^{\mathrm{a}}$ compound;
Sāmán-pị́ər $n$. traditional New Year ceremony
sàn̆'am ${ }^{\mathrm{m}} d v$. spoil, get spoiled, get broken; destroy
sāŋá pl sānsá cb sān- n. time 13.1; sān-kán$a d v$. then; when?
sān-sị'ə $=n$ lā clause adjunct at one time, once ...
sà $\eta-g b a ̀ u \eta^{3} n$. sky, heaven; cf sāa
sāŋgúnnìr ${ }^{\varepsilon} p l$ sāpgónnà cb sāngún- $n$. millipede
sāpál ${ }^{l \varepsilon} n$. Harmattan part of the dry season v́vn ${ }^{\text {ne }}$
sāpī ideo. straight (LF sāpīı or sāpīné)
sārıgá n. prison (Hausa sarkàa "chain")
sàrịyà or sèrịyà n. law (Arabic Sariifa); sàrịyà-kāta $n$. judge NT
sāvg ${ }^{\text {/ }} \mathrm{pl}$ sāad ${ }^{\varepsilon /}$ cb sā- $n$. broom, brush
sàvk ${ }^{\top} \mathrm{pl}$ sà' $a d^{\varepsilon} n$. mote of dust
sáv $\eta^{\circ} n$. hospitality
$s \varepsilon ̀ ~ i p f v ~ s \varepsilon ̀ \varepsilon d^{\mathrm{a}} d v$. transplant
$s \bar{\varepsilon} o n ̆ g^{0} n$. rainy season
sì $d v$. skin, flay
sị'a pron. some, any (sg)
sịa pl sị̀əs ${ }^{\varepsilon}$ cb sinà- $n$. waist; sinà-lōodín $\eta^{a} n$. belt ("waist-tying-thing"); sinà-nị̣ ${ }^{\rho} n$. kidney siā'al $l^{\varepsilon /} d v$. get to be enough
sinà'ar pl sinà'a cb sinà'- n. forest (WK), wilderness
sìàk ${ }^{\varepsilon} d v$. agree (Mooré sàke, Buli siagi)
sia $k^{\varepsilon /} d v$. suffice (Mooré sékè, Buli chagi)
sị̂bī $g^{\text {a/ }} p l$ sịbí cb sị̂b- $n$. a kind of termite
sid tense-slot adjunct truly
sìdà pl sìd-n. pl as sg truth
sī $d^{\mathrm{a}} \mathrm{pl}$ sīdī $b^{\mathrm{a}} c b$ sìd- $n$. husband; sìd-bịll ${ }^{\mathrm{a}} n$. husband's younger brother;
sìd-kp $\bar{\varepsilon} \varepsilon \check{n} m^{\mathrm{m}} n$. husband's elder brother; sìd-pūāk ${ }^{\mathrm{a}} n$. husband's sister
$s i ̣ e / d v$. descend, be humbled
sịəbā pron. some, any; sị̀'əl ${ }^{\mathrm{a}}$ something, anything; sị' $\partial m^{\mathrm{m}}$ somehow, anyhow
$s i ̣ g^{\varepsilon} d v$. descend
sīgī $r^{\varepsilon /} n$. guardian spirit; often the $w \bar{i} n^{n \varepsilon /}$ of an ancestor $\underline{21.2}$
sịgīs ${ }^{\varepsilon /} d v$. lower
sịgısír ${ }^{\varepsilon}$ pl sịgısá n. stopping-place
$\operatorname{sī} \imath g^{\text {a }} p l \operatorname{sī} \imath s^{\varepsilon} c b$ sì- $n$. shade, personal spirit (KED); used in NT for "spirit"; in traditional belief Lebenskraft (Haaf) "vital energy", identified with a person's tutelary kìkịrīs ${ }^{\varepsilon /}$ (qv); Sì-sì $\eta^{3} n$. Holy Spirit NT; cf Buli chíik
sīı $g^{\mathrm{a}} \mathrm{pl} \operatorname{sī} \imath s^{\varepsilon} n$. African birch, Anogeissus leiocarpa; cf Buli sī̀k
sịilìm ${ }^{\mathrm{m}} d v$. cite proverbs
sụilín $\eta^{\mathrm{a}}$ sịilv́ $\eta^{\top}$ pl sịilís ${ }^{\varepsilon}$ sịilímìs ${ }^{\varepsilon}$ sṭilímà cb sịilín- n. proverb
sịiň $d^{\varepsilon /}$ n. honey
sịiñfol sịin̆ $g^{\mathrm{a} /}$ pl sịinn $s^{\varepsilon /}$ cb sịñ- $n$. bee
$s i ̄^{-1} i S^{\varepsilon /} d v$. touch
sīlīnsị̂ug ${ }^{3}$ pl sīl̄̄nsịis ${ }^{\varepsilon} n$. ghost
sīlīnsị̂un̆ $g^{0}$ pl sīl̄̄nsị̂in̆d ${ }^{\varepsilon} n$. spider
sìlù $g^{3} p l \operatorname{sìn}^{\mathrm{n} \varepsilon} \operatorname{sillìs~}^{\varepsilon} c b$ sìl- $n$. hawk
$s i ̣ m^{\mathrm{m}} d v$. sink in a liquid
Sìmịi $g^{\mathrm{a}}$ pl Sìmịiis ${ }^{\varepsilon}$ cb Sìmị̀- $n$. FulGe person, Fulani
Sìmịil ${ }^{\varepsilon} n$. Fulfulde language
Sìmị̂ug ${ }^{3} n$. place of the Fulbe
$s i ̣ n n{ }^{\text {na/ }}$ ger sịnnním ${ }^{\mathrm{m}} s v$. be silent
sīnsáan̆ $n$. a kind of tiny ant
$\sin ^{\mathrm{a}} \mathrm{pl} \operatorname{sī} \check{n} s^{\varepsilon} c b \operatorname{sì} \eta-n$. a kind of very big pot
$s i{ }^{-} \eta^{\varepsilon /} d v$. begin
sīsị̂bì $g^{\mathrm{a}}$ pl sīsịbìs ${ }^{\varepsilon}$ cb sīsịb- n. neem tree, Azadirachta indica
sīsịibì $r^{\varepsilon} p l$ sīsịbà $n$. fruit of neem tree
sìsị' $\partial m^{\mathrm{m}} n$. wind, storm
sìsùvgū $=n^{\varepsilon /}$ postpostion between; KB suvgun

sō' pron. some(one), any(one), animate sg
sōb ${ }^{\mathrm{a}}$ pron. (animate dummy head sg )
$s \overline{\omega^{\varepsilon}} d v$. go/make dark; usually write; sōbī $r^{\varepsilon /} n$. piece of writing
sōbī $g^{\varepsilon /} d v$. blacken
sōeñ̆ WK sōeñ̆ya $\mathrm{DK} p l$ sōon̆ ${ }^{\mathrm{a}}$ cb sòn̆- $n$. witch
sógiàa ${ }^{\mathrm{a}} n$. soldier (English)
sōlv̄ŋว/ pl sōlımá n. story
sōn̆ $d v$. rub
sōn̆'e $e^{\mathrm{ya} /} s v$. be better than; ag sōn̆'od $d^{\mathrm{a} / ~} p l$ sōn̆'ob $b^{\mathrm{a} /} c b$ sōn̆'od-
sōnnīr ${ }^{\varepsilon} p l$ s $\operatorname{n} n n a ̄ ~ c b ~ s o ̀ n-~ n . ~ c o u r t y a r d ~ d i v i d i n g ~ w a l l ~$
sōn̆s ${ }^{\varepsilon}$ ger són̆sì $g^{\mathrm{a}} d v$. converse, talk with
sว̄on̆ $g^{\circ} n$. witchcraft
sว̄on̆ $r^{\varepsilon} p l$ sōn̆yā cb sòn̆- $n$. liver
$\operatorname{sò}^{\varepsilon}$ ger sōsī $g^{\mathrm{a}} d v$. ask; ag sòs ${ }^{\mathrm{a}} n$. beggar
sù $d v$. take a bath
$s u^{\prime} \bar{a}^{\mathrm{a}} d v$. do secretly, hide
sūāk ${ }^{\mathrm{a} /} n$. hiding place
sūen̆'dv. anoint
sū'e $e^{\mathrm{ya} /} s v$. own; ger sū'vlím ${ }^{\mathrm{m}} n$. property, country, realm
$s u \bar{g} \bar{v} r^{\varepsilon /} d v$. show forbearance, be patient with; sūgvrú $n$. forbearance
sùm ${ }^{\mathrm{m}} n$. goodness; well
sùm ${ }^{\text {ma }} s v$. be good
sùmbūgusím ${ }^{\mathrm{m}} n$. peace
sūmmīr ${ }^{\varepsilon} p l$ sūmmā cb sùm- $n$. groundnuts; sùm-d̄̄gvdá $n$. cooked groundnuts $\operatorname{sùn}^{\mathrm{n} \varepsilon}$ ger sùnnìr ${ }^{\varepsilon}$ or sùnnv̀ $g^{\circ} d v$. bow one's head; ag sūn ${ }^{\text {na }} n$. ("someone who goes about with bowed head") deep thinker, close observer WK
sūn̆'el $d v$. become better than
sūn̆ $f^{\rho /}$ sūun̆r $r^{\varepsilon /}$ pl sūn̆yá cb sūn̆- $n$. heart; sūn̆-kpị̂'on ${ }^{3} n$. boldness; sūn̆-má'asìm ${ }^{m} n$. joy (M sūn̆f má'e yā. "My heart has cooled" = I'm joyful); sūn̆-málısìm ${ }^{\mathrm{m}}$ cb sūn̆-málìs- $n$. joy; sū̆̆-p $\bar{\varepsilon} \varepsilon n^{\mathrm{n} \varepsilon} n$. anger ( $M$ sūn̆f pélìg n $\bar{\varepsilon}$. "My heart is whitened" $=$ I'm angry); sūn̆-sân̆'vך ${ }^{3} n$. sorrow (M sūn̆f sân̆'am n $\bar{\varepsilon}$. "My heart is spoilt" = I'm sad)
$\operatorname{sùn}^{\varepsilon} d v$. help
sù $\eta^{J}$ sùm ${ }^{\mathrm{m} \varepsilon}$ pl sùmà cb sùn- adj. good
sv̀nā' adv. well, much
sú'ө $\eta^{\mathrm{a}} p l$ sū'өmís ${ }^{\varepsilon} c b$ sū'өך- n. rabbit
sūөr ${ }^{\varepsilon /}$ pl sūēyá cb sūā- n. road; permission in sūөr bé, mōr sūөr 17.4.1
sù' $\theta S^{\mathrm{a}} n$. yesterday
$\operatorname{sù̀'\theta s}^{\varepsilon} d v$. trick
sùr ${ }^{\mathrm{a}} s v$. have one's head bowed
sùsòm ${ }^{\mathrm{m} \varepsilon} n$. grasshopper
Sūtáanà n. Satan
$s \bar{v} v g^{\varepsilon /} d v$. wither (leaves) WK


## T

tāa tāas ${ }^{\varepsilon}$ fellow- as second part of compound 9.2.1.4
tāabā tāab pron. each other
tā'adīr ${ }^{\varepsilon} p l$ tā'adā cb tà'ad- $n$. sandal
tàal ${ }^{l \varepsilon}$ pl tàalà cb tàal- $n$. fault, sin
tá'am ${ }^{\mathrm{m} \varepsilon}$ pl tā'amá $n$. shea tree fruit
tá'ana pl tā'amís ${ }^{\varepsilon} c b$ tā'aŋ- $n$. shea butter tree Butyrospermum parkii
$t a{ }^{\prime} a s^{\varepsilon /} d v$. help someone to walk
tà $b^{\varepsilon} d v$. get stuck to
tàbìya $s v$. be stuck to
tàbì $g^{\varepsilon} d v$. get unstuck from
tàbì $l^{\varepsilon} d v$. stick to (transitive)
tàdì $g^{\varepsilon} n$. become weak
tādīm ${ }^{\mathrm{m} /} \mathrm{pl}$ tàdìm-nàm ${ }^{\mathrm{a}}$ cb tàdìm- $n$. weak person
tàdımís ${ }^{\varepsilon} n$. weakness
Tàlìn $n^{\text {n }} n$. Talni language
Tàlì $\eta^{\text {a }} p l$ Tàlìs ${ }^{\varepsilon}$ cb Tàlı̀ $\eta-n$. Tallensi person
tàm ${ }^{\mathrm{m}}$ ipfv tàmmìd ${ }^{\mathrm{a}} d v$. forget
tàmpịin̆ ${ }^{\mathrm{a}}$ n. rock
tàmpūa pl tàmpōos ${ }^{\varepsilon}$ cb tàmpò- n. housefly
tàmpūvr ${ }^{\varepsilon}$ cb tàmpù- $n$. ashpit, rubbish tip
tān ${ }^{\text {ň }} p l$ tānā cb tàn- $n$. earth; tàn-mē $\varepsilon d^{\text {a }} n$. builder
tān̆ $p^{3} n$. war; tàn̆p-sōb ${ }^{\text {a }} n$. warrior
tàn̆s ${ }^{\varepsilon}$ ger tàn̆sù $g^{\circ} d v$. shout; Wịnnìg tán̆sìd $n \bar{\varepsilon}$. The sun is shining.
tār $r^{\mathrm{a} /}$ ger tārím ${ }^{\mathrm{m}}$ sv. have; more typical of Toende Kusaal; NT/KB always mōral
tàsìntàl ${ }^{l \varepsilon} n$. palm of hand
tàtàl ${ }^{l \varepsilon} n$. palm of hand
tāun̆' pl tān̆np $p^{\mathrm{a} /}$ cb tāun̆n- tān̆p- $n$. sibling of opposite sex
$t \varepsilon{ }^{\prime} b^{\varepsilon}$ ger t $\bar{\varepsilon} b \bar{i} g^{a} d v$. carry in both hands
$t \bar{\varepsilon} b \bar{\imath} g^{\varepsilon /} d v$. get heavy
$t \bar{\varepsilon} b i \bar{s} s^{\mathrm{a} /} s v$. be heavy

$t \bar{\varepsilon} b ı s^{\prime} \mathrm{m}^{\mathrm{m}} n$. heaviness
té $\varepsilon b \grave{l} l^{\varepsilon} p l$ técbòl-nàm ${ }^{\mathrm{a}} n$. table (English)
$t \bar{\varepsilon} \varepsilon g^{\varepsilon /} d v$. drag, draw; t $\bar{\varepsilon} \varepsilon g \mathrm{X}$ tùbùr punish X
$t \grave{\varepsilon}^{\prime} \varepsilon g^{\mathrm{a}} p l$ tè' $\varepsilon s^{\varepsilon} c b$ t $̀$ '- n. baobab, Adansonia digitata
$t \bar{\varepsilon} k^{\varepsilon /} d v$. pull
tèn̆ $b^{\varepsilon}$ ger tèn̆hò $g^{\circ} d v$. tremble, struggle
$t \varepsilon ̀ n ̆ ' \varepsilon s^{\varepsilon} d v$. remind
$t \bar{\varepsilon} \breve{n}^{\prime} \varepsilon s^{\varepsilon /} d v$. think; ger t $\bar{\varepsilon} \bar{n}^{\prime} \varepsilon s a ́ n$. thought


 $t \varepsilon ̀ \eta-p \bar{v} v d^{\varepsilon /} c b$ tè $\eta-p \bar{v}-n$. village, town; tè $\eta-z u ̀ \eta^{3} p l ~ t \varepsilon ̀ \eta-z \grave{v} v n s^{\varepsilon} n$. foreign country; $t \varepsilon ̀ \eta-s \bar{v} k^{\mathrm{a}} n$. centre
$t \bar{\varepsilon} \eta \bar{\imath}=n^{\varepsilon /}$ or $t \bar{\varepsilon} \eta i^{\prime} r^{\varepsilon}$ downward; as postposition under
tèog ${ }^{\circ} p l$ tè $\varepsilon d^{\varepsilon} n$. nest
$t \varepsilon \dot{\varepsilon}^{\prime} o g^{\rho} p l t \dot{\varepsilon}^{\prime} \varepsilon d^{\varepsilon} n$. baobab fruit
tì pron. we (right-bound); tı us (enclitic)
tì preverb once 16.6
tià 'al $l^{\varepsilon} d v$. come next
tiàk ${ }^{\varepsilon} d v$. change
$t i ̣ ' ə b^{\varepsilon} d v$. prepare, get ready; heal in this sense perhaps influenced by Arabic $t^{s} i b b$ "medicinal art"; tị'əb ${ }^{\text {a }} n$. healer
tịen̆ $d v$. inform WK (KED remember)
tịen̆ $d v$. stretch out
tị̀ $\eta^{\mathrm{a}} \mathrm{pl}$ tị̀əmìs ${ }^{\varepsilon}$ cb tị̀ə $-n$. beard; tị̀ə $-g \bar{v} v r^{\varepsilon} n$. chin
$t i \bar{g}{ }^{\varepsilon} d v$. become sated, have too much/many; ger tī $g i ̄ r^{\varepsilon /} n$. glut


$t \underset{T}{1} i l^{\varepsilon /} d v$. lean something
tìım ${ }^{\mathrm{m}} c b$ tì- $n$. medicine; tì-kūvdím ${ }^{\mathrm{m}} n$. poison; tì-sābılím ${ }^{\mathrm{m}} n$. "black medicine" (a specific traditional remedy); tì-vōnním ${ }^{\mathrm{m}} n$. oral medication
$t ̣^{\prime} i^{\varepsilon} d v$. begin to lean
tịlás ${ }^{\varepsilon} n$. necessity (Hausa tiilàs) 17.4.1
tìlì $g^{\varepsilon} d v$. survive, be saved
tīnám ${ }^{\mathrm{a}}$ pron. we, us (contrastive); tīnámì we (subject of $\grave{n}$-clause)
tīntōn̆ríg ${ }^{\text {a }}$ pl tīnts̄n̆rís ${ }^{\varepsilon}$ cb tīntón̆r- n. mole (animal)
tì $p^{\mathrm{a}} p l$ tìp-nàm ${ }^{\mathrm{a}}$ cb tìp- $n$. healer (see tị'əb ${ }^{\mathrm{a}} i d$ )
tīrâan ${ }^{\mathrm{a}}$ pl tīrâan-nàm ${ }^{\mathrm{a}}$ cb tīrâan- $n$. neighbour, peer
tīrâannìm ${ }^{\mathrm{m}} n$. neighbourliness
tírıgà ideo. for gị $\eta^{\mathrm{a}}$ short
tìs ${ }^{\varepsilon}$ ipfv tìsid ${ }^{\mathrm{a}}$ tìt $t^{\mathrm{a}}$ ag tìs ${ }^{\mathrm{a}} d v$. give; also tì before bound pronouns: $t \grave{l}=f$ gave you
tītā'al ${ }^{l \varepsilon} n$. proud person
tītā'alīm ${ }^{\mathrm{m}} n$. pride
tītā'am ${ }^{\mathrm{m}} n$. multitude
tītā'vg ${ }^{\circ}$ tītā'ar ${ }^{\varepsilon}$ pl tītādā cb tītá'- adj. big, great
tò OK (Hausa tôo)
$t{ }^{2} d^{\varepsilon} d v$. give to the poor, share
$t \bar{j} e^{\text {ya/ }} s v$. be bitter, difficult
tóklàe n. torch (English "torchlight")
tólì ideo.
$t \bar{\jmath} l \bar{\imath} s^{\varepsilon /} d v$. do next, advance, carry on
tólılìlì ideo. for wōk ${ }^{\mathrm{o} /}$ tall
tòn̆ $d v$. shoot
tòn̆' $s^{\varepsilon} d v$. hunt

tōom ${ }^{\mathrm{m} / d v}$. depart, disappear
tò'stō' $a d v$. straight away
tưà $d v$. grind in a mortar; tưà-bịla $n$. pestle
$t u^{\prime} a^{\mathrm{a}} d v$. speak, plead in court
$t{ }^{\prime} l^{\varepsilon} d v$. condemn in court
tù' $a s^{\varepsilon} d \nu$. talk
tùbùr ${ }^{\varepsilon}$ pl tùbà cb tùb-n. ear; tùb-kpị̀r $r^{\varepsilon} n$. half of jaw; tùb-yīun $\eta^{J /} a d j$. one-eared
$t \bar{v} l^{\text {la/ }} s v$. be hot
tùlì $g^{\varepsilon} d v$. invert
$t \bar{v} l \bar{l} g^{\varepsilon /} d v$. heat up
$t u ̀ m{ }^{\mathrm{m}} d v$. work; ger tv̄vm ${ }^{\mathrm{m} \varepsilon} n$. deed pl tv̄vmā $n$. deeds; work cb tùvm-; tùvm-b $\bar{\varepsilon}^{\prime} \varepsilon d^{\varepsilon}$ $n$. bad deeds; tùvm-b $\bar{\varepsilon} ' \varepsilon d-d i ́ m{ }^{\text {a }} n$. sinners NT; ag tùm-tv̄m ${ }^{\text {na }} n$. worker
tùm ${ }^{\mathrm{m}}$ ger tìtūmīs ${ }^{\varepsilon} d v$. send; compare Hausa àikaa "send", aikàtaa "work"
tūn̄'e sv. be able, have power over 17.2.1
tū $d^{1} r^{\varepsilon} p l$ tū $\theta d \bar{a}$ cb tù $\theta d-n$. mortar
tùөn ${ }^{\mathrm{n} \varepsilon}$ postposition in front; West (KB yà tùөnà); tùөn-gāt ${ }^{\mathrm{a}} n$. leader
Tù̀n ${ }^{\mathrm{n} \varepsilon} n$. Toende, western part of Kusaasi country
Tùөnnìr ${ }^{\varepsilon} n$. Toende dialect of Kusaal
tūsīr ${ }^{\varepsilon /} n$. thousand
tìtūll ${ }^{\varepsilon} n$. upside-down thing, cf tùlì $g^{\varepsilon}$
tv̄vlígā' adv. hotly
tūvlv́gº pl tūvlá cb tūvl- adj. hot
$t \bar{u} ' v s^{\varepsilon /} d v$. meet

## $\mathbf{U}$

ùdù $g{ }^{\top} p l ~ u ̀ t^{\varepsilon} c b ~ u ̀ d-n$. (piece of) chaff
$\bar{u} g \bar{v} s^{\varepsilon /} d v$. bring up a child
$\grave{v} k^{\varepsilon} d v$. vomit
$\bar{u} k^{\varepsilon} d v$. bloat
$\grave{v} m^{\mathrm{m}} d v$. close eyes
$\bar{u} r i ̄ g^{\varepsilon /} d v$. scrape
v́vn $n^{\text {ne }} n$. dry season

## V

$v a \bar{b} \overline{\mathrm{i}} \mathrm{ya} / \mathrm{ger} v \overline{p^{2 /}} \mathrm{KT} v a \bar{b} \overline{\mathrm{i}}^{\varepsilon /} \mathrm{WK} s v$. be lying prone
$v a \overline{b i ̄} l^{\varepsilon /} d v$. make lie prone
$v a ̀ b i ̀ n \varepsilon d v$. lie prone
vàe $d v$. gather up
$v a \overline{v n ̆ g^{j /}} p l v a \overline{a n} d^{\varepsilon /} c b$ vān̆-n. leaf
$\nu \bar{\varepsilon}{ }^{\prime} d \nu$. lead
$\nu \bar{\varepsilon}^{\prime} \varepsilon g^{\varepsilon /} d v$. drag
$v \varepsilon ̀ n^{\text {na }}$ or $v e ̀ n ̆ n l^{\text {la }} s v$. be beautiful
vèn̆llì $g^{\text {a }}$ pl vèn̆llìs ${ }^{\varepsilon}$ vèñllà $c b$ vèn̆l- $a d j$. beautiful
vèn̆llín $\eta^{\mathrm{a}} \mathrm{pl}$ vèn̆nlís ${ }^{\varepsilon}$ cb vèñllín- adj. beautiful
vغ̀nnì $g^{\mathrm{a}} v \varepsilon \grave{n} n \grave{r^{\varepsilon}} \mathrm{r}^{\varepsilon} \mathrm{pl}$ vÈnnìs ${ }^{\varepsilon}$ vènnà $c b$ vèn- $a d j$. beautiful
vènnìm ${ }^{\mathrm{m}} n$. beauty
$v i ̣ ̀ ' d v$. uproot
$v i ̣ k^{\varepsilon /} d v$. uproot
vịu $g^{\text {/ }}$ pl vịiid ${ }^{\varepsilon /}$ cb vị- n. owl
$v \overline{\omega^{\varepsilon /}} d v$. thrash (tones uncertain)
$v \bar{u}$ ger $v \bar{u} u g^{\rho /} d v$. make a noise; $v \bar{u} u d^{\varepsilon /} n$. noise
$v \bar{v}{\underset{\sim}{y a / ~}}^{y} s v$. be alive
$v \overline{]^{\varepsilon}} d v$. swallow
vòlìnvùun̆ll ${ }^{l \varepsilon} n$. mason wasp
$v \bar{v} m^{\mathrm{m} /} c b v \overline{\mathrm{v}} \mathrm{m}-\mathrm{n}$. life; vūm-pâal ${ }^{\mathrm{l}} n$. new life
vúө $\eta^{\text {a }} p l$ vūөmís ${ }^{\varepsilon} n$. red kapok, Bombax buonopozense
$v u ́ \theta r^{\varepsilon} p l v u ̄ a ́ a ~ c b v u ̄ \theta-n$. fruit of red kapok
$v \bar{v} r^{\varepsilon /} p l$ vōyá $c b v \bar{u} r-a d j$. alive
$v u ̄ r i ̄ g^{\varepsilon /} d v$. shift along, move over (tones uncertain)
$v \bar{u}^{\prime} v g^{\varepsilon /} d v$. come, make alive
$v \bar{v}^{\prime} v s^{\varepsilon /} d v$. breathe, rest
$v \bar{v}^{\prime} v$ sím $^{\mathrm{m}} n$. resting

## W

$w \bar{a} ' d v$. dance
wāad ${ }^{\varepsilon /} n$. cold weather
wáaf pl wịigí cb wā'- n. snake
$w_{a} a l^{\varepsilon /} d v$. sow, scatter seed
wā'alím ${ }^{\mathrm{m}} n$. length
$w a \bar{a}^{\prime} a m^{\mathrm{a} /} s v$. be long, tall
wàbì $^{\mathrm{a}}$ wàbì $r^{\varepsilon} p l$ wàbìs ${ }^{\varepsilon}$ wàbà $c b$ wàb- $n$. lame person
wàbılìm $^{\mathrm{m}} d v$. make, go lame
wābū $g^{\rho / ~ p l ~ w a ̄ b i ̄ d ~} d^{\varepsilon /} c b$ wāb-n. elephant
wādī $r^{\varepsilon /} p l$ wādá cb wād- $n$. law (English "order" via Hausa) plural as sg: law wād-tís ${ }^{\mathrm{a}} n$. lawgiver NT
wà'e $e^{\text {ya }} s v$. be travelling
wālīga pl wālīs ${ }^{\varepsilon}$ wālí (tone sic) cb wàl- n. a kind of gazelle
wànı̀m ${ }^{\mathrm{m}} d \nu$. waste away
wàsìnwàl ${ }^{l \varepsilon} n$. a parasitic gall on trees, called "mistletoe" in local English
wàun $\eta^{3}$ pl wànà $c b$ wàun $-a d j$. wasted, thin
$w \varepsilon ̀ \varepsilon d^{\mathrm{a}}$ see wìı $d^{\mathrm{a}}$
$w \bar{\varepsilon} \varepsilon l^{\varepsilon /} d v$. be left unsold (KED) but see w $\bar{\varepsilon} o g^{3 /}$
$w \bar{\varepsilon} \varepsilon^{\varepsilon} d \nu$. bear fruit
$w \bar{\varepsilon} l^{l \varepsilon /} p l$ wēlá cb w $\bar{\varepsilon} l-n$. fruit
wह̄lá or wālá proadverb how?; nị̀ w wēlá n/kà how can ...? 17.2.1
$w \bar{\varepsilon} n^{\text {na/ }} s v$. resemble; in $K B$ w $n$ n $n \bar{\varepsilon}$ appears as nwene; ger w $\begin{gathered}\text { nním }\end{gathered}{ }^{m}$
$w \bar{\varepsilon} n n \bar{i} r^{\varepsilon}$ adj. resembling (Pattern $A$, specifically confirmed with $W K$ )
$w \varepsilon ̀ o g^{3} n$. deep bush
$w \bar{\varepsilon} o g^{\Omega /} p l w \bar{\varepsilon} \varepsilon d^{\varepsilon /}$ n. cheap thing sold in abundance WK
$w i$
wìdì $g^{\varepsilon} d v$. scatter
wịə⿰ ${ }^{\rho} \mathrm{pl}$ wịd̀̀ Cb wìd- $n$. horse; wìd-lōr $r^{\varepsilon /} n$. place for tying up horses in a compound;
wìd-dāvg ${ }^{\circ} n$. stallion; wìd-n̆yá'an $n$. mare; wìd-zv̄vr ${ }^{\varepsilon} n$. horsetail
wìı $d^{\mathrm{a}}$ or wè $\varepsilon d^{\mathrm{a}} \mathrm{pl}$ wìı $b^{\mathrm{a}} c b$ wı̀ıd- $n$. hunter
Wịid ${ }^{\mathrm{a}}$ pl Wịid-nàm ${ }^{\mathrm{a}}$ cb Wịid- n. member of the clan Wiid
Wịidù $g{ }^{\circ} n$. place of the clan Wiid
wịi $g^{\mathrm{a} /} n$. whistle
$w_{\imath ̀ ı}{ }^{\mathrm{m}} n$. sickness, disease ("worse than bān̆'as ${ }^{\varepsilon "} \mathrm{WK}$ )
$w i ̣ ̂^{\varepsilon}{ }^{\varepsilon} i p f v w_{i l i}{ }^{\mathrm{a}} d v$. fetch water
wịl $^{l}{ }^{\varepsilon} p l$ wịlà $c b$ wịl- $n$. branch
wīlısúク ${ }^{\circ} \mathrm{pl}$ wīlımís ${ }^{\varepsilon}$ cb wīlısún- $n$. a kind of snail
wịm ideo. for zịn̆'a red
$w \bar{\imath} n^{\mathrm{n} \varepsilon /} \mathrm{pl}$ wīná $c b$ wīn- $n$. God; god; spiritual double, genius; destiny; wīn-tôวgo $n$. misfortune
Wínà'am ${ }^{\mathrm{m}} n$. God
wịnnnì $g^{\mathrm{a}}$ cb wịn- $n$. sun; talent; wị̀n-lịir ${ }^{\varepsilon} n$. sunset; wịn-kj̀on̆r $r^{\varepsilon} n$. sunset
wị̀u ${ }^{\circ}$ wịi $i^{\varepsilon} p l$ wịyà wịid ${ }^{\varepsilon} c b$ wị̀- adj. red [see note on pị̀lì $g^{\mathrm{a}}$ ]
wōk ${ }^{\rho /}$ wā' $a r^{\varepsilon /} p l$ wá'a wā'ad ${ }^{\varepsilon /} c b$ wōk-wā'- adj. long, tall
$w v ̀ m{ }^{\mathrm{m}} d v$. hear; understand (a language); smell
$w \bar{s} a \bar{q}$. all
$w \bar{v} v q$. all
$w \bar{v}$ preposition like, resembling
$w \bar{v} \cdot v g^{\varepsilon /} d v$. get wet
$w \bar{v}^{\prime} v l^{\varepsilon /} d v$. make wet

## $\mathbf{Y}$

yà pron. you pl (right-bound); ya you pl (enclitic)
ya pron. you pl, enclitic subject after imperative 4.2 17.1.3
yā independent-perfective particle 16.5
yà' if, when 17.1.4; yà' nāan if only; yà' pùn even if
yáa adv. whither?
yáab ${ }^{\mathrm{a}} \mathrm{pl}$ yāa-nám ${ }^{\mathrm{a}}$ cb yāa-n. grandparent, ancestor; yāa-dáu $n$. grandfather; yāa-pú'áa $n$. grandmother
yà' $a b^{\varepsilon} d v$. mould clay
yā'ad ${ }^{\varepsilon} c b$ yà'- n. clay
yà'al ${ }^{\varepsilon} d v$. hang up; make perch (bird)
yà' $a n^{\varepsilon} d v$. perch (of a bird)
Yàan ${ }^{\mathrm{n} \varepsilon} n$. Yansi language (apparently Mooré now)
yáa ní adv. where?
yáa ${ }^{\text {a }}$ pl irr yáas ${ }^{\varepsilon}$ (without nasalisation) cb yāaŋ- $n$. grandchild, descendant
Yàan ${ }^{\text {a }}$ pl Yàam ${ }^{\text {ma }}$ Yàamìs ${ }^{\varepsilon}$ Yàan̆s ${ }^{\varepsilon}$ cb Yàaŋ- $n$. Yansi person
yāar ${ }^{\varepsilon /} d v$. scatter
yàarìm ${ }^{\mathrm{m}}$ cb yàar- $n$. salt
yà'as ${ }^{\mathrm{a}}$ yà'as ${ }^{\varepsilon}$ again 17.2.1
$y \bar{a}^{\prime} a s^{\varepsilon /} d v$. open repeatedly
yàddā or yàdā $n$. faith, trust 16.7.1 (Hausa yàrda; probably Arabic yard$a a$ ); yàddā-nínìr ${ }^{\varepsilon} n$. belief
$y \bar{a} d \bar{l} g^{\varepsilon /} d v$. scatter; irreg ag yāta/ participant in a housebuilding ritual
$y a \bar{\prime} e^{l} d v$. widen, open (mouth)
yà ${ }^{\varepsilon} d v$. unhang, unhook
yàlìm ${ }^{\text {ma }} s v$. be wide
yālī $m^{\mathrm{m} /}$ pl yālīm-nám ${ }^{\mathrm{a}} n$. worthless person
yālısú $\eta^{3}$ pl yālımís ${ }^{\varepsilon}$ cb yālısún- n. quail
yàlù ${ }^{3}$ pl yàlımà cb yàlùn- adj. wide
yām ${ }^{\mathrm{m} \varepsilon} p l$ yàmà $c b$ yàm- $n$. hay WK
$y a \bar{a} m^{\mathrm{m} /}$ cb yām- $n$. gall; gall bladder; common sense. WK yā' $a m^{\mathrm{m} / ;}$; probably originally two distinct words 2.2
yàmmì $g^{\mathrm{a}}$ yàmmù $g^{\mathrm{a}}$ yàmmù ${ }^{3}$ pl yàmmìs ${ }^{\varepsilon}$ cb yàm- $n$. slave
yānám ${ }^{\mathrm{a}}$ pron. you pl (contrastive); yānámı̀ you pl (subject of ǹ-clause)
Yārī $g^{\mathrm{a} /} p l$ Yārīs ${ }^{\varepsilon /}$ cb Yār- $n$. Yarsi person; also called Kantonsi; said to have been originally of Manding/Dyula origin
Yāt ${ }^{\varepsilon /} n$. Yarsi language (no longer Dyula/Bambara, but a Western Oti-Volta language) yàvg ${ }^{\circ}$ pl yàad ${ }^{\varepsilon} n$. grave, tomb
$y \bar{\varepsilon}$ that 17.4; be about to ... 16.2.3
$y \varepsilon ̀ d v$. dress oneself; pfv adj yè $\varepsilon l v ́ \eta{ }^{3}$ worn (e.g. of a shirt)
$y \varepsilon ̀ \varepsilon g^{\varepsilon} d \nu$. undress oneself
$y \varepsilon ̇ \varepsilon \varepsilon^{\varepsilon} d v$. dress someone
$y \bar{\varepsilon} \varepsilon s^{\varepsilon /} d v$. betray a secret

$y \bar{\varepsilon} l^{1 \varepsilon /} p l y \bar{z} l a ́ ~(a s ~ p o s t p o s i t i o n: ~ a b o u t) ~ c b ~ y \bar{\varepsilon} l-n . ~ m a t t e r, ~ a f f a i r ; ~ y \bar{\varepsilon} l-m \varepsilon ́ \eta \grave{\eta} r^{\varepsilon} n$. truth;
$y \bar{\varepsilon} l$-nárù $\eta^{د} n$. necessity; y $\bar{\varepsilon} l$-pákì $r^{\varepsilon} n$. disaster; y $y \bar{\varepsilon} l$-sú'adì $r^{\varepsilon} n$. confidential matter; y $\bar{\varepsilon} l$-súm ${ }^{\mathrm{m} \varepsilon} n$. blessing
$y \bar{\varepsilon} \eta^{\prime} m^{\mathrm{m}} d v$. oscillate (like waves)
$y \varepsilon ̇ o g^{\circ} p l y \varepsilon ̀ \varepsilon d^{\varepsilon} n$. bird's crop; person displaced from family (KED)
yćoŋ $q$. one, in counting

$y i ̣ d ı ̀ g^{\varepsilon} d v$. go astray
$y i ̄ ̀ d i ̄ \imath g^{\varepsilon /} d v$. untie
yị̀r $r^{\varepsilon} n$. jaw
yịịgá $q$. firstly; ỵ̣ig-sób ${ }^{\mathrm{a}} n$. first person
$y \grave{i ̣ i} s^{\varepsilon /}$ ger yịisíi ${ }^{3} d v$. make go/come out, extract
yīmmír $r^{\varepsilon}$ pl yīmmá cb yīm- $a d j$. solitary, lone, unique
yīmmú q. adv. straight away, at once
yīnní q. one
$y \grave{i ̀ n} \eta^{\mathrm{a}} a d v$. outside
 householder; yị-dím ${ }^{\text {a }} n$. members of the household; yī-pón̆rù $g^{3}$ pl yị-póňrà $n$. neighbouring house; yī-sígıdìr $r^{\varepsilon} n$. lodging-house; yị́n ${ }^{\text {ne }}$ at home pl yáa $=n^{\varepsilon}$
$y i \bar{s} s^{\varepsilon} d v$. make go/come out, extract
yīu $\eta^{\text {J/ }}$ pl yīná adj. single- 12.6.1.1
yò $d v$. close; pfv adj yòolv́ $\eta^{3}$ closed
$y \bar{\partial} d v$. pay; ger ȳ̄od ${ }^{\varepsilon /} n$. pay
$y \bar{l} \overline{1} s^{\varepsilon /} d v$. untie
yōlısím ${ }^{\mathrm{m}} n$. freedom

$y$ ỳ'og $g^{\varepsilon} d v$. open
yòor ${ }^{\varepsilon} p l$ yòyà $c b$ yò- $n$. soldier ant
yuà $d v$. bleed; also fornicate WK
$y u ̄ ' a d i ̄ r^{\varepsilon} p l y u ̄ ' a d a ̄ n$. rafter
yùbì $g^{\text {a }} p l$ yùbìs ${ }^{\varepsilon} c b$ yùb- $n$. small bottle-like pot
yūgodīr $r^{\varepsilon} p l$ yūgvdā cb yùgv̀d- $n$. hedgehog
yūgúm ${ }^{\mathrm{m} \varepsilon}$ yūgúm ${ }^{\mathrm{n} \varepsilon}$ pl yūgumá $c b$ yūgūm- $n$. camel
yùlìg ${ }^{\varepsilon} d v$. swing (transitive)
$y u \bar{n} ' e^{\prime} d v$. set alight
$y u \bar{\prime} r^{\varepsilon} p l$ yūādā cb yù'өr-n. penis
$y u ̀ u g^{\varepsilon} d v$. get to be a long time, delay; $T i ̀ y u ̂ u g ~ n \bar{\varepsilon} t a ̄ a b \bar{a}$. It's long since we met.
$y u ̀ u l^{\varepsilon} d v$. swing (intransitive)
$y \bar{'}{ }^{\prime} v m^{\mathrm{m} /} d v$. sing; ag yūvm-yט̂'vm ${ }^{\text {na }} p l y \bar{v} v m-y \hat{\prime} \hat{'}^{\prime} v m n i ̀ b^{\mathrm{a}} n$. singer
yú'vm ${ }^{\mathrm{n} \varepsilon} \mathrm{pl}$ yū'vmá $c b$ yū'vm- or yv̄vm- $n$. song
yv̀vm ${ }^{\mathrm{m} \varepsilon}$ pl yv̀mà cb yv̀vm- $n$. year; yv̀vm-pāalíg ${ }^{\mathrm{a}} n$. new year
$y \bar{v}$ 'vn tense-slot adjunct then, next

yū'vr $r^{\varepsilon /}$ pl yūdá cb yū'- n. name
yūvr ${ }^{\varepsilon} p l$ yūyā $c b$ yù- $n$. water pot

## Z

$z \bar{a}^{\prime} c b z \bar{a}-n$. millet

$z a ̄ a$ lím $^{\mathrm{m}} a d v$. emptily
zàam ${ }^{\mathrm{m}} c b$ zà- $n$. evening; zà-sìsōbī $r^{\varepsilon /} n$. evening
zàn̆'an ${ }^{\mathrm{n} \varepsilon} \mathrm{pl}$ zàn̆'anà $n$. metal hammer, iron-tipped weapon, bludgeon
zàan̆sìm ${ }^{\mathrm{m}} d v$. dream
zāan̆sím ${ }^{\mathrm{m}}$ cb zāan̆s- n. soup; soup in general, not "fish soup" despite Mampruli zaasim "fish"; cf Toende zãasím "meat soup" (Niggli)
zàan̆sú ${ }^{3}$ pl zàan̆símà cb zàan̆súp- $n$. dream
zà $b^{\varepsilon}$ ger zàbì $r^{\varepsilon} d v$. fight; hurt (of body part); ag zàb-zàb ${ }^{\mathrm{a}} n$. warrior; gbān-záb ${ }^{\mathrm{a}} n$. leather-beater, leather-worker
$z a ̀ b i l^{\varepsilon} d v$. cause to fight
zàk ${ }^{\mathrm{a}}$ pl zà'as ${ }^{\varepsilon} c b$ zà'- $n$. compound; zà'-nōor ${ }^{\varepsilon /} n$. gate; zà'-nō-gúr $r^{\mathrm{a}} n$. gatekeeper
$z a ̀ k i ̀ m{ }^{\mathrm{m}} d v$. itch
zàlì $\eta^{a} p l$ zàlımìs ${ }^{\varepsilon}$ cb zàlı̀ $\eta-n$. electric eel
$z a ̀ m ~^{\mathrm{m}}$ ipfv zàmmìd ${ }^{\mathrm{a}} d v$. cheat; ag zàm-zām ${ }^{\text {na }} n$. cheat
zàmìs ${ }^{\varepsilon} d v$. learn, teach
zān̆'a q. every
$z a ̀ n ̆ ' a s^{\varepsilon} d v$. refuse
$z a ̀ n ̆ b i l^{\varepsilon} d v$. tattoo, mark skin


zàñl ${ }^{1 \varepsilon} n$. umbilicus
$z a ̀ \eta^{\varepsilon} d v$. pick up, take up
Zàngbèz $\varepsilon^{\varepsilon} n$. Hausa language
Zàngbèog ${ }^{\circ}$ pl Zàngbèzd ${ }^{\varepsilon} n$. Hausa person
zàngùөm ${ }^{\mathrm{m} \varepsilon} \mathrm{pl}$ zàngùөmà cb zàngùөm-n. wall
zàpkv̀'ar ${ }^{\varepsilon}$ pl zànkư'àa zànkv̀'adà cb zànku'à- n. jackal
$z \bar{\varepsilon} m^{\mathrm{mal}}$ ger $z \bar{\varepsilon} m m u ́ g^{\circ} s v$. be equal
$z \bar{\varepsilon} m \bar{i} s^{\varepsilon /} d v$. make equal
$z \bar{\varepsilon} m m u ́ g^{\circ}$ pl $z \bar{\varepsilon} m m a ́ c b z \bar{\varepsilon} m-a d j$. equal
$z \overline{1}$ ger $z \overline{1} i d^{\varepsilon /} d \nu$. carry on one's head; ag $z \bar{l}-z i ̣ i l d^{\mathrm{a}} n$. carrier on the head

$z i!' e e^{\text {ya }}$ ger zị'a KED; DK KT $z i ̣ ' \partial g^{\text {a }}$ (exceptional phonology) sv. be standing
$z i!' \partial l^{\varepsilon} d \nu$. make to stand; zi!'əl nōor ${ }^{\varepsilon /}$ promise, command; with $n$ tìs X: promise to X
$z i!' \partial n^{\varepsilon} d v$. stand still; $\dot{O} z i!' \partial n ~ n \bar{\varepsilon}$. She's pregnant.
$z \bar{\imath} \imath m^{\mathrm{m} /} c b z \overline{\mathrm{\imath}}-n$. blood
zịina $p l$ zịmí $c b$ zịm- $n$. fish; zị̀m-gbân̆' $a d^{\mathrm{a}} n$. fisherman
zìlìm ${ }^{\mathrm{m} \varepsilon}$ pl zìlımà cb zìlìm- $n$. tongue
$z \bar{l} \bar{i} n z i ̂ o g^{\circ}$ adj. unknown
zị́m ideo. for sābılíg ${ }^{\text {a }}$ black
zịnná today

zịn̆'iya sv. be sitting; ger zịn̆'i ${ }^{\text {a }}$ pl zị̆n'is ${ }^{\varepsilon}$ cb zin̆n-(also place)
$z i ̣ n ॅ ' i l^{\varepsilon} d v$. make sit, seat
$z i ̣ n ̌ ' i n \varepsilon d v$. sit down
zīnzāun $\eta^{\text {/ }}$ pl zīnzāná cb zīnzáụŋ- n. bat
zīrí n. lie, untruth
$z \grave{~ i p f v ~ z o ̀ t ~}{ }^{\mathrm{a}} \operatorname{imp} z \grave{m} \mathrm{~m}^{\mathrm{a}} d v$. run; fear; experience emotion; ger zūa zōog ${ }^{\mathrm{J}}$ run;
ipfı ger zòtìm ${ }^{\mathrm{m}}$ fear; Ò zòtō nịn-báalìg. He has pity on him.
$z \overline{0} l^{\varepsilon} d v$. castrate
$z \overline{l ı m i ́ s}{ }^{\varepsilon} n$. foolishness
$z \bar{l} \mathrm{v} g^{\rho /} p l z \bar{\jmath} n^{\mathrm{n} \varepsilon /}$ cb $z \bar{\jmath} \mathrm{l}-\mathrm{n}$. fool


$z \overline{\sin } \mathrm{~g}^{\mathrm{a} / n}$. small child WK
$z \bar{r} \bar{v} g^{\partial /}$ pl $z \overline{\text { ōrá } n \text {. piece }}$
$z \bar{u} d v$. steal
zưà pl zưà-nàm ${ }^{\text {a }} c b$ zưà- $n$. friend
 $z u ̀ ' e d v$. get higher, more
zùe $d v$. perch, get on top (? variant of zù'e)
$z \bar{u} g^{\partial /} p l z \bar{u} t^{\varepsilon /} c b z \bar{u} g-z \bar{u}-n$. head; postposition onto, due to; $z \bar{u} g v ́=n^{\varepsilon}$ postposition on; $z u \bar{q}$-dâan ${ }^{\mathrm{a}} n$. boss, master (replaces $z \bar{u} g$-sób ${ }^{\mathrm{a}}$ in KB for meanings other than "the Lord"); $z \bar{u} g-k \bar{v} g \bar{v} r^{\varepsilon} p l z u \bar{u} g-k \bar{v} g a ̄ ~ c b ~ z u ̄ g-k u ́ g-n . ~ p i l l o w ; ~ z u ̄ g-m a ́ u k^{3} p l z \bar{u} g-$ mâ' $a d^{\varepsilon} a d j$. crushed-headed; $z \bar{u} g$-sób ${ }^{\mathrm{a}} n$. boss; NT Lord; $z \bar{u}-p \varepsilon ́ \varepsilon l v ̀ g^{3} p l z u \bar{u}$-pć $\varepsilon l a ̀$ adj. bald; zū-pịbì $g^{\mathrm{a}} n$. hat
$z u ̀ l ı ̀ g^{\varepsilon} d v$. deepen
zùlìm ${ }^{\text {ma }} s v$. be deep
zùlv̀ $\eta^{3}$ pl zùlımà cb zùlv̀n- adj. deep
zùlù $\eta^{3} n$. depth


$z u ̀ \theta d^{\varepsilon} n$. friendship
$z u ̀ \theta l^{\varepsilon} d v$. make to perch
$z u \overline{ }{ }^{\prime} \theta m^{\mathrm{m} /} \mathrm{pl} z \bar{u}^{\prime} \theta$ mís $^{\varepsilon} c b z \bar{u} \bar{'}^{\prime} \theta m-n$. blind person
$z \bar{u} ' \theta m^{\mathrm{m} /} d v$. go blind, make blind
$z u ̀ \theta n^{\varepsilon} d v$. begin to perch
$z u ̄ \theta r^{\varepsilon} p l$ zūēyā cb zùà- n. hill
$z u ̀ \theta s^{\varepsilon} d v$. befriend
$z u ̄ r i ́ f o ~ p l ~ z u ̄ r i ́ ~ c b ~ z u ̄ r-n . ~ d a w a d a w a ~ s e e d ~$

zùun̆ $g^{\circ} p l$ zùun̆s ${ }^{\varepsilon}$ zùun̆d $d^{\varepsilon} c b$ zùn̆- n. vulture
$z \bar{v} v r^{\varepsilon}$ pl $z \bar{v} y a \bar{a} c b z u ̀-n$. tail; $z \grave{v}-w \bar{v} k^{\rho /} a d j$. long-tailed

